

# WOAH Reference Laboratory Reports Activities 2023

## Activities in 2023

This report has been submitted : 11 juillet 2024 11:25

### Laboratory Information

<b>Name of disease (or topic) for which you are a designated WOA Reference Laboratory:</b>	Brucellosis (Brucella abortus, B. melitensis, B. suis)
<b>Address of laboratory:</b>	Via Campo Boario, 64100 Teramo
<b>Tel.:</b>	+390861332626
<b>E-mail address:</b>	f.demassis@izs.it
<b>Website:</b>	www.izs.it
<b>Name (including Title) of Head of Laboratory (Responsible Official):</b>	Dr Nicola D'Alterio, DVM, Director General
<b>Name (including Title and Position) of WOA Reference Expert:</b>	Dr Fabrizio De Massis, DVM, Head of Branch Laboratory
<b>Which of the following defines your laboratory? Check all that apply:</b>	Governmental Research agency

### 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 WOA Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
<b>Indirect diagnostic tests</b>		<b>Nationally</b>	<b>Internationally</b>
RBT		180121	0
CFT		16099	76
I-ELISA (bovine serum)		641	0
I-ELISA (ovine/caprine serum)		241	0
C-ELISA (Bovine / Ovine / Caprine sera)		768	0
Milk ELISA		0	18
CFT RB51		687	0
SAT B. canis		491	10
IFAT B. canis		220	0
<b>Direct diagnostic tests</b>		<b>Nationally</b>	<b>Internationally</b>
Bacterial isolation		1126	0
Brucella identification and biotyping (animal strains)		442	0
Brucella identification and biotyping (human strains)		3	0
PCR		445	6
Real –Time PCR		1046	

			0
PCR-RFLP (identification)		382	0
Bruceladder		62	0
MLST		318	0
WGS (SNP typing, cgMLST)		445	0
MALDI-TOF		555	0

## TOR2: REFERENCE MATERIAL

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

No

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

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST	PRODUCED/ PROVIDE	AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOA?H MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
Rose Bengal Antigen	Rose Bengal Test	Produced and provided (162240 ml)	153020	0	1	ITALY,
Brucella RB51 Antigen	CFT-RB51	Produced and provided (5925 ml)	6015	0	1	ITALY,
Brucella canis SAT Antigen	SAT	Produced and provided (380 ml)	30	20	2	FRANCE, ITALY,
LPS Antigen from Brucella abortus s 99	Various	Produced and provided (19,8 ml)	20	0	1	ITALY,
Negative Buffalo Serum for Brucella abortus	Negative control for all serological methods	Provided (4 ml)	4	0	1	ITALY,
Negative Standard Bovine Serum for Brucella abortus	Negative control for all serological methods	Provided (326 ml)	458	0	1	ITALY,
Rabbit Serum positive for Brucella canis	Positive control for all serological methods	Provided (18,5 ml)	15	1	2	FRANCE, ITALY,
Water Buffalo Serum Positive for Brucella abortus strain RB51	Positive control for all serological methods	Produced and Provided (45 ml)	6.5	0	1	ITALY,
Negative Bovine Milk for B. abortus	MRT for control and ring trial	Provided (133 ml)	133	0	1	ITALY,

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOA?H Members?

Not applicable

## 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 WOA?H Standards for the designated pathogen or disease?

Yes

NAME OF THE NEW TEST OR DIAGNOSTIC METHOD DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
Detection of antibodies against Brucella spp. (smooth strains) through Rose Bengal test and complement fixation test	Revision of the Method
Detection of Brucella antibodies in bovine, buffalo, ovine-caprine, and swine serum through indirect ELISA	Revision of the Method
Detection of Brucella antibodies in bovine and buffalo milk through indirect ELISA	Revision of the Method
Control of attenuated vaccines for brucellosis (B. melitensis strain rev.1, B. abortus)	Revision of the Method

strain 19, B. abortus strain RB51)	
Molecular typing of Brucella spp.	Revision of the Method
Brucella: species and biovar identification	Revision of the Method
Detection of anti-Brucella canis antibodies through slow serum agglutination test	Revision of the Method
Molecular typing of Brucella spp. and Brucella vaccine strains using PCR Bruce-Ladder	Revision of the Method
Official control of buffered Rose Bengal antigen for serological diagnosis of brucellosis	Revision of the Method
Production of s-LPS antigen from Brucella abortus strain 99 and other s-LPS producing bacteria	Revision of the Method
Detection of Brucella spp. through real-time PCR	Validation of the method

8. Did your laboratory develop new vaccines for the designated pathogen or disease?

No

9. Did your laboratory validate vaccines according to WOAHS Standards for the designated pathogen or disease?

No

## TOR4: DIAGNOSTIC TESTING FACILITIES

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

No

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

No

## TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

Yes

Title of the study	Duration	PURPOSE OF THE STUDY	PARTNERS (INSTITUTIONS)	WOAHS MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY
ERFAN. Enhancing Research and Development in Africa through WOAHS Reference Laboratories and Collaborating Centres, and Poles of Excellence, as resultant of WOAHS twinning Projects - ERFAN	5 years	ERFAN is an WOAHS network to facilitate and strengthen collaboration among countries of the SADC Region and Arab Maghreb Union (UMA) as well as IZSAM in the Animal health and food security domains.	WOAHS CC University of Pretoria National Central Veterinary Laboratories, and some Faculties of Veterinary Science of other African countries: Angola, Mozambique, Namibia, Tanzania, Zambia and Zimbabwe	ANGOLA LIBYA MOROCCO MOZAMBIQUE NAMIBIA TANZANIA TUNISIA ZAMBIA ZIMBABWE
WOAHS twinning project on Epidemiology and Risk Assessment Between IZSAM and the Department of Animal Resources Risk Assessment (KSA ARRAD) - Kingdom of Saudi Arabia.	4 years (2019-2023)	WOAHS Twinning project	Department of Animal Resources Risk Assessment (KSA ARRAD) Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale"	SAUDI ARABIA
IDEMBRU	2.5 year (30 months, 2020-2022)	Identification of potentially emerging Brucella species: new threats for human and animals. To produce a toolkit of immunological and molecular techniques to detect classical and emerging strains of Brucella spp.	ANSES (lead) + Members of the consortium of One Health EJP	BULGARIA FRANCE GERMANY PORTUGAL THE NETHERLANDS UNITED KINGDOM
EUOHZ Report	4 years 2021-2024	Provision of support to EFSA and to ECDC in the production of the EU One Health Zoonoses report and in related zoonoses online interactive data visualisation dashboards and zoonoses story	IZSAM (lead) + different experts coming from the EU Member States	AUSTRIA BELGIUM BULGARIA CYPRUS CZECH REPUBLIC DENMARK ESTONIA FINLAND FRANCE GERMANY GREECE HUNGARY ICELAND LATVIA LIECHTENSTEIN LITHUANIA LUXEMBOURG MALTA POLAND PORTUGAL ROMANIA SLOVAKIA

		maps		SLOVENIA SPAIN SWEDEN THE NETHERLANDS
Twinning Project France-Italy-Tunisia "Renforcement du dispositif national d'encadrement vétérinaire de la santé animale" - TN 18 ENI AG 01 21)	3 years (2022-2025)	Twinning project founded by the European Union	Tunisian Veterinary Services Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale" France Vétérinaire International	FRANCE TUNISIA
Twinning Project France-Italy-Madagascar "Appui au renforcement du dispositif de surveillance et de contrôle de la qualité et conformité sanitaire et phytosanitaire des produits agricoles et agroalimentaires à Madagascar", - MG 19 FED AG 01 21.	2 years (2022-2024)	Twinning project founded by the European Union	Malgasi Veterinary Services Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale" France Vétérinaire International	FRANCE MADAGASCAR

13. In exercising your activities, have you identified any regulatory research needs\* relevant for WOA?H?

No

## 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:

The Reference Laboratory collaborates with the WOA?H CC for veterinary epidemiology, Teramo, in managing and updating the Information System on animal brucellosis, taking care, in particular, of the publication of a dashboard summarizing indicators on the progress of the national plans for the eradication of bovine, buffalo, sheep and goat brucellosis in non-officially free territories. Criteria for the calculation of main epidemiological indicators have been defined in order to highlight the dissemination or persistence of infection in specific geographic areas. The dashboard summaries are produced by integrating the laboratory data with the data generated by veterinary services activities.

As part of its institutional activities in collaboration with the national reference centers for brucellosis and epidemiology, the CRNB has provided technical support in the analysis and organization of the data and information necessary for the preparation of national plans for the eradication of bovine, buffalo, sheep and goats brucellosis in Italy, submitted to the European Commission for the approval of the financial contribution and the necessary changes due to the entry into force of Regulation (EU) 2016/429 (the so-called Animal Health Law - AHL).

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:

International and national research conference and seminars. See publications below

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:

10

1. Brunetti Roberta Ottaiano, Maria Fordellone Mario, Chiodini, P. S., Simona, Gargano, Federica De Massis, Fabrizio Baldi, Loredana, & De Carlo, E. 2023. Risk factors for the spread of brucellosis in sheep and goats in the Campania region in the years 2015–2020. *Microorganism*, 11(11), 1-14. doi:10.3390/microorganisms11112623

2. De Massis F, Sacchini, F., D'Alterio, N., Migliorati, G., Ferri, N., Rossi, E., Averaimo, D., Petrini, A., Podaliri Vulpiani, M., Perletta, F., Rodomonti, D., Luciani, M., Befacchia, G., Maggetti, M., Di Febo, T., Di Pancrazio, C., Krasteva, I. M., Salini, R., Vincifori, G., Iannetti, S., & Tittarelli, M. 2023. Brucella abortus strain RB51 administered to prepubescent water buffaloes, from vaccination to lactation: Kinetics of antibody response and vaccine safety. *Microorganisms*, 11(8), 2078. doi:10.3390/microorganisms11082078. doi:10.3390/microorganisms11082078

3. Djokic V, Freddi, L., de Massis, F., Lahti, E., van den Esker, M. H., Whatmore, A., Haughey, A., Ferreira, A. C., Garofolo, G., Melzer, F., Sacchini, F., Koets, A., Wyllie, S., Fontbonne, A., Girault, G., Vicente, A. F., McGiven, J., & Ponsart, C. 2023. The emergence of Brucella canis as a public health threat in Europe: What we know and what we need to learn. *Emerging Microbes & Infections*, 12(2), 2249126. doi:10.1080/22221751.2023.2249126

4. Grattarola C., Petrella, A., Lucifora, G., Di Francesco, G., Di Nocera, F., Pintore, A., Cocumelli, C., Terracciano, G., Battisti, A., Di Renzo, L., Farina, D., Di Francesco, C. E., Crescio, M. I., Zoppi, S., Dondo, A., Iulini, B., Varello, K., Mignone, W., Goria, M., Mattioda, V., Giorda, F., Di Guardo, G., Janowicz, A., Tittarelli, M., De Massis, F., Casalone, C., & Garofolo, G. 2023. *Brucella ceti infection in striped dolphins from Italian seas: Associated lesions and epidemiological data*. *Pathogens*, 12(8) doi:10.3390/pathogens12081034
5. Lara Savini, Luca Candeloro, Paolo Calistri, Alessio Di Lorenzo, Margherita Perilli, Armando Giovannini and Fabrizio De Massis. 2023. *Insights for brucellosis eradication in Italy through a model-based spread evaluation in grazing livestock - Sicily case study*. *Veterinaria Italiana*, 59(1) doi:10.12834/VetIt.2934.20799.1
6. Luciani M., Krasteva, I., Di Febo, T., Perletta, F., D'Onofrio, F., De Massis, F., D'Alterio, N., Sacchini, F., & Tittarelli, M. 2023. *Proteomics and bioinformatics investigations to improve serological diagnosis of canine brucellosis*. *Proteomics. Clinical Applications*, e2200116. doi:10.1002/prca.202200116
7. Moreno E., Middlebrook, E. A., Altamirano-Silva, P., Al Dahouk, S., Araj, G. F., Arce-Gorvel, V., Arenas-Gamboa, Á., Ariza, J., Barquero-Calvo, E., Battelli, G., Bertu, W. J., Blasco, J. M., Bosilkovski, M., Cadmus, S., Caswell, C. C., Celli, J., Chacón-Díaz, C., Chaves-Olarte, E., Comerci, D. J., Conde-Álvarez, R., Cook, E., Cravero, S., Dadar, M., De Boelle, X., De Massis, F., Díaz, R., Escobar, G. I., Fernández-Lago, L., Ficht, T. A., Foster, J. T., Garin-Bastuji, B., Godfroid, J., Gorvel, J., Güler, L., Erdenliğ-Gürbilek, S., Gusi, A. M., Guzmán-Verri, C., Hai, J., Hernández-Mora, G., Iriarte, M., Jacob, N. R., Keriell, A., Khames, M., Köhler, S., Letesson, J., Loperena-Barber, M., López-Goñi, I., McGiven, J., Melzer, F., Mora-Carlin, R., Moran-Gilad, J., Muñoz, P. M., Neubauer, H., O'Callaghan, D., Ocholi, R., Oñate, Á., Pandey, P., Pappas, G., Pembroke, J. T., Roop, M., Ruiz-Villalón, N., Ryan, M. P., Salcedo, S. P., Salvador-Bescós, M., Sangari, F. J., de Lima Santos, R., Seimenis, A., Splitter, G., Suárez-Esquivel, M., Tabbaa, D., Trangoni, M. D., Tsolis, R. M., Vizcaino, N., Wareth, G., Welburn, S. C., Whatmore, A., Zúñiga-Ripa, A., & Moriyón, I. 2023. *If you're not confused, you're not paying attention: Ochrobactrum is not brucella*. *Journal of Clinical Microbiology*, 61(8), e0043823. doi:10.1128/jcm.00438-23
8. Moriyón I., Blasco, J. M., Letesson, J. J., De Massis, F., & Moreno, E. 2023. *Brucellosis and one health: Inherited and future challenges*. *Microorganisms*, 11(8), 2070. doi:10.3390/microorganisms11082070
9. Perletta F., Di Pancrazio, C., Rodomonti, D., Di Febo, T., Luciani, M., Krasteva, I. M., Maggetti, M., Profeta, F., Salini, R., De Massis, F., Sacchini, F., & Tittarelli, M. 2023a. *Evaluation of three serological tests for diagnosis of canine brucellosis*. *Microorganisms*, 11(9), 2162. doi: 10.3390/microorganisms11092162. doi:10.3390/microorganisms11092162
10. Perilli, M., Averaimo, D., & De Massis, F. (2023). *Brucella spp.* In A. Paparella, M. Schirone & P. Visciano (Eds.), *Igiene nei processi alimentari. progettazione della sicurezza degli alimenti*. (2023, 3rd ed., pp. 176-185). Milano: Casa Editrice Libr. Ulrico Hoepli spa.

## b) International conferences:

1

1. Fabrizio De Massis, Flavio Sacchini, Manuela Tittarelli, Nicola D'Alterio, Giacomo Migliorati, Giuliano Garofolo, 2023 *Genomic characterization of Brucella spp. strains circulating in water buffaloes (Bubalus bubalis) during recent years in Italy*. *Proceedings of the 75th Annual Brucellosis Research Conference International Brucellosis Society Virginia-Maryland College of Veterinary Medicine Virginia Tech, Blacksburg, VA. May 20-21, 2023.*

## c) National conferences:

2

1. Grattarola, C., Testori, C., Lucifora, G., Petrella, A., Di Francesco, G., Di Nocera, F., Pintore, A., Giuliana, T., Battisti, A., Di Frenzo, L., Farina, D., Di Francesco, C. E., Crescio, M. I., Zoppi, S., Dondo, A., Iulini, B., Varello, K., Mignone, W., Goria, M., Mattioda, V., Giorda, F., Di Guardo, G., Janowicz, A. A., Tittarelli, M., De Massis, F., Casalone, C., & Garofolo, G. *L'infezione da Brucella ceti nei cetacei dei mari italiani: Lesioni associate ed epidemiologia*. *SIDILV XXII Congresso Nazionale, 2023, Poster*
2. Perletta, F., Di Pancrazio, C., Rodomonti, D., Di Febo, T., Luciani, M., Krasteva, I., Onofrio, F., De Massis, F., Sacchini, F., & Tittarelli, M. *Studio della cinetica anticorpale di cani naturalmente infetti da Brucella canis*. *SIDILV XXII Congresso Nazionale, 11-13 ottobre 2023 Brescia, Poster*

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

## TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAHA Members?

Yes

a) Technical visit : 1

b) Seminars : 10

c) Hands-on training courses: 6

d) Internships (&gt;1 month) 0

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
B	ITALY	74
C	ITALY	52
C	ITALY	96
	SAUDI ARABIA	

A		1
B	ITALY	200
B	FRANCE	1
B	FRANCE	1
B	FRANCE	30
B	ITALY	200
B	TUNISIA	45
B	SOUTH AFRICA	40
C	ALGERIA	2
C	KOSOVO	2
C	KAZAKHSTAN	2
C	SOUTH AFRICA	1
B	TUNISIA	45
B	SOUTH AFRICA	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	PDF Format	2027 Certificato Accredia ISO17025.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Complement Fixation test (CFT)	ACCREDIA (member of EA, IAF and ILAC)
RBT	ACCREDIA (member of EA, IAF and ILAC)
FPA	ACCREDIA (member of EA, IAF and ILAC)
CFT - RB51	ACCREDIA (member of EA, IAF and ILAC)
mSAT Brucella canis	ACCREDIA (member of EA, IAF and ILAC)
IFAT Brucella canis	ACCREDIA (member of EA, IAF and ILAC)
Brucella spp. Isolation	ACCREDIA (member of EA, IAF and ILAC)
Brucella spp. real time PCR	ACCREDIA (member of EA, IAF and ILAC)
Brucella spp. PCR	ACCREDIA (member of EA, IAF and ILAC)
Brucella spp. Isolation from food matrix	ACCREDIA (member of EA, IAF and ILAC)
Identification and typing	ACCREDIA (member of EA, IAF and ILAC)
c-ELISA	ACCREDIA (member of EA, IAF and ILAC)
PCR-RFLP	ACCREDIA (member of EA, IAF and ILAC)
PCR Bruce ladder	ACCREDIA (member of EA, IAF and ILAC)

20. Does your laboratory maintain a "biorisk management system" for the pathogen and the disease concerned?

Yes

We have a BSL-3 practices when handling products suspected or clinical specimens to prevent the risk of exposure

## TOR9: SCIENTIFIC MEETINGS

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

No

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

No

**TOR10: NETWORK WITH WOAHP REFERENCE LABORATORIES**

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

Yes

24. Do you network (collaborate or share information) with other WOAHP Reference Laboratories designated for the same pathogen?

Not applicable (Only WOAHP Reference Laboratory designated for the disease)

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

Yes

PURPOSE OF THE PROFICIENCY TESTS: 1	ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/PARTICIPANT)	NO. PARTICIPANTS	PARTICIPATING WOAHP REF. LABS/ ORGANISING WOAHP REF. LAB.
EU Bovine Brucellosis Serum Proficiency Test 2023 organised by EU-RL ANSES. ILPT Brucellosis bacteriology e Brucellose_serum_bovin_LNR proficiency test	Participant	27 EU Countries	ANSES France EU RL for Brucellosis

26. Did your laboratory collaborate with other WOAHP 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 WOAHP REFERENCE LABORATORIES
IDEMBRU	Identification of potentially emerging Brucella species: new threats for human and animals. To produce a toolkit of immunological and molecular techniques to detect classical and emerging strains of Brucella spp.	ANSES (lead) + Members of the consortium of One Health EJP Bulgaria, France Germany, Portugal, The Netherlands and United Kingdom
"Provision of support to EFSA and to ECDC in the production of the EU One Health Zoonoses report and in related zoonoses online interactive data visualisation dashboards and zoonoses story maps" (EUOHZ Report). Framework contract number: OC/EFSA/BIOCONTAM/2020/03. Codice interno IZSAM AFAATE1221	The project aims to provide support in the preparation of the joint EFSA-ECDC annual report on zoonoses in the European Union, Brucella Included.	All EU Reference Labs
ERFAN. Enhancing Research and Development in Africa through WOAHP Reference Laboratories and Collaborating Centres, and Poles of Excellence, as resultant of WOAHP twinning Projects - ERFAN	ERFAN is an WOAHP network to facilitate and strengthen collaboration among countries of the SADC Region and Arab Maghreb Union (UMA) as well as IZSAM in the Animal health and food security domains.	IZS-Teramo

**TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING**

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

Yes

Purpose for inter-laboratory test comparisons <sup>1</sup>	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the Test	WOAHP Member Countries
22th IZSAM National and international brucellosis serology proficiency testing	Organiser	58	RBT, CFT	
10th IZSAM National and international proficiency testing for brucellosis identification in food	Organiser	5	brucellosis identification in food	
17th IZSAM National and international proficiency testing for brucellosis identification in animal specimens	Organiser	20	brucellosis identification in Animal Specimens	

**TOR12: EXPERT CONSULTANTS**

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
Revision of the brucellosis chapter of the terrestrial manual	Several videoconferences	.

## 29. Additional comments regarding your report:

Yes

- Organised by EU; Chairmanship of the Task force on monitoring animal disease eradication programmes in Member States– Brucellosis subgroup (no meetings in 2023).
- Organised by EFSA; Participation to the Animal Health and Welfare Network (F. De Massis)
- Organised by EFSA; Participation to the Task Force on Zoonosis Data Collection;
- Organised by EFSA; Participation to the Working group on Zoonosis SINZOO;
- Organised by EFSA; Participation to the Zoonosis Monitoring Network;
- Organised by WOAAH ERFAN Project: Meetings of the ERFAN Brucellosis Working Groups
- Organised by EURL for Brucellosis: Expert Meetings of the EU Brucellosis National Reference Laboratories
- Organised by EURL for Brucellosis: IDEMBRU meetings
- (EFSA) Participation as an expert in the working group for the preparation of the European One Health Zoonoses Report (EUOHZ) – chapter brucellosis.
- EURL BRUCELLOSIS - Expert Meeting Agenda - Animal Health Law, Various VDC, 12 January 2022, 16 February 2022, 7 April 2022, 17 May 2022, 1 July 2022
- ERFAN working groups meeting on Brucellosis
- One Health EJP COHESIVE + IDEMBRU Projects Working group: Controlling the spread of Brucella canis in Europe.
- Participation in the working group (Ministry of Health, Regions and Reference Centers for Brucellosis, Tuberculosis and Enzootic Bovine Leucosis) for the drafting of the Ministerial Decree on eradication plans and programs for 2024.