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REPORT OF THE MEETING OF THE OIE WORKING GROUP ON WILDLIFE DISEASES

Paris, 7 – 10 November 2011

1. Introduction and Welcome

The meeting of the OIE Working Group on Wildlife Diseases (WGWD) was held from 7 to 10 November 2011 at the OIE Headquarters in Paris, France. The meeting was chaired by Dr William Karesh. Dr Karesh welcomed the participants and expressed appreciation for the dedication and contributions of the members of the WGWD over the past year, including the work in planning, participating and follow-up efforts from the successful OIE Global Conference on Wildlife: Animal Health and Biodiversity, as well as the time the members devoted to the numerous telephone conference calls held during the year.

2. Adoption of agenda and designation of rapporteur

Prof. Ted Leighton was appointed as rapporteur for the meeting. The agenda and complete list of participants are provided in Appendices I and II, respectively. Ms Catherine Machalaba of the EcoHealth Alliance (EHA) attended the meeting to provide administrative support to the WGWD members and the secretariat.

3. Information from the meeting of the Scientific Commission – September 2011 – priority setting for the WGWD

Dr Thomas Mettenleiter, representative of the OIE Scientific Commission for Animal Diseases (SCAD), provided an update on the SCAD programme of work relevant to wildlife. He acknowledged the importance of WGWD's work and referred to the following areas identified by the SCAD as priority for the WGWD's future work, in particular:

- Wildlife-livestock disease interactions related to Foot and Mouth Disease (FMD) and rabies; and
- Disease-free status interpretation when wildlife is infected with diseases such as avian influenza (AI), FMD and swine fevers.

Dr Mettenleiter noted that there should be further discussion on how best to address these topics in the *Terrestrial Animal Health Code (Terrestrial Code)* chapters. Additionally, he reported that the SCAD was considering how best to standardise procedures relating to surveillance and sampling in wildlife. As funds for surveillance programmes were often not sustainable, a concept of "baseline surveillance" could be developed, in particular for AI that would still allow early detection of influenza strains in wild animal population.

4. Disease reporting

a) Update on WAHIS-Wild

Dr Karim Ben Jebara, Head of the OIE Animal Health Information Department, and Dr Simona Forcella, Chargée de mission, provided an update on *WAHIS* and *WAHIS-Wild* (which would allow for reporting of non-OIE listed diseases in wildlife). In 2010, ninety-seven Member Countries submitted reports to *WAHIS*. The *WAHIS-Wild* system was advancing and a formal online notification application would be rolled out in 2012. Submissions through completing a spread sheet would still be possible for situations where internet access was not readily available. The questionnaire that covered currently 70 non-listed diseases was reviewed and updated. The updated questionnaire would continue to serve mainly for collecting data at the national level and for use by the OIE National Focal Points for Wildlife within the *WAHIS-Wild* notification application.

WAHIS-Wild utilised species names in Latin for standardised reporting, was optimised for data entry, yet permitting users to provide only minimal information. Validated information would be made available online to the public in the future, through a newly designed *WAHIS-Wild* Interface, dissociated from the *WAHIS* Interface. The WGWD agreed with Dr Ben Jebara on the need to provide support to the OIE National Focal Points for Wildlife as *WAHIS-Wild* would be rolled out, explaining that the system's important role was being proactive in enhancing transparency in disease reporting, while minimising negative impacts on trade.

Diseases/infections of amphibians and fish could be added to the *WAHIS-Wild* list if that would be useful for information purposes. Dr Ben Jebara noted that the OIE could reconcile between country disease data reported through multiple sources in *WAHIS* and *WAHIS-Wild*.

Dr Karesh informed the WGWD that EHA had started an initiative to classify susceptible host species of the OIE listed diseases. The intention was to eventually add these species to the host options in *WAHIS*. As a longer-term effort, EHA was also proposing to compare the susceptible host species of the OIE listed diseases with EHA's internal database of mammal virus hosts. The WGWD expressed thanks to EHA for making their resource available and noted that the effort was a starting point from which the WGWD could then apply their expertise to determine epidemiologically important information for OIE's purposes.

The WGWD noted that an update on *WAHIS/WAHIS-Wild* should be a standing agenda item at its forthcoming meetings.

b) Update on the specific list of wildlife diseases (non OIE listed diseases)

In the presence of Dr Ben Jebara and Dr Simona Forcella, the WGWD reviewed a list of "Non-Listed pathogens and other disease-causing agents in wildlife" which had been developed at prior meetings of the WGWD and had been used for reporting by the Member Countries. The updated list can be found in [Appendix III](#).

The criteria for the non OIE-listed diseases for wildlife had been defined as those diseases having a possible impact on humans, livestock and biodiversity (per the overarching guidelines of the July 2008 report of the *ad hoc* Group on Notification of Diseases in Wildlife).

The WGWD determined that there were two levels in the need for reporting diseases or infections in wildlife, "Whenever found" and "New or unexpected occurrences". Reporting of infection or disease in these two categories would serve two different goals; on the one hand, to raise awareness in new and emerging events, and the other hand, to accumulate knowledge on presence/absence of wildlife diseases or infections in countries in a way which would allow documenting sanitary risks in the future when appropriate.

The WGWD agreed to continue to revise the list in coming years as necessary and in the light of new data obtained.

The WGWD discussed the need for networking with the OIE National Focal Points for Wildlife and was supportive of engaging the Focal Points more frequently and finding ways to recognise their contributions. The OIE Collaborating Centre located in Canada could consider hosting an email list to disseminate news on wildlife diseases or sending relevant information to the OIE for distribution.

The WGWD was invited to actively submit contributions to the OIE *Bulletin*. Where appropriate, the OIE National Focal Points for Wildlife could be invited to join the Wildlife Health Specialist Group of the IUCN¹ to facilitate exchange with other wildlife health professionals.

c) New proposed criteria for adding items in the OIE listed diseases

Dr Alejandro Thiermann, President of the OIE Terrestrial Animal Health Standards Commission (Code Commission), provided an update on the new proposed criteria for disease listing. He stated that the listing criteria would be proposed for adoption in May 2012 by the OIE to the World Assembly of Delegates.

Dr Thiermann noted that parameters would be needed to weigh the significance of wildlife morbidity and mortality events and he suggested that the WGWD could provide guidance on the species of epidemiological importance for the disease-specific chapters of the *Terrestrial Code* during the process of updating these chapters under the guidance of the SCAD.

The WGWD commended the Code Commission for making reference to wildlife for the first time in the Code with regard to its significance for biodiversity and conservation in addition to its relevance for human health, animal health and trade in animal products; this move would advance the role of Veterinary Services in contributing to public good.

Prof. Mettenleiter reiterated that for the SCAD the current priority remained FMD, classical and African swine fevers, and vector borne diseases. Members of the WGWD could be invited to relevant *ad hoc* Groups to bring the wildlife perspectives into the relevant chapter revision when appropriate.

5. Feedback on the recent *ad hoc* Group meetings and future meetings (for information)

Dr Masatsugu Okita from the OIE International Trade Department provided feedback to the WGWD on revisions to chapters involving input from the WGWD. He stressed that providing a case definition and susceptible animals in each chapter would aid in completing revision to the chapters. The Chairman of the WGWD expressed thanks to Dr Okita and proposed to discuss this process with regard to wildlife with the SCAD, as he would be invited to the next SCAD meeting.

The reports of the following *ad hoc* Groups, where a representative of the WGWD had participated, were presented for information to the WGWD:

- *ad hoc* Group on Rabies (meetings from 4 to 6 August 2010 and from 20 to 22 April 2011),
- *ad hoc* Group on the Validation of Diagnostic Tests for Wildlife (meeting from 27 to 29 April 2011),
- *ad hoc* Group on Brucellosis (meeting from 20 to 22 July 2011).

With regards to Brucellosis, the WGWD discussed the need for inclusion of a reference to wildlife concerning the movement of wild animals by mentioning that some wild animal species were susceptible to infection, and uninfected wild animals to be moved should be moved to areas free of infection.

The WGWD also suggested that appropriate recommendations should be provided in determining the *Brucella* infection status after capture and before translocation of susceptible wild animals from areas not free of infection.

¹ International Union for Conservation of Nature (<http://www.iucn.org/>)

The Group was informed that a brainstorming meeting would be held at the OIE Headquarters end of November on risk assessment and alien invasive species. The main objective of this meeting was to brainstorm and make recommendations on the use of risk assessment as a tool to evaluate and manage the risks to ecosystems presented by trade in animals.

Furthermore, Dr Joseph Domenech from the Scientific and Technical Department was invited to provide, for information, an overview on the Global Strategy on the Control of Foot and Mouth Disease, which was under development.

6. Discussion on developing components on wildlife in the Performance of Veterinary Services (PVS) Tools

The topic was introduced to the meeting in response to a previous proposal to consider developing a PVS “wildlife” mission. Ms Jennifer Lasley, Dr Kate Glynn, and Dr Alain Dehove briefed the WGWD on the current PVS Tools. Dr Dehove provided an overview of the OIE PVS Pathway, and informed the Group that the World Bank identified the PVS as an extremely important assessment tool. Dr Glynn provided details on the current status of the pilot PVS “One Health” evaluation missions. She also mentioned that within the pilot missions, issues of wildlife were already included, particularly related to emerging diseases, with a view to implementing the concept of One Health. Dr Glynn proposed that more detailed discussions could take place regarding the needs the WGWD envisioned for the PVS “wildlife” mission. She felt that based on these discussions, it could be determined whether the existing pilot “One health” PVS could be expanded to include additional components related to wildlife or if a new pilot PVS “Wildlife” mission should be developed. Dr Dehove explained that if the latter was chosen, the following process would need to be followed in pursuing revisions to the PVS: 1) define and propose wildlife components of existing core competencies or propose some additional core competencies with respect to wildlife health management, as well as the five levels of achievement for each and indicators or assessment criteria that each level has been achieved, 2) provide draft proposal to the Scientific Commission. Dr Dehove stated that the PVS Tools would be modified in a Sixth Edition in 2013; this could provide an opportunity to incorporate a wildlife component into this new edition.

The WGWD saw value in expanding the PVS Pathway to include wild animal health and disease concerns relevant to the OIE; the WGWD would assist the OIE to determine how best to achieve this objective through continued dialogue on this topic.

7. Emerging and Noteworthy wildlife disease occurrences

a) Information provided by members of WGWD

Anthrax: A significant outbreak of anthrax in the Kruger National Park in South Africa was recorded in 2010, involving buffaloes (*Syncerus caffer*), impala (*Aepyceros melampus*), greater kudu (*Tragelaphus strepticrosus*), nyala (*Tragelaphus spekii*) and elephants (*Loxodonta africana*). After a decline in incidence during the summer rainy season, the outbreak continued into the winter of 2011 at a lower level, with sporadic cases regularly detected.

An anthrax outbreak was detected in cattle in Sweden causing sudden death during 2011. No spread to wildlife was detected during this outbreak.

Bovine Tuberculosis: The State of Minnesota recently regained its accredited bovine tuberculosis free status in the USA. Since 2005, twelve affected cattle herds were detected in the north-western portion of the State. Among wild white-tailed deer, 27 infected animals were detected with the last positive animal found in 2009. Aggressive efforts to eliminate the disease in cattle and in deer were undertaken and appear to have made substantial progress. Surveillance for bovine TB would continue in the area.

Canine Distemper: 2 cases of canine distemper were observed in monkeys in a breeding facility in Japan.

Echinococcosis: For the first time in modern history, *Echinococcus multilocularis* was observed in foxes in Sweden in 2011 and the parasite has now been recorded at three different locations.

Epizootic Haemorrhagic Disease (EHD): One laboratory has isolated EHD virus type 2 from 35 white-tailed deer and bluetongue-11 from 1 deer in the USA. Some States were experiencing heavy deer mortality and were offering refunds to hunters who already had purchased licenses to hunt deer. So far this year there have been no isolations of exotic orbiviruses from affected deer in the USA. In view of past isolations of non-endemic orbiviruses, surveillance was being conducted to determine if previously unreported species of *Culicoides* were present in areas where the exotic viruses had been found.

Filovirus: An Ebola like -virus has been isolated by a Spanish-American team from a bat (*Miniopterus schreibersi*) collected in the Iberian Peninsula where a mass die off was observed in 2006.

Foot and Mouth Disease (FMD): In South Africa, an outbreak of FMD in cattle in the protection zone of Kwazulu-Natal was detected. This SAT-1 virus appeared to be of low pathogenicity because few clinical signs were seen. This virus shared significant homology with a buffalo strain isolated in the central Kruger National Park.

A single case of FMD was found in Bulgaria in a wild boar. Seropositive wild boars were also detected in Turkey.

Influenza: An outbreak of H5N2 in farmed ostriches was reported in the Western Cape province of South Africa. No infection was recorded in wild birds or poultry in this region. H5N1 has been found in wild birds in Asia in Japan and Korea.

LPAI viruses are regularly found in North America during general duck surveys. Prevalence varied greatly year to year, and two H7 variants were identified in 2011.

Rabies: There was an ongoing problem with dog rabies in Mpumalanga and Limpopo Provinces in South Africa. There was major concern that infected stray dogs may have entered adjoining uninfected wildlife conservation areas, and infected certain social predator populations.

A major outbreak of rabies was seen since November 2008 in North-Eastern Italy which was being brought under control by oral vaccination of foxes. In the Arctic regions there was a growing concern that the arctic fox (*Alopex lagopus*) rabies variants were adapting to red foxes (*Vulpes vulpes*) where their ranges overlap.

Rift Valley Fever: In 2010, a significant outbreak was seen in the Central Plateau of South Africa affecting both domestic and wild ruminants. This was the largest outbreak since 1981 (more than 100,000 animals were affected). Following the rainy season in 2011 very few cases were detected probably as a result of a high level of regional immunity.

Simian retroviruses: Type 4 retroviruses imported with infected *Cynomolgus* monkeys caused mortality in Japanese macaques at a primate facility in Japan.

Trichomonas: Trichomonas-associated mortalities in passerine birds have been reported from UK, Scandinavia and other parts of Europe. Mortality has also been recorded in eastern Canada in passerine birds, especially in finches.

White Nose Syndrome (WNS): Research efforts were underway in the USA and Canada to better understand the disease. A recent publication indicated that *Geomyces destructans* was confirmed as the cause. The Fish and Wildlife Service of the USA published a National WNS Response Plan in May 2011. There was concern about some of the species being affected, because of the possibility that WNS could contribute to their extinction. The geographic range of WNS was expanding in Canada, as it was in the USA. Canada was developing a management plan that would modify the American plan and would support border initiatives.

Baltic Sea waterfowl: Many species of waterfowl including common eider, long-tailed duck (*Clangula hyemalis*), scooter and pintail have declined significantly over the last 15 years in the Baltic region. The reason for this decline was unknown, but poor reproduction and high mortality in ducklings were believed to contribute.

Green algae: In Brittany in France, a mortality of wild boar was associated with hydrogen-sulphide release from rotting mats of green algae during the summer of 2011.

Mortality in Common Eiders (*Somateria mollissima*): Mortality events involving 30-2800 birds have been observed since 2009 near Cape Cod, Massachusetts, USA. A novel *orthomyxovirus* has been isolated from affected birds. Much about this apparently new virus was unknown and research was underway to characterise the virus genetically and to understand its pathogenesis and epidemiology.

Mortality in deer and wild boar in Europe: The two last winters have been very severe in Northern Europe with, consequently, a high mortality in roe deer (*Capreolus capreolus*) and wild boar (*Sus scrofa*).

Wild boar numbers were increasing in Scandinavia and the population was estimated to have doubled in the past 3 years in Sweden. Serological studies failed to detect any exposure to significant pathogens in this species.

8. OIE Scientific and Technical Review - One Health - August 2014

The WGWD was informed that the OIE would publish a *Scientific and Technical Review* on One Health, to appear in 2014. Dr Karesh had been asked to serve as coordinator and editor for the publication. A suggested list of authors and topics would be presented to the OIE in 2012. The WGWD suggested that some of the presentations from the programme of the 30th World Veterinary Congress, as well as papers being presented at the July 2012 conference of the Wildlife Disease Association, would be good starting points for identifying possible contents and authors. Dr Karesh would keep the WGWD up to date about the *Review* development process.

9. OIE Guide on Animal Health Surveillance

Dr Susanne Munstermann updated the WGWD on the status of the Guide on Animal Health Surveillance. She mentioned that disease surveillance specifically in wild animals was integrated into the chapters at relevant places.

The WGWD expressed its strong support for this project.

10. Eco-Toxicology

The WGWD reviewed the situation of vultures (*Gyps* sp.) after the massive die-off reported in India and Pakistan for several years². It was still a concern that the ecological and sanitary consequences of this die-off might impact on the environment. The use of non-steroidal anti-inflammatory drugs had been identified among possible causes of the mortality.

The WGWD felt that in this and other similar situations, surveillance by veterinarians for unexpected adverse effects of drugs on other species could help identify unrecognised environmental risks. The WGWD agreed that it might be helpful to invite an expert on toxicology to a future meeting of WGWD to discuss issues more broadly and explore areas for future consideration.

11. Avian Influenza

The WGWD noted that surveillance for Influenza A viruses in wild birds had been significantly reduced over the past few years and global knowledge of the viruses in circulation was therefore diminishing. Dr Keith Hamilton, acting as OIE Coordinator for OFFLU³, reported that these wild bird viruses were viewed as important potential candidates in human seasonal influenza vaccines and that there was current public health interest specifically in potential transmission to people of H2 strains. The WGWD expressed concern that the value of having current information about viruses in circulation, and access to these viruses for full characterization and use in vaccines, was very high; it was particularly relevant for risk analysis with respect to poultry production, security of food supplies and human health.

² <http://www.oie.int/en/international-standard-setting/specialists-commissions-groups/working-groups-reports/working-group-on-wildlife-diseases/group-meetings-reports/>

³ OIE-FAO global network of expertise on animal influenza

The WGWD discussed possible ways by which surveillance for avian influenza viruses could be maintained as a global public good at minimal cost. It was noted that modest sampling of wild sub-adult ducks at a small number of strategic locations once each year and full genetic sequencing of the viruses obtained from these samples would be sufficient to meet global information needs. Such a programme would be inexpensive if the cost were shared among countries and the results made available to all. The WGWD recommended such a programme could be organized through OFFLU, possibly drawing on the wildlife-oriented Collaborating Centres for operational assistance.

The WGWD reviewed and discussed information about avian influenza viruses that had been brought to its attention. This included recent mortality of seals on the Atlantic coast of the USA, highly pathogenic H5N2 in captive ostriches in South Africa, and highly pathogenic H5N1 in poultry and wild birds in Japan. Clade variants in South Asia also were noted but these had not infected or spread in wild birds as far as it was known. Surveillance in North America in live wild ducks continued to find a wide range of H and N subtypes.

12. OIE Collaborating Centres for Wildlife

- a) **Collaborating Center for Training in Integrated Livestock and Wildlife Health and Management (South Africa):** The annual report to the OIE from 2010 was reviewed. The Center was focusing on a graduate programme and curriculum development and the creation of online training programmes.
- b) **Collaborating Centre for Wildlife Disease Surveillance and Monitoring, Epidemiology and Management (Canada):** The annual report from 2010 was reviewed and the activities in 2011 were presented to the WGWD by Prof. Ted Leighton, Director of the Centre. The Centre had been assisting Sri Lanka to establish the Sri Lanka Wildlife Health Center and a national programme of wildlife health management. This was not an official OIE twinning programme but was a similar partnership and might seek OIE twinning status in the future.
- c) **Collaborating Centre for Research and Diagnosis of Emerging and Existing Pathogens of Wildlife (USA):** A collaborative agreement between the Collaborating Centre located in USA and the Collaborating Centre located in Canada was being signed in November 2011. The aim was to pool resources, strengthen the complementarities of the centers and work together as a joint OIE Collaborating Centre while maintaining independent administrative status.

The WGWD stressed that the Collaborating Centres in different regions had different strengths and capacities, and networking among Centres to maximise complementarities was encouraged. The partnership having been developed by the two Collaborating Centres was considered as an interesting model for the establishment of other partnerships and networks.

13. Training of Wildlife Focal points

Dr Erlacher-Vindel and Dr Leighton provided the WGWD with an update on the second round of training of the OIE National Focal Points for Wildlife:

- *English-Speaking Africa:* 4-7 October 2011 (Kenya): The workshop content was well received by the participants who were fully engaged. Networking was established among several participants. The participants requested an extra evening session to further practice the use of *WAHIS-wild*.
- *Americas:* 15-17 November 2011 (Argentina). Workbook and presentations were provided in Spanish and English
- *French-Speaking Africa,* 28 November -1 December 2011 (Botswana). Workbook and presentations were provided in French.
- *Europe:* 23-26 January 2012 (Bulgaria): Workbook and presentations were under preparation in English and Russian.
- *Asia:* 24-26 April 2012 (Sri Lanka). Workbook and presentations would be in English.

The first cycle of workshops mainly provided a background on the OIE and general information about the importance of wildlife pathogens and diseases according to the OIE mandate. The current, second cycle of workshops was providing practical information about setting up of wildlife disease surveillance programmes, interpreting the data obtained from such programmes, and notification to the OIE of diseases in wildlife.

The common programme featured sessions with group work and discussions, and presentations by expert speakers followed by discussion. Publication of the workbook for the second cycle was anticipated in English, French and Spanish.

The WGWD noted the potential training value of the Training Manual from the first cycle and the Workbook and related material of the 2nd cycle of workshops. The WGWD suggested that the OIE post these documents on the OIE's website for wider distribution.

14. OIE Conferences

The members of the WGWD discussed past and future participation in international conferences relevant to wildlife.

- a) **OIE Global Conference on Wildlife: Animal Health and Biodiversity**, 23-25 February 2011, Paris (France). This conference brought together over 350 experts and interested professionals from the fields of human health, animal health, and biodiversity conservation. There was very positive feedback on the conference, and active participation of participants in the sessions was noted. An edited volume was now being prepared for publication and would include 19 manuscripts from speakers' presentations. These had all been reviewed and revised and were currently in the editing phase by the Publication Department. The WGWD highlighted the importance to have the final version available before the General Assembly meeting in May of 2012 and offered support to the Publication Department to help with this goal.
- b) **OIE Global Conference on Rabies Control**, 7-9 September 2011, Incheon–Seoul (Republic of Korea). Drs Fischer and Karesh attended the conference, speaking on “Animal habitat and environmental factors” and “Other relevant international standards for the control of rabies” respectively. Over 350 people attended the conference, and there was support and consensus to move rabies control up in the political agenda as a high priority. It was noted by many experts speaking at the conference that while wildlife could play an important role in the natural maintenance of rabies and warranted attention for vaccine use, controlling rabies in domestic dogs effectively would eliminate over 99% of the domestic animal and human cases worldwide.
- c) **Wildlife Disease Association (WDA)**: Prof. Artois informed the WGWD on the 61st International Conference of the Wildlife Disease Association (www.wildlifedisease.org) and the 10th Biennial Conference of the European chapter of the WDA (www.ewda.org) which would be jointly organised in Lyon (France) from 22 July to 27 July 2012.

The mission of the WDA was to acquire, disseminate and apply knowledge of the health and diseases of free living, wild animals in relation to their biology, conservation, and interactions with humans and domestic animals.

The main topic of the conference, organised under the patronage of the OIE, would be "Convergence in wildlife health". Five topics would be featured during specific sessions opened by a key note lecture: “One Health”, Migration and infectious disease risk, How to assess the health status of a wild animal population? Weighing costs and benefits of wildlife disease control, and effect of multiple pollutants on the health of wild animals. Information was available at: <http://wda2012.vetagro-sup.fr/>.

15. Wildlife Disease Risk Assessment- Discussion on Collaboration with IUCN

Dr Richard Kock and Dr Dominic Travis provided an update on the IUCN's Wildlife Disease Risk Assessment. A standalone guide to Disease Risk Assessment (DRA) was being developed in addition to a larger technical manual. The documents would address broad issues while still maintaining a focus on infectious disease and justification for why DRA was a valuable tool. The WGWD stressed the importance of DRA and the benefit its use could provide; at the same time, the WGWD was concerned that the larger manual was attempting to address too many things in one document. The WGWD agreed to review the documents in mid-February 2012, with an anticipated printing date of April 2012. Dr Karesh would provide an update on DRA at the SCAD meeting in February 2012. The WGWD was invited to submit ideas for case

studies for inclusion in the documents, and it was pointed out that the OIE surveillance methodology could be included in the Appendix. The possibility of a joint publication of this DRA guide and manual by the IUCN and by the OIE was being explored and the WGWD supported this concept. Drs Kock and Travis extended thanks to the OIE for offering to support the printing costs of the documents.

16. Other Business

FAO: Dr Juan Lubroth, Chief Veterinary Officer and Chief of Animal Health Services, Food and Agriculture Organization of the United Nations, participated partly in the meeting as an observer. He expressed gratitude to the OIE for inviting FAO to have a role in the meeting. Dr Lubroth briefed the WGWD on the proposed joint FAO-CMS⁴ Resolution related to wildlife diseases to be presented at the upcoming Conference of the Parties to the Convention on Migratory Species in November 2011 in Bergen, Norway. The WGWD noted that the FAO had some overlapping work areas with the OIE and other international organisations working on wildlife health and biodiversity.

WildTech: Dr Artois reported on the second year activities of the WildTech project. WildTech (Novel Technologies for Surveillance of Emerging and Re-emerging Infections of Wildlife) was a research programme supported by the European Commission, aiming at the application of microarray technology for the detection of known and unknown infectious agents in wildlife populations.

The project was advancing according to plan. The target pathogens and host species groups were specified. The newly developed serology and nucleic acid assays would be used for screening wildlife samples in the first half of 2012 to test a surveillance system concept based on computer modelling and epidemiological analysis.

Confiscated wildlife imports: The WGWD discussed the issue of the testing of imported, confiscated wildlife products at port of entry. The WGWD recalled that the *Terrestrial Code* stated that findings did not affect country status and encouraged testing at ports of entry, but that some clarification was needed. The WGWD proposed to further discuss this subject with the relevant OIE Commissions.

OIE WGWD Website: Since OIE had launched a new website for the organisation, the WGWD was asked to review pages associated with its activities. The WGWD reviewed each webpage and forwarded written recommendations and requests for the Scientific and Technical Department and the OIE website managers.

17. Date of next meeting

The WGWD noted the proposed dates for its next meeting: 12–16 November 2012.

.../Appendices

⁴ Convention on Migratory Species (<http://www.cms.int/>)

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Paris, 7 - 10 November 2011

Agenda

- 1. Introduction and Welcome**
 - 2. Adoption of agenda and designation of rapporteur**
 - 3. Information from the meeting of the Scientific Commission – September 2011 – priority setting for the WGWD**
 - 4. Disease reporting**
 - a) Update on WAHIS-Wild
 - b) Update on the specific list of wildlife diseases (non OIE listed diseases)
 - c) New proposed criteria for adding items in the OIE listed diseases
 - 5. Feedback on the recent *ad hoc* Group meetings and future meetings**
 - 6. Discussion on developing components on wildlife in the Performance of Veterinary Services (PVS) Tools**
 - 7. Emerging and noteworthy wildlife disease occurrences**
 - a) Feedback from members of WGWD
 - 8. OIE Scientific and Technical Review – One Health – August 2014**
 - 9. OIE Guide on Animal Health Surveillance**
 - 10. Eco-toxicology**
 - 11. Avian influenza**
 - 12. OIE Collaborating Centres for Wildlife**
 - a) Feedback from Collaborating Center for Integrated Wildlife and Livestock Health and Management
 - b) Feedback from CCWHC
 - c) Preliminary report on coordination between USA and NHWHC
 - 13. Training of Wildlife Focal points**
 - 14. OIE Conferences**
 - a) Wildlife Conference, Paris, February 2011
 - b) Rabies Conference, Incheon, Korea – September 2011
 - c) WDA – Lyon, France – sponsorship – Workshop on capacity development
 - 15. Wildlife disease risk assessment- discussion on collaboration with IUCN**
 - 16. Other business**
 - 17. Date of next meeting**
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Appendix III

Non-listed pathogens and other disease-causing agents in wildlife	
Agent causing Chronic wasting disease (CWD)	Infection with Ovine herpesvirus 2 (causing malignant catarrhal fever in sheep)
Calicivirus Marine Mammals	Infection with parvovirus
Calicivirus of European Brown Hare Syndrome (EBHS)	Infection with <i>Pasteurella</i> spp.
Infection with Alcelaphine herpesvirus 1 (wildebeests origin causing malignant catarrhal fever in cattle)	Infection with <i>Plasmodium</i> spp.
Infection with Avian Paramyxoviruses (other than those listed by the OIE)	Infection with pox viruses (other than those listed by the OIE)
Infection with <i>Babesia</i> spp. (new or unusual occurrences)	Infection with <i>Psoroptes</i> spp.
Infection with <i>Baylisascaris procyonis</i>	Infection with <i>Salmonella enterica</i> (all serovars)
Infection with <i>Borrelia</i> spp.	Infection with <i>Sarcoptes scabiei</i>
Infection with Circoviruses	Infection with <i>Theileria</i> spp. (new or unusual occurrences)
Infection with <i>Clostridium piliforme</i> (Tyzzer's Disease)	Infection with <i>Toxoplasma gondii</i>
Infection with Encephalomyocarditis virus	Infection with <i>Trichomonas</i> spp. in birds and reptiles
Infection with Elephant Herpesvirus	Infection with Yellow fever virus
Infection with <i>Fasciola gigantica</i>	Infection with <i>Yersinia enterocolitica</i>
Infection with <i>Fascioloides magna</i>	Infection with <i>Yersinia pestis</i>
Infection with Feline Leukaemia virus (FeLV)	Infection with <i>Yersinia pseudotuberculosis</i>
Infection with Filovirus	
Infection with Flavivirus (causing Louping ill)	Reptiles
Infection with Flavivirus (causing Tick Borne Encephalitis)	Infection with Crocodilepox virus (Papillomatosis in crocodiles)
Infection with <i>Geomyces destructans</i> in bats (White-nose syndrome)	Infection with Fibropapillomatosis in sea turtles (herpesvirus)
Infection with hantavirus	Infection with <i>Trichinella nelsoni</i> , <i>zimbabwei</i> and <i>papouae</i>
Infection with Henipaviruses (Hendra viruses)	
Infection with Henipaviruses (Nipah viruses) in bats	Non-Infectious Diseases causing high mortality in animal population
Infection with <i>Histomonas</i> spp.	Algal toxicosis
Infection with Immunodeficiency viruses (Feline, Simian)	Botulism
Infection with <i>Leptospira interrogans</i> ssp.	Chemical poisons
Infection with <i>Listeria monocytogenes</i>	Mycotoxins
Infection with Low pathogenic avian influenza viruses (all subtypes)	
Infection with morbillivirus (canids and felids)	Diseases of Unknown Cause
Infection with morbillivirus (marine mammals)	Unusual morbidity or mortality event (cause undetermined)
Infection with morbillivirus (measles)	

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