WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted: 25 avril 2023 15:06

Laboratory Information

Name of disease (or topic) for which you are a designated WOAH Reference Laboratory: Bluetongue

Address of laboratory: via Campo Boario, 64100, Teramo, Italy

Tel.: +39 0861 332 424

E-mail address: g.savini@izs.it

Website: www.izs.it

Name (including Title) of Head of Laboratory (Responsible Official): Nicola D’Alterio, DVM, General Director, Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise

Name (including Title and Position) of WOAH Reference Expert: Giovanni Savini, DVM, PhD, head of the Animal Health Department and Virology and Cell Culture Unit, Istituto Zooprofilattico Sperimentale dell’ Abruzzo e del Molise

Which of the following defines your laboratory? Check all that apply: Governmental

TOR1: DIAGNOSTIC METHODS

1. Did your laboratory perform diagnostic tests for the specified disease/topic for purposes such as disease diagnosis, screening of animals for export, surveillance, etc.? (Not for quality control, proficiency testing or staff training)

Yes

<table>
<thead>
<tr>
<th>Diagnostic Test</th>
<th>Indicated in WOAH Manual (Yes/No)</th>
<th>Total number of test performed last year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nationally</td>
<td>Internationally</td>
</tr>
<tr>
<td>Indirect diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c-ELISA</td>
<td>Yes</td>
<td>3,008</td>
</tr>
<tr>
<td>c-ELISA</td>
<td>Yes</td>
<td>31,090</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genotype specific Real-time RT-PCR</td>
<td>Yes</td>
<td>4,136</td>
</tr>
<tr>
<td>Serotype specific PCR real time</td>
<td>No</td>
<td>3,630</td>
</tr>
</tbody>
</table>
**TOR2: REFERENCE MATERIAL**

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by WOAH?

No

3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOAH Members?

Yes

<table>
<thead>
<tr>
<th>TYPE OF REAGENT AVAILABLE</th>
<th>RELATED DIAGNOSTIC TEST</th>
<th>PRODUCED/ PROVIDE</th>
<th>AMOUNT SUPPLIED NATIONALLY (ML, MG)</th>
<th>AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)</th>
<th>NO. OF RECIPIENT WOAH MEMBER COUNTRIES</th>
<th>COUNTRY OF RECIPIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTV inactivated reference strain</td>
<td>RT Real Time PCR</td>
<td>Produced</td>
<td>30 ml</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>BTV inactivated reference strain</td>
<td>RT Real Time PCR</td>
<td>Provide</td>
<td>36 ml</td>
<td>0</td>
<td>1</td>
<td>Europe</td>
</tr>
<tr>
<td>BTV positive reference sera</td>
<td>VNT</td>
<td>Produced</td>
<td>240 ml</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>AHSV positive reference sera</td>
<td>ELISA</td>
<td>Provide</td>
<td>9 ml</td>
<td>0</td>
<td>1</td>
<td>Europe</td>
</tr>
<tr>
<td>Antibody Test Kit c- ELISA rec VP7</td>
<td>c- ELISA</td>
<td>Produced</td>
<td>197 packages</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Antibody Test Kit c- ELISA rec VP7</td>
<td>c- ELISA</td>
<td>Provide</td>
<td>348 packages</td>
<td>0</td>
<td>1</td>
<td>Europe</td>
</tr>
<tr>
<td>c-ELISA antigen for 197 tests</td>
<td>c- ELISA</td>
<td>Produced</td>
<td>23,5 ml</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>VP7 monoclonal antibody</td>
<td>c- ELISA</td>
<td>Produced</td>
<td>9,000 ml</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAH Members?

No

**TOR3: NEW PROCEDURES**

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?

Yes

7. Did your laboratory validate diagnostic methods according to WOAH Standards for the designated pathogen or disease?

Yes

<table>
<thead>
<tr>
<th>NAME OF THE NEW TEST OR DIAGNOSTIC METHOD DEVELOPED</th>
<th>DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral presentation at national meeting &quot;Giornata di studio sulla ...&quot;</td>
<td></td>
</tr>
</tbody>
</table>
BTV-3 Serotype specific PCR real time

BTV-27 Serotype specific PCR real time

EHDV-8 TUN Serotype specific PCR real time

8. Did your laboratory develop new vaccines for the designated pathogen or disease?  
No

9. Did your laboratory validate vaccines according to WOAH Standards for the designated pathogen or disease?  
No

**TOR4: DIAGNOSTIC TESTING FACILITIES**

10. Did your laboratory carry out diagnostic testing for other WOAH Members?  
Yes

<table>
<thead>
<tr>
<th>NAME OF WOAH MEMBER COUNTRY SEEKING ASSISTANCE</th>
<th>DATE</th>
<th>WHICH DIAGNOSTIC TEST USED</th>
<th>NO. SAMPLES RECEIVED FOR PROVISION OF DIAGNOSTIC SUPPORT</th>
<th>NO. SAMPLES RECEIVED FOR PROVISION OF CONFIRMATORY DIAGNOSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>TUNISIA</td>
<td>2022-05-05</td>
<td>Real-time RT-PCR</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>TUNISIA</td>
<td>2022-05-05</td>
<td>VNT</td>
<td>0</td>
<td>670</td>
</tr>
<tr>
<td>TUNISIA</td>
<td>2022-09-19</td>
<td>Real-time RT-PCR</td>
<td>0</td>
<td>89</td>
</tr>
<tr>
<td>TUNISIA</td>
<td>2022-09-19</td>
<td>VNT</td>
<td>0</td>
<td>240</td>
</tr>
</tbody>
</table>

11. Did your laboratory provide expert advice in technical consultancies on the request of an WOAH Member?  
Yes

<table>
<thead>
<tr>
<th>NAME OF THE WOAH MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY</th>
<th>PURPOSE</th>
<th>HOW THE ADVICE WAS PROVIDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>TUNISIA</td>
<td>Diagnostic assistance</td>
<td>Remote and in loco assistance Internship</td>
</tr>
<tr>
<td>PAKISTAN</td>
<td>Diagnostic assistance</td>
<td>Internship</td>
</tr>
<tr>
<td>SERBIA</td>
<td>Diagnostic assistance</td>
<td>Internship</td>
</tr>
</tbody>
</table>

**TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES**

12. Did your laboratory participate in international scientific studies in collaboration with WOAH Members other than the own?  
Yes

<table>
<thead>
<tr>
<th>Title of the study</th>
<th>Duration</th>
<th>PURPOSE OF THE STUDY</th>
<th>PARTNERS (INSTITUTIONS)</th>
<th>WOAH MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Avia-GIS, ERGO – Environmental Research Group Oxford, CIRAD – French Agricultural Research Centre for</td>
<td></td>
</tr>
<tr>
<td>Project Description</td>
<td>Duration</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECDC - EFSA VectorNet. European network of medical and veterinary entomology</td>
<td>5 years (2019-2023)</td>
<td>To create a sense of connection between medical and veterinary entomologists and professionals interested in vector-borne diseases in the Public and Veterinary Health sector. The VectorNet Entomological Network aims to better embed entomological monitoring and knowledge in national and international vector-borne disease surveillance systems.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Point-of-incidence toolbox for emerging virus threats (TELE-Vir)</td>
<td>2 years (2020-2023)</td>
<td>To develop a very fast point-of-incidence (poi) toolbox for identification and characterization of emerging virus threats for humans and/or domestic and wildlife animals.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CZECH REPUBLIC**
- INSA, Portugal
- INIA-CISA, Spain
- PIWET, Poland
- VRI, Czech Republic
- SVA, Sweden
- ANSES, France
- UoS, UK
- NVI, Norway
- IZSLER, Italy
- SSI, Denmark

**DENMARK**
- BELGIUM
- FRANCE
- ITALY
- NORWAY
- POLAND
- PORTUGAL
- SPAIN
- SWEDEN
- UNITED KINGDOM

**ERFAN is a strategic platform to build**
<table>
<thead>
<tr>
<th>Programme / Project</th>
<th>Duration</th>
<th>Description</th>
<th>Partners</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancing Research for Africa Network – ERFAN</td>
<td>5 years (2018-2022)</td>
<td>Fruitful collaborations for both African countries and Italian institutions, allowing a continuous and updated knowledge of animal and human health conditions in relation to the African continent.</td>
<td>INMV, Algeria DSV, Algeria NCAH, Libya ONSSA, Morocco ONARDEL, Mauritania LNERV, Senegal NRC, Egypt ENMV, Tunisia IRVT, Tunisia ENMV, Tunisia</td>
<td>ALGERIA EGYPT LIBYA MAURITANIA MOROCCO SENEegal TUNISIA</td>
</tr>
<tr>
<td>Partnership for Research and Innovation in the Mediterranean Area (PRIMA) European Commission Project “A novel integrated and sustainable approach to monitor and control Bluetongue spread in the Mediterranean Basin” (BlueMed)</td>
<td>3 years (2019-2023)</td>
<td>Setting up a comprehensive and flexible operating model capable to detect new incursions or circulation of BTV strains and prevent and/or control their spread in the Mediterranean region. To refine current diagnostic systems and explore the basis for improved control strategies.</td>
<td>National School of Veterinary Medicine of Sidi Thabet (ENMV)/ National Institute of Veterinary Research of Tunisia (IRVT) Tunisia, National Research Centre (NRC) Egypt, ANSES France</td>
<td>EGYPT FRANCE TUNISIA</td>
</tr>
<tr>
<td>EuropeAid140314/DH/SER/Multi – SANTE/2018-G-046 EU Regional action on animal disease eradication in the Western Balkans (ADEWB) Project</td>
<td>3 years</td>
<td>Design a controlling strategy for BTV in the Balkan peninsula</td>
<td>Albania, Kosovo, North Macedonia, Montenegro; Serbia; Romania; Bosnia Erzegovina</td>
<td>ALBANIA BOSNIA AND HERZEGOVINA KOSOVO MONTENEGRO NORTH MACEDONIA (REP. OF) ROMANIA SERBIA</td>
</tr>
<tr>
<td>OIE Twinning contract for Bluetongue between Istituto Zooprofilattico Sperimentale dell’ Abruzzo e del Molise and Instituto Biologico of San Paolo</td>
<td>2 years</td>
<td>To enhance capacity and improve scientific capabilities in relation to diagnosis and surveillance of Bluetongue.</td>
<td>Instituto Biológico of São Paulo</td>
<td>BRAZIL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A network of experts BTV European Institute, with partners in endemic region of Africa the Middle East and Turkey, to increase the accuracy of BTV-strain distribution</td>
<td>The Pirbright Institute, Agence Nationale De Securite Sanitaire De L’alimentation, De L’environnement Et Du Travail, Centre De Cooperation International En Recherche Agronomique Pour Le Developpement, Friedrich Loeffler Institut, Environmental Research Group Oxford Limited, Universite Libre De Bruxelles, Instituto Nacional De</td>
<td>BELGIUM FRANCE</td>
</tr>
</tbody>
</table>
### 2017 Proposal number: 727393-1 “PALE-Blu” “Understanding pathogen, livestock, environment interactions involving bluetongue virus Horizon 2020”

- **4 years**
  - maps, to identify pathways and mechanisms for spread into and within Europe, as well as appropriate prevention strategies. These studies will provide a better understanding of incursion risks for different BTV strains, supporting effective control strategies.

### Call n° CHAFEA/LUX/2020/OP/0005 - Chafea/2020/BTSF/01: Organisation and implementation of training activities on the new EU Animal Health Law under the "Better Training for Safer Food"(BTSF) initiative

- **2 years**
  - Training course aiming at spreading knowledge, disseminating best practices for official policies and controls in the animal health area and favouring exchange of experience in order to increase the level of expertise with regard to the rules introduced by the new EU AHL legal framework, and the level of consistency of their implementation across EU

### Representative of EU member States

- AUSTRIA
- BELGIUM
- BULGARIA
- CROATIA
- DENMARK
- ESTONIA
- FINLAND
- FRANCE
- GERMANY
- GREECE
- HUNGARY
- IRELAND
- ITALY
- LITHUANIA
- LUXEMBOURG
- MALTA
- POLAND
- PORTUGAL
- ROMANIA
- SLOVAKIA
- SLOVENIA
- SPAIN
- SWEDEN

### TOR6: EPIZOOLOGICAL DATA

14. Did your Laboratory collect epidemiological data relevant to international disease control?

Yes

**IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:**

- Data related to the BTV atypical serotypes outbreaks occurring in Tunisia in 2022
- Data related to the BTV-3 serotypes outbreaks occurring in Italy (Sardinia) in 2022
- Data related to the EHDV-8 TUN outbreaks occurring in Tunisia in 2022
- Data related to the EHDV-8 TUN outbreaks occurring in Italy (Sardinia and Sicily) in 2022
15. Did your laboratory disseminate epidemiological data that had been processed and analysed?
Yes

**IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:**

- Sequencing of BTV-4 strain circulating in Sardinia in 2022
- Sequencing of BTV-3 strain circulating in Sardinia in 2022
- Sequencing of EHDV-8 TUN strain circulating in Sardinia in 2022
- Serological surveillance to investigate the presence and spread of BTV in Pakistan
- Serological surveillance to investigate the presence and spread of BTV in Tunisia
- Serological surveillance to investigate the presence and spread of EHDV-8 in Tunisia

16. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category and list the details in the box)

a) Articles published in peer-reviewed journals:

5


b) International conferences:

3

1. 12th International congress for veterinarian virology (ESVV), Ghent, Belgium, 20-23 September, 2022
2. 14th Epizone congress. Barcelona, 17-20 may 2022
3. EU review for PALE-Blu. On-line 18 march 2022

c) National conferences:
1. Online webinar “Giornata di studio sulla Bluetongue”, 13 December 2022
2. “Giornata di studio EHD” Cagliari, 16 November 2022
3. XXI Congresso Nazionale SIDILV 2022 Ischia 7-9 September 2022

d) Other (Provide website address or link to appropriate information):

internet
A public web site (www.izs.it) disseminating information and data on Bluetongue is continuously updated in order to have:

- the latest on the Italian and European Regulations issued by the Italian Ministry of Health;
- the current (2022) and past (2008-2021) epidemiological situations in Italy;
- weekly updated maps on entomological and serological surveillance activities (bluetongue national information system);
- the current epidemiological situations in the Mediterranean Basin;
- rules and regulations
- an scientific documents on-line.

**TOR7: SCIENTIFIC AND TECHNICAL TRAINING**

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAH Members?
   Yes
   a) Technical visit : 1
   b) Seminars : 0
   c) Hands-on training courses: 0
   d) Internships (>1 month) 2

<table>
<thead>
<tr>
<th>Type of technical training provided (a, b, c or d)</th>
<th>Country of origin of the expert(s) provided with training</th>
<th>No. participants from the corresponding country</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Serbia</td>
<td>2</td>
</tr>
<tr>
<td>d</td>
<td>Pakistan</td>
<td>1</td>
</tr>
<tr>
<td>d</td>
<td>Tunisia</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOR8: QUALITY ASSURANCE**

18. Does your laboratory have a Quality Management System?
   Yes

<table>
<thead>
<tr>
<th>Quality management system adopted</th>
<th>Certificate scan (PDF, JPG, PNG format)</th>
<th>Accreditation body</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 17025</td>
<td>ACCREDIA_IZSAM_Italy.pdf</td>
<td>ACCREDIA</td>
</tr>
</tbody>
</table>

19. Is your quality management system accredited?
   Yes

<table>
<thead>
<tr>
<th>Test for which your laboratory is accredited</th>
<th>Accreditation body</th>
</tr>
</thead>
<tbody>
<tr>
<td>VNT</td>
<td>ACCREDIA</td>
</tr>
</tbody>
</table>
20. Does your laboratory maintain a “biorisk management system” for the pathogen and the disease concerned?

Yes

The biosecurity policy integrates aspects related to safety, security and environment, in fact risks associated with all our activities are assessed and managed to ensure the safety of workers and of the environment in accordance with international standards. In particular, IZSAM has developed its biosecurity manual in accordance with the WHO standards “The WHO Laboratory Biosafety Manual (LBM) 4th ed.) as well as the specific procedures for safe handling and containment of infectious microorganisms and hazardous biological material. Furthermore, to reduce or eliminate the exposure of the environment (air, water, soil) to potentially infectious or hazardous agents IZSAM obtained the certification according to the ISO 14001. Lastly, a rigorous management of biologicals, chemicals and their associated waste is in place and information and communication to personnel done on a routine bases. To ensure the safety handling and movement of goods, the IZS-Teramo has developed protocols and procedures according to the World Health Organization standards (WHO/WHE/CPI/2019.20 Guidance on regulations for the Transport of infectious Substances” - 2019-2020, pag. 1-29.). The laboratory is officially authorised by the Italian Ministry of Health to import biological materials and biological reagents of any origin through the airports of Rome (Fiumicino) and Milan (Malpensa and Linate) Transport by air of biological materials considered as infectious substances is done according to the international regulations guidelines developed by IATA (Infectious Substances Shipping Guidelines- 1 January 2006- 7th Edition p.1-41). The IZS - Teramo also complies with ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road and Directive 2014/103/UE) regulations to guarantee the safe road transportation of dangerous goods and owns vehicles properly equipped for the purpose. Traceability of biological material for research purposes is provided by the use of MTA, and dispatch and receipt are regulated by Standard Operating procedures.

**TOR9: SCIENTIFIC MEETINGS**

21. Did your laboratory organise scientific meetings related to the pathogen in question on behalf of WOAH?

Yes

<table>
<thead>
<tr>
<th>NATIONAL/ INTERNATIONAL</th>
<th>TITLE OF EVENT</th>
<th>CO-ORGANISER</th>
<th>DATE (MM/YY)</th>
<th>LOCATION</th>
<th>NO. PARTICIPANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>Giornata di studio sulla Bluetongue</td>
<td>Italian Ministry of Health</td>
<td>2022-12-13</td>
<td>online</td>
<td>300</td>
</tr>
</tbody>
</table>

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOAH?

Yes

<table>
<thead>
<tr>
<th>Title of event</th>
<th>Date (mm/yy)</th>
<th>Location</th>
<th>Role (speaker, presenting poster, short communications)</th>
<th>Title of the work presented</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU review for PALE-Blu</td>
<td>2022-03-18</td>
<td>Online</td>
<td>Speaker</td>
<td>IZSAM results</td>
</tr>
<tr>
<td>14th Epizone congress</td>
<td>2022-05-17</td>
<td>Barcelona (Spain)</td>
<td>Speaker</td>
<td>Recent genomic epidemiology of western btv-4 strains in the mediterranean basin</td>
</tr>
<tr>
<td>XXI National congress</td>
<td></td>
<td></td>
<td></td>
<td>Isolamento e caratterizzazione in vivo di</td>
</tr>
</tbody>
</table>
TOR10: NETWORK WITH WOAH REFERENCE LABORATORIES

23. Did your laboratory exchange information with other WOAH Reference Laboratories designated for the same pathogen or disease?
Yes

24. Are you a member of a network of WOAH Reference Laboratories designated for the same pathogen?
Yes

<table>
<thead>
<tr>
<th>PURPOSE OF THE PROFICIENCY TESTS: 1</th>
<th>ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/PARTICIPANT)</th>
<th>NO. PARTICIPANTS</th>
<th>PARTICIPATING WOAH REF. LABS/ ORGANISING WOAH REF. LAB.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detection of BTV and serotyping in blood samples (Real Time RT-PCR)</td>
<td>Participant</td>
<td>0</td>
<td>Information not available at the moment</td>
</tr>
<tr>
<td>Detection of BTV antibody in serum samples (c-ELISA)</td>
<td>Participant</td>
<td>0</td>
<td>Information not available at the moment</td>
</tr>
</tbody>
</table>

25. Did you organise or participate in inter-laboratory proficiency tests with WOAH Reference Laboratories designated for the same pathogen?

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Giovanni Savini - Bluetongue - ITALY

**SIDILV**

- **2022-09-09**
- **Ischia (Italy)**
- **Speaker**
  - un sierotipo atipico del virus della bluetongue

**12th International congress for veterinarian virology (ESVV)**

- **2022-09-20**
- **Ghent (Belgium)**
- **Speaker**
  - 1. Blue tongue virus in Europe and in Africa, 2022
  - 2. Diagnosis and characterization of a novel strain of EHDV-8 in Tunisia in 2021
  - 3. Infection kinetics of BTV-X ITL2021 (BTV-32) in small ruminants

**Giornata di studio EHD**

- **2022-11-13**
- **Cagliari (Italy)**
- **Speaker**
  - 1. Malattia emorragica epizootica del cervo: storia ed evoluzione
  - 2. Diagnostica di laboratorio
  - 3. La malattia emorragica del cervo (EHD). Approfondimenti diagnostici e possibili scenari di diffusione nell'area del Mediterraneo
  - 4. Ruolo dei vettori nella diffusione dell'EHD

**EU National Reference Laboratories Annual meeting 2022 African Horse Sickness and Bluetongue**

- **2022-12-01**
- **Online**
- **Speaker**
  - EHD situation in Tunisia and Italy
Yes

<table>
<thead>
<tr>
<th>PURPOSE OF THE PROFICIENCY TESTS: 1</th>
<th>ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/PARTICIPANT)</th>
<th>NO. PARTICIPANTS</th>
<th>PARTICIPATING WOAH REF. LABS/ ORGANISING WOAH REF. LAB.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detection of BTV and serotyping in blood samples (Real Time RT-PCR)</td>
<td>Participant</td>
<td>Information not available at the moment</td>
<td>Information not available at the moment</td>
</tr>
<tr>
<td>Detection of BTV antibody in serum samples (c-ELISA)</td>
<td>Participant</td>
<td>Information not available at the moment</td>
<td>Information not available at the moment</td>
</tr>
</tbody>
</table>

26. Did your laboratory collaborate with other WOAH Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?

Yes

<table>
<thead>
<tr>
<th>TITLE OF THE PROJECT OR CONTRACT</th>
<th>SCOPE</th>
<th>NAME(S) OF RELEVANT WOAH REFERENCE LABORATORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIE Bluetongue reference laboratories network (WOAH- BTNet)</td>
<td>Sharing reagents, updating, revising and validating the protocols of old procedures and adding new diagnostic procedures</td>
<td>All the WOAH BT reference laboratories</td>
</tr>
<tr>
<td>Understanding pathogen, livestock, environment interactions involving bluetongue virus_Pale Blu</td>
<td>A network of experts BTV European Institute, with partners in endemic region of Africa the Middle East and Turkey, to increase the accuracy of BTV-strain distribution maps, to identify pathways and mechanisms for spread into and within Europe, as well as appropriate prevention strategies. These studies will provide a better understanding of incursion risks for different BTV strains, supporting effective control strategies</td>
<td>Pirbright Institute</td>
</tr>
</tbody>
</table>

**TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING**

27. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than WOAH Reference Laboratories for the same pathogen?

Yes

<table>
<thead>
<tr>
<th>Purpose for inter-laboratory test comparisons1</th>
<th>Role of your reference laboratory (organizer/participant)</th>
<th>No. participating laboratories</th>
<th>Region(s) of participating WOAH Member Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detection of BTV and serotyping in blood samples(Real Time RT-PCR)</td>
<td>Organiser</td>
<td>19</td>
<td>Europe</td>
</tr>
<tr>
<td>Detection of BTV antibody in serum samples (c- ELISA)</td>
<td>Organiser</td>
<td>32</td>
<td>Europe</td>
</tr>
</tbody>
</table>

**TOR12: EXPERT CONSULTANTS**

28. Did your laboratory place expert consultants at the disposal of WOAH?
Yes

<table>
<thead>
<tr>
<th>KIND OF CONSULTANCY</th>
<th>Location</th>
<th>SUBJECT (FACULTATIVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ad hoc group meeting</td>
<td>Cagliari (Italy)</td>
<td>Sicily and Sardinia BTV and EHDV Emergency task force</td>
</tr>
<tr>
<td>EHDV technical assistance</td>
<td>Tunisia</td>
<td>Expert group assistance</td>
</tr>
</tbody>
</table>

29. Additional comments regarding your report:
No