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

Diagnostic Test	Indicated in WOAH Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
c-ELISA	Yes	3,008	0
c-ELISA	Yes	31,090	910
Direct diagnostic tests		Nationally	Internationally
Genotype specific Real-time RT-PCR	Yes	4,136	90
Serotype specific PCR real time	No	3,630	35

KC + VERO cell culture	Yes	88	0
Microscopic examination Culicoides imicola identification	No	3,147	0
Microscopic examination Culicoides spp.	No	3,147	24

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

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

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

NAME OF THE NEW TEST OR DIAGNOSTIC METHOD DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
	Oral presentation at national meeting " Giornata di studio sulla

BTV-3 Serotype specific PCR real time	Bluetongue "
BTV-27 Serotype specific PCR real time	Oral presentation at national meeting " Giornata di studio sulla Bluetongue "
EHDV-8 TUN Serotype specific PCR real time	Oral presentation at national meeting " Giornata di studio sulla Bluetongue "

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

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

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

Yes

NAME OF THE WOAH MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
TUNISIA	Diagnostic assistance	Remote and in loco assistance Internship
PAKISTAN	Diagnostic assistance	Internship
SERBIA	Diagnostic assistance	Internship

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

Title of the study	Duration	PURPOSE OF THE STUDY	PARTNERS (INSTITUTIONS)	WOAH MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY
			Avia-GIS, ERGO – Environmental Research Group Oxford, CIRAD – French Agricultural Research Centre for	

ECDC- EFSA Vectornet. European network of medical and veterinary entomology	5 years (2019-2023)	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.	International Development, Haceteppe University, PHE – Public Heath England, RIVM – Dutch Institute for Public Health and the Environment, CUNI, Charles University, Czech Republic, CIISA - Centro de Investigaçao Interdisciplinar em Sanidade Animal,Portugal, CReSA - Centre de Recerca en Sanitat Animal, Spain, DTU - Danmarks Tekniske Universitet, Denmark, EBC, evolutionary Biology Centre, Uppsala University, Sweden, FLI - Friederich-Loeffler-Institut, Germany, IAH, Institute of Animal Health, Pirbright Institute, UK, IRD – Institut de Recherche pour le Développement, France, IVB – Institute of Vertebrate Biology, KAU, Kafkas University, Turkey, NoviSad University, Serbia, Primarska University, Slovenia, VECPAR – Transmision Vectorielle et épidemiosurveillance des Maladies Parasitaires, Reims University, Zaragosa University, Spain	CZECH REPUBLIC DENMARK FRANCE GERMANY PORTUGAL SLOVENIA SPAIN SWEDEN TURKEY UNITED KINGDOM
Point-of-incidence toolbox for emerging virus threats (TELE-Vir)	2 years (2020-2023)	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.	INSA, Portugal, Sciensano, Belgium, INIA-CISA, Spain, PIWET, Poland VRI, Czech Republic, SVA, Sweden, ANSES, France, UoS, UK, NVI, Norway, IZSLER, Italy, SSI, Denmark	BELGIUM CZECH REPUBLIC DENMARK FRANCE ITALY NORWAY POLAND PORTUGAL SPAIN SWEDEN UNITED KINGDOM
		ERFAN is a strategic platform to build		

Enhancing Research for Africa Network –ERFAN	5 years (2018-2022)	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.	INMV, Algeria DSV, Algeria NCAH, Libya ONSSA, Morocco ONARDEL, Mauritania LNERV, Senegal NRC, Egypt ENMV, Tunisia IRVT, Tunisia ENMV, Tunisia	ALGERIA EGYPT LIBYA MAURITANIA MOROCCO SENEGAL TUNISIA
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)	3 years (2019-2023)	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.	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	EGYPT FRANCE TUNISIA
EuropeAid140314/DH/SER/Multi – SANTE/2018-G-046 EU Regional action on animal disease eradication in the Western Balkans (ADEWB) Project	3 years	Design a controlling strategy for BTV in the Balkan peninsula	Albania, Kosovo , North Macedonia, Montenegro; Serbia; Romania; Bosnia Erzegovina	ALBANIA BOSNIA AND HERZEGOVINA KOSOVO MONTENEGRO NORTH MACEDONIA (REP. OF) ROMANIA SERBIA
OIE Twinning contract for Bluetongue between Istituto Zooprofilattico Sperimentale dell' Abruzzo e del Molise and Istituto Biologico of San Paolo	2 years	To enhance capacity and improve scientific capabilities in relation to diagnosis and surveillance of Bluetongue.	Instituto Biológico of São Paulo	BRAZIL
Horizon 2020 Call: H2020-SFS-2016-		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	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	BELGIUM FRANCE

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.	Investigacion Y Tecnologia Agraria Y Alimentaria, Stichting Dienst Landbouwkundig Onderzoek, University Of Glasgow, Kimron Veterinary Institute, Universidad Complutense De Madrid, Statens Veterinaermedicinska Anstalt, Kafkas Universitesi,Institut Agronomique Et Veterinaire Hassan Ii, The University Of Nottingham, International Livestock Research Institute, Institut Senegalais De Recherches Agricoles	GERMANY ISRAEL KENYA MOROCCO SENEGAL SPAIN SWEDEN TUNISIA UNITED KINGDOM
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

1. Spedicato M, Compagni ED, Caporale M, Teodori L, Leone A, Ancora M, Mangone I, Perletta F, Portanti O, Di Giallonardo F, Bonfini B, Savini G, Lorusso A. Reemergence of an atypical bluetongue virus strain in goats, Sardinia, Italy. Res Vet Sci. 2022 Dec 10;151:36-41. doi: 10.1016/j.rvsc.2022.07.003. Epub 2022 Jul 10. PMID: 35853329.

2. Sana K, Soufien S, Thameur BH, Liana T, Massimo S, Kaouther G, Raja G, Haikel H, Bassem BHM, Wiem K, Monia L, Ameni BS, Naouel F, Anissa D, Mehdi BA, Sarah T, Chedia S, Giovanni S, Salah H. Risk-based serological survey of bluetongue and the first evidence of bluetongue virus serotype 26 circulation in Tunisia. Vet Med Sci. 2022 Jul;8(4):1671-1682. doi: 10.1002/vms3.818. Epub 2022 May 5. PMID: 35510402; PMCID: PMC9297743.

3. Serroni A., Ulisse S., Iorio M., Laguardia C., Testa L., Armillotta G., Caporale M., Salini R., Lelli D., Wernery U., Raghavan R., Mercante M. T., Di Ventura M. Development of a Competitive Enzyme-Linked Immunosorbent Assay Based on Purified Recombinant Viral Protein 7 for Serological Diagnosis of Epizootic Haemorrhagic Disease in Camels. Journal of Tropical Medicine. 2022. 2022. 10.1155/2022/5210771.

4. Armillotta G., Di Febo T., Ulisse S., Laguardia C., Iorio M., Krasteva I., Tittarelli M., Mercante M. T., Luciani M. Production and Characterization of Monoclonal Antibodies Against the VP7 Protein of Epizootic Hemorrhagic Disease Virus Monoclonal Antibodies in Immunodiagnosis and Immunotherapy. 2022. 41 4 181-187 10.1089/mab.2021.0019.210816.

5. Sghaier S, Sailleau C, Marcacci M, Thabet S, Curini V, Ben Hassine T, Teodori L, Portanti O, Hammami S, Jurisic L, Spedicato M, Postic L, Gazani I, Ben Osman R, Zientara S, Bréard E, Calistri P, Richt JA, Holmes EC, Savini G, Di Giallonardo F, Lorusso A. Epizootic Haemorrhagic Disease Virus Serotype 8 in Tunisia, 2021. Viruses. 2022 Dec 21;15(1):16. doi: 10.3390/v15010016. PMID: 36680057

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:

3
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

Type of technical training provided (a, b, c or d)	Country of origin of the expert(s) provided with training	No. participants from the corresponding country
a	Serbia	2
d	Pakistan	1
d	Tunisia	1

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO 17025		ACCREDIA_IZSAM_Italy.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
VNT	ACCREDIA

c-ELISA	ACCREDIA
Genotype specific Real-time RT-PCR	ACCREDIA

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

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

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

Yes

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

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
12th International congress for veterinarian virology (ESVV)	2022-09-20	Ghent (Belgium)	Poster	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

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

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

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

Yes

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

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

TITLE OF THE PROJECT OR CONTRACT	SCOPE	NAME(S) OF RELEVANT WOAH REFERENCE LABORATORIES
OIE Bluetongue reference laboratories network (WOAH- BTNet)	Sharing reagents, updating, revising and validating the protocols of old procedures and adding new diagnostic procedures	All the WOAH BT reference laboratories
Understanding pathogen, livestock, environment interactions involving bluetongue virus_Pale Blu	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	Pirbright Institute

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

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

TOR12: EXPERT CONSULTANTS

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
ad hoc group meeting	Cagliari (Italy)	Sicily and Sardinia BTV and EHDV Emergency task force
EHDV technical assistance	Tunisia	Expert group assistance

29. Additional comments regarding your report:

No