

OIE Reference Laboratory Reports Activities

Activities in 2020

This report has been submitted : 2021-01-20 15:20:32

Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Highly and low pathogenic avian influenza
Address of laboratory:	OIE Reference Laboratory for Avian Influenza disease Istituto Zooprofilattico Sperimentale delle Venezie (IZSve) Viale dell'Università 10 - 35020 Legnaro (PD) - Italy
Tel.:	+39-049 808 4381
Fax:	+39-049 808 4360
E-mail address:	imonne@izsvenezie.it
Website:	www.izsvenezie.it
Name (including Title) of Head of Laboratory (Responsible Official):	Calogero Terregino, Head of the EU/National Reference Laboratory for AI/NDV. Director of the Research and Development Department/acting Director of the Specialized Virology and Experimental Research Unit (IZSve)
Name (including Title and Position) of OIE Reference Expert:	Isabella Monne, DVM PhD, Head of the Viral genomics and transcriptomics Laboratory, Division of Research and Innovation
Which of the following defines your laboratory? Check all that apply:	Governmental

ToR 1: To use, promote and disseminate diagnostic methods validated according to OIE Standards

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 OIE Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
Indirect diagnostic tests		Nationally	Internationally
Haemoagglutination inhibition (HI)	Yes	12.626	0
Neuraminidase inhibition	Yes	0	0
C-ELISA (AI-type A)	Yes	12.775	0
AGID	Yes	415	0
Direct diagnostic tests		Nationally	Internationally
Virus Isolation	Yes	66	52
PCR	Yes	20.201	244
Sequencing of HA gene	Yes	122	16
IVPI - Intravenous Pathogenicity Index	Yes	3	2
WGS - Whole Genome Sequencing	Yes	23	96

**ToR 2: To develop reference material in accordance with OIE requirements, and implement and promote the application of OIE Standards.
To store and distribute to national laboratories biological reference products and any other reagents used in the diagnosis and control of the designated pathogens or disease.**

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

No

3. Did your laboratory supply standard reference reagents (non OIE-approved) and/or other diagnostic reagents to OIE Member Countries?

Yes

Type of reagent available	Related diagnostic test	Produced/ provide	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	No. of recipient OIE Member Countries	Region of recipients
Control positive antigens	HI serological test	10394/3629 ml	870 ml	2759 ml	23	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input checked="" type="checkbox"/> Middle East
Control positive sera	HI/AGID serological test	2122/1569 ml	273 ml	1296 ml	19	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
Control negative serum	HI serological test	1400/340 ml	64 ml	276 ml	4	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to OIE Member Countries?

No

ToR 3: To develop, standardise and validate, according to OIE Standards, new procedures for diagnosis and control of the designated pathogens or diseases

6. Did your laboratory develop new diagnostic methods validated according to OIE Standards for the designated pathogen or disease?

No

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?

No

ToR 4: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries

8. Did your laboratory carry out diagnostic testing for other OIE Member Countries?

Yes

Name of OIE Member Country seeking assistance	Date (month)	No. samples received for provision of diagnostic support	No. samples received for provision of confirmatory diagnoses
BELGIUM	December	0	2
BENIN	October	0	12
BULGARIA	March and June	0	28
DENMARK	November	0	6
IRELAND	September	0	12
NORTH MACEDONIA (REP. OF)	April	0	3
MALTA	June - July	0	132
POLAND	January	0	2
CZECH REPUBLIC	January	0	2
ROMANIA	January	0	1
SLOVAKIA	January	0	2
SUDAN	December	17	0
THE NETHERLANDS	November	0	3
HUNGARY	February	0	1

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

Yes

Name of the OIE Member Country receiving a technical consultancy	Purpose	How the advice was provided
SUDAN	Providing support on evaluation of diagnostic cases understanding possible reasons for mortality rate in animals; Providing information on preparation of organs and swabs on FTA cards and their packaging.	Remote assistance (virtual event)
DENMARK	Providing information on influenza viruses circulating in Denmark; laboratory methods.	Remote assistance as EU Reference Laboratory, OIE Reference Laboratory, FAO Reference Centre
ROMANIA	Providing information on avian influenza outbreak management; influenza viruses circulating in Romania; laboratory methods.	Remote assistance as EU Reference Laboratory, OIE Reference Laboratory, FAO Reference Centre
HUNGARY	Providing information on avian influenza outbreak management; influenza viruses circulating in Hungary; laboratory methods.	Remote assistance as EU Reference Laboratory, OIE Reference Laboratory, FAO Reference Centre
POLAND	Providing information on avian influenza outbreak management; influenza viruses circulating in Poland; laboratory methods.	Remote assistance as EU Reference Laboratory, OIE Reference Laboratory, FAO Reference Centre
SLOVAKIA	Providing information on avian influenza outbreak management; influenza viruses circulating in Slovakia; laboratory methods.	Remote assistance as EU Reference Laboratory, OIE Reference Laboratory, FAO Reference Centre
CZECH REPUBLIC	Providing information on avian influenza outbreak management; influenza viruses circulating in Czech Republic; laboratory methods.	Remote assistance as EU Reference Laboratory, OIE Reference Laboratory, FAO Reference Centre

ToR 5: To carry out and/or coordinate scientific and technical studies in collaboration with other laboratories, centres or organisations

10. Did your laboratory participate in international scientific studies in collaboration with OIE Member Countries other than the own?

Yes

Title of the study	Duration	Purpose of the study	Partners (Institutions)	OIE Member Countries involved other than your country
Testing a validation method for identification of avian influenza virus through LAMP-PCR	Year 2020	Analyses of samples provided by the organiser, through Loop Mediated Isothermal Amplification of M gene	ANSES the National Reference Centre for Avian influenza and Newcastle Disease (France)	FRANCE ITALY
HORIZON 2020: DELTA-FLU Dynamics of avian influenza in a changing world	5 years	Study of the key viral, host-related, and environmental factors that determine the dynamics of avian influenza (AI) in poultry and other host species, with the goal of improving prevention and control strategies against this disease	1)Friedrich- Loeffler- Institut (FLI) (Germany),2) Erasmus Universitair Medisch Centrum Rotterdam (The Netherlands),3) The Secretary of State for Environment, Food and rural Affairs (UK), 4) IZSVE (Italy), Universiteit Gent (Belgium),5) The University of Edinburgh (UK), 6) Linneuniversitetet (Sweden), 7) The University of Hong Kong (People's Rep. of China), 8) Southeast Poultry Research Laboratory (SEPRL), U.S. National Poultry Research Center, Agricultural Research Service, U.S. Department of Agriculture (USA), 9) Canadian Food Inspection Agency (CFIA) - Canada (associated partner)	BELGIUM CANADA CHINA (PEOPLE'S REP. OF) GERMANY SWEDEN THE NETHERLANDS UNITED KINGDOM UNITED STATES OF AMERICA
EFSA - Working Group on Avian Influenza	(for the time needed)	Avian influenza wg meeting - monitoring	IZSVE (Italy), APHA - Animal and Plant Health Agency (UK), Friedrich- Loeffler- Institut (Germany) (see EFSA https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2018.5493)	GERMANY ITALY UNITED KINGDOM
OIE TWINNING between IZSVE and the National Veterinary Research Institute (NVRI), (Regional Support Laboratory for Animal Influenzas and other Transboundary Animal Diseases) Nigeria	2 years	Improving NVRI laboratory capacity for a better control of the Avian Influenza virus at National and Regional level	IZSVE (Italy); National Veterinary Reseach Institute (NVRI), Regional Support Laboratory for Animal Influenzas and other Transboundary Animal Diseases (Nigeria)	ITALY NIGERIA
Studies on general avian virology and genetics	5 years	Exchange of scientists and technicians through short to medium term missions; sharing of knowledge and expertise	IZSVE (Italy); Avian Virology and Immunology service of Sciensano (Belgium)	BELGIUM ITALY
Collaboration in diagnostic and scientific research on host range, interspecies transmission and pathogenicity of influenza viruses	5 years	Training of research personnel; sharing of viruses, reagents, facilities and expertise	IZSVE (Italy);Philipps Universität Marburg (Germany)	GERMANY ITALY

Research studies relating to zoonotic viral agents including animal influenza viruses	5 years	Encouraging and promoting cooperation in the following areas: diagnostic and vaccine developments for influenza viruses; training of research personnel; sharing viruses, reagents, facilities and expertise. Training of research personnel	IZSVE - National Centre for Foreign Animal Disease - "NCFAD" (Canada)	CANADA ITALY
---	---------	--	---	-----------------

ToR 6: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases

11. Did your Laboratory collect epizootiological data relevant to international disease control?

Yes

If the answer is yes, please provide details of the data collected:
<p>° National/regional surveillance programmes following the European Commission's technical advice with reference to circulation of avian influenza viruses in the domestic reservoir. In addition, the RL supported a specific regional surveillance programme targeting areas of high sampling intensity and at a high risk of infection. ° Active surveillance programmes for avian influenza virus infection in wild birds and analysis of avian fecal samples from the environment, in collaboration with the Italian National Institute for Environmental Protection and Research (ISPRA). ° Regional passive surveillance programmes in wild birds.</p>

12. Did your laboratory disseminate epizootiological data that had been processed and analysed?

Yes

If the answer is yes, please provide details of the data collected:
<p>National Information Systems: regular reporting of epidemiological data to the Ministry of Health and EU Commission Supporting the OFFLU VCM network: the aim of the network is to identify animal influenza viruses with zoonotic potential, and to speed up production of human vaccines against zoonotic influenza, or pandemic viruses that have emerged from animals and that could have negatively impact on humans. The RL generated and provided HA sequences from 15 AI viruses of the H5 subtypes. Remote assistance to EU NRLs by email and through Mattermost, a flexible, open source messaging platform that enables secure team collaboration and enhances cooperation between veterinary/public health laboratories and scientists from the EU. This allows rapid dissemination on Avian Influenza Responding to Commission, EFSA, ECDC and member States requests for scientific information by: maintaining the competence through meetings and conferences related to AI with regard to the characteristics of circulating viruses and laboratory methods; keeping abreast of AI related issues through reading, training and research programs; maintaining a reciprocal information exchange with the OIE RL for AI, the FAO RC for Animal Influenza, the WHO CC on influenza, the WHO H5 Reference Laboratories and National influenza Centres (NICs); participating in the EURL's Directors' Working group on the development and evaluation of AI issues.</p>

**13. What method of dissemination of information is most often used by your laboratory?
(Indicate in the appropriate box the number by category)**

a) Articles published in peer-reviewed journals: 10

Abdollahi, H., Ali, A.S.M., Monne, I., Milani, A., Habibi, M., Zamperin, G., Ghafouri, S.A., Maghsoudloo, H., Mohammadpoor, B., Esmailzadeh, S., Farahani, R.K., Ghasemi, Y., Afzalkhani, A.A., Nabipoor, J., Javanmardi, B., Fusaro, A., & Zecchin, B. (2020). Spatial spread and emergence of reassortant H5 highly pathogenic avian influenza viruses in Iran reassortant H5 highly pathogenic avian influenza virus in Iran. *Infection, genetics and evolution: journal of molecular epidemiology and evolutionary genetics in infectious diseases*, 104342.

European Food Safety Authority, European Centre for Disease Prevention and Control and European Union Reference Laboratory for Avian Influenza, Adlhoch C, Fusaro A, Gonzales JL, Kuiken T, Marangon S, Niqueux É, Staubach C, Terregino C, Baldinelli F. Avian influenza overview August - December 2020. *EFSA J.* 2020 Dec 16;18(12):e06379. doi: 10.2903/j.efsa.2020.6379. PMID: 33343738; PMCID: PMC7744019.

European Food, S.A., European Centre for Disease Prevention and Control and European Union Reference Laboratory for Avian Influenza, Adlhoch, C., Fusaro, A., Kuiken, T., Niqueux, E., Staubach, C., Terregino, C., Guajardo, I.M., & Baldinelli, F. (2020). Avian influenza overview February - May 2020. *EFSA Journal*, 18

European Food, S. A., European Centre for Disease Prevention and Control and European Union Reference Laboratory for Avian Influenza, C. Adlhoch, A. Fusaro, T. Kuiken, É. Niqueux, C. Staubach, C. Terregino, I. Muñoz Guajardo, and F. Baldinelli. Avian influenza overview May - August 2020. *EFSA Journal* 18:e06270. 2020.

European Food, S.A., European Centre for Disease Prevention and Control and European Union Reference Laboratory for Avian Influenza, Adlhoch, C., Fusaro, A., Kuiken, T., Niqueux, E., Staubach, C., Terregino, C., Guajardo, I.M., & Baldinelli, F. (2020). Avian influenza overview November 2019- February 2020. *EFSA Journal*, 18, e06096.

European Food Safety Authority; European Centre for Disease Prevention Control and European Union Reference Laboratory for Avian Influenza, Adlhoch C, Fusaro A, Gonzales JL, Kuiken T, Marangon S, Niqueux É, Staubach C, Smietanka K, Terregino C, Van der Stede Y, Aznar I, Baldinelli F. Avian influenza overview - update on 19 November 2020, EU/EEA and the UK. *EFSA J.* 2020 Nov 24;18(11):e06341.

Fusaro, A., Zecchin, B., Vrancken, B., Abolnik, C., Ademun, R., Alassane, A., Arafa, A., Awuni, J.A., Couacy-Hymann, E., Coulibaly, M.â.B., Gaidet, N., Go-Maró, E., Joannis, T., Jumbo, S.D., Minoungou, G., Meseko, C., Souley, M.M., Ndumu, D.B., Shittu, I., Twabela, A., Wade, A., Wiersma, L., Akpeli, Y.P., Zamperin, G., Milani, A., Lemey, P., & Monne, I. (2019). Disentangling the role of Africa in the global spread of H5 highly pathogenic avian influenza. *Nature Communications*, 10, 5310.

Laconi, A., Fortin, A., Bedendo, G., Shibata, A., Sakoda, Y., Awuni, J.A., Go-Maró, E., Arafa, A., Maken Ali, A.S., Terregino, C., & Monne, I. (2020). Detection of avian influenza virus: a comparative study of the in silico and in vitro performances of current RT-qPCR assays. *Scientific reports*, 10, 8441-020-64003-6.

Lycett, S.J., Pohlmann, A., Staubach, C., Caliendo, V., Woolhouse, M., Beer, M., Kuiken, T., & Global Consortium for H5N8 and Related Influenza Viruses. (2020). Genesis and spread of multiple reassortants during the 2016/2017 H5 avian influenza epidemic in Eurasia. *Proceedings of the National Academy of Sciences of the United States of America*, 202001813 [pii]

Scolamacchia, F., Mulatti, P., Mazzucato, M., Barbujani, M., Harvey, W.T., Fusaro, A., Monne, I., & Marangon, S. (2020). Different environmental gradients associated to the spatiotemporal and genetic pattern of the H5N8 highly pathogenic avian influenza outbreaks in poultry in Italy. *Transboundary and Emerging Diseases*, doi: 10.1111/tbed.13661; 06

Shittu, I., Bianco, A., Gado, D., Mkpuma, N., Sulaiman, L., Laleye, A., Gobbo, F., Bortolami, A., Bonfante, F., Vakuru, C., Meseko, C., Fusaro, A., Shamaki, D., Alabi, O., Terregino, C., & Joannis, T. (2020). First detection of highly pathogenic H5N6 avian influenza virus on the African continent. *Emerging microbes & infections*, 9, 886-888.

Swieton, E., Fusaro, A., Shittu, I., Niemczuk, K., Zecchin, B., Joannis, T., Bonfante, F., Smietanka, K., & Terregino, C. (2020). Sub-Saharan Africa and Eurasia Ancestry of Reassortant Highly Pathogenic Avian Influenza A(H5N8) Virus, Europe, December 2019. *Emerging infectious diseases*, 26, 1557-1561.

b) International conferences: 0

c) National conferences: 0

d) Other:

(Provide website address or link to appropriate information) 8

IZSVE website, OIE & FAO activities:

<https://www.izsvenezie.com/reference-laboratories/avian-influenza-newcastle-disease/oie-fao-activities/>

IZSVE website, European Union Reference Laboratory (EURL) for Avian Influenza and Newcastle Disease

<http://www.izsvenezie.com/reference-laboratories/avian-influenza-and-newcastle-disease/>

IZSve website, Veterinary Biobank - EVA-GLOBAL

<https://www.izsvenezie.it/biobanca-veterinaria-izsve-progetto-eva-global/>

<https://www.european-virus-archive.com/>

DELTA-FLU Dynamics of avian influenza in a changing world

<https://delta-flu.fli.de/de/dynamics-of-avian-influenza-in-a-changing-world/>

EFSA - Avian influenza

<https://www.efsa.europa.eu/en/topics/topic/avian-influenza>

<https://www.efsa.europa.eu/en/news/avian-influenza-eu-alert-new-outbreaks>

WHO - Global Influenza Surveillance and Response System (GISRS)

http://www.who.int/influenza/gisrs_laboratory/en/

OIE -FAO OFFLU - Network of expertise on animal influenza

<http://www.offlu.net/index.php?id=51>

Global Collaboration on H5N8 and Related Influenza Viruses

<https://www.gisaid.org/collaborations/global-collaboration-on-h5n8/>

ToR 7: To provide scientific and technical training for personnel from OIE Member Countries

To recommend the prescribed and alternative tests or vaccines as OIE Standards

14. Did your laboratory provide scientific and technical training to laboratory personnel from other OIE Member Countries?

Yes

a) Technical visits: 0

b) Seminars: 136

c) Hands-on training courses: 1

d) Internships (>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	Croatia, Finland, France, Germany, Ireland, Italy, Latvia, Lithuania, Montenegro, The Netherlands, Portugal, UK, Slovenia, Spain, Sweden, Tunisia, Hungary	31
b	Czech Republic	5
b	28 EU countries and 8 non EU countries (detailed information available at IZSVe)	100
c	Nigeria	1

ToR 8: To maintain a system of quality assurance, biosafety and biosecurity relevant for the pathogen and the disease concerned

15. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)
ISO 17025	A_20_certificato ISO 17025.pdf
ISO 17043	B_certificato-ISO-17043-aqua.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Detection of antibodies to type A influenza virus by agar gel immunodiffusion assay (AGID)	ACCREDIA - Italian Accreditation System
Detection of subtype-specific antibodies to Avian influenza virus by haemagglutination inhibition test	ACCREDIA - Italian Accreditation System
Avian Influenza Virus Antibodies serological enzyme-linked immunosorbent assay (ELISA)	ACCREDIA - Italian Accreditation System
Isolation and characterization of Avian influenza viruses using SPF embryonated chicken eggs and haemagglutination inhibition test	ACCREDIA - Italian Accreditation System
Detection of type A avian influenza virus by real time RT-PCR	ACCREDIA - Italian Accreditation System
Detection of Eurasian H5 avian influenza virus by one-step RT-PCR	ACCREDIA - Italian Accreditation System
Eurasian H5 avian influenza virus sequence analysis	ACCREDIA - Italian Accreditation System
Detection of Eurasian H7 avian influenza virus by one-step RT-PCR	ACCREDIA - Italian Accreditation System
Eurasian H7 avian influenza virus sequence analysis	ACCREDIA - Italian Accreditation System
Detection of Eurasian H5 avian influenza virus by real time RT-PCR	ACCREDIA - Italian Accreditation System
Detection of Eurasian H7 avian influenza virus by real time RT-PCR	ACCREDIA - Italian Accreditation System
Proficiency testing provider	ACCREDIA - Italian Accreditation System

17. Does your laboratory maintain a “biorisk management system” for the pathogen and the disease concerned?

Yes

(See *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, Chapter 1.1.4*)

ToR 9: To organise and participate in scientific meetings on behalf of the OIE

18. Did your laboratory organise scientific meetings on behalf of the OIE?

No

19. Did your laboratory participate in scientific meetings on behalf of the OIE?

No

ToR 10: To establish and maintain a network with other OIE Reference Laboratories designated for the same pathogen or disease and organise regular inter-laboratory proficiency testing to ensure comparability of results

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

Yes

21. Was your laboratory involved in maintaining a network with OIE Reference Laboratories designated for the same pathogen or disease by organising or participating in proficiency tests?

Yes

Purpose of the proficiency tests: ¹	Role of your Reference Laboratory (organiser/ participant)	No. participants	Participating OIE Ref. Labs/ organising OIE Ref. Lab.
European Proficiency Test on AI and ND	European Proficiency Test on AI and ND	36	<ul style="list-style-type: none"> •Friedrich Loeffler Institute Federal Research Institute for Animal Health Institute of Diagnostic Virology (Germany); •NRL for Avian Influenza and Newcastle Disease Federal State-Financed Institution "Federal Centre for Animal Health" (FGBI "ARRIAH") (Russia) •Animal and Plant Health Agency Weybridge (UK) (detailed information available at IZSVe)

¹ validation of a diagnostic protocol: specify the test; quality control of vaccines: specify the vaccine type, etc.

22. Did your laboratory collaborate with other OIE 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 OIE Reference Laboratories
OFFLU VCM Consultation on the Composition of Influenza Virus Vaccines for the Northern Hemisphere	Antigenic and genetic characteristics of zoonotic influenza viruses and candidate vaccine viruses developed for potential use in human vaccines	1) EU Reference Laboratory, the Animal and Plant Health Agency (APHA) Surrey, UK; 2) National Avian Influenza Reference Laboratory Animal Influenza Laboratory of the Ministry of Agriculture, Harbin People's Rep. of China; 3) Hokkaido University Research Center for Zoonosis Control, Sapporo, Japan; 4) Indian Council of Agricultural Research (ICAR) National Institute of High Security Animal Diseases (NIHSAD), Bhopal, India.
European Food Safety Authority (EFSA)	EFSA Panel on Animal Health and Welfare (AHAW) - WG on Avian influenza	1) EU Reference Laboratory, the Animal and Plant Health Agency (APHA) Surrey, UK; 2) Friedrich- Loeffler- Institut (FLI) (Germany) See also https://www.efsa.europa.eu/en/topics/topic/avian-influenza
HORIZON 2020: DELTAFLU Dynamics of avian influenza in a changing world	Study of the key viral, host-related, and environmental factors that determine the dynamics of avian influenza (AI) in poultry and other host species, with the goal of improving prevention and control strategies against this disease	Friedrich- Loeffler- Institut (FLI) (Germany)

ToR 11: To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results

23. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than OIE Reference Laboratories for the same disease?

Yes

Note: See Interlaboratory test comparisons in: *Laboratory Proficiency Testing* at: <http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing> see point 1.3

Purpose for inter-laboratory test comparisons ¹	No. participating laboratories	Region(s) of participating OIE Member Countries
National Proficiency Test for Avian Influenza and Newcastle Disease (organiser)	20	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
Preparation and dispatch of FAO proficiency test panels for the assessment of laboratory testing capacities for the national health laboratories in Sub-Saharan Africa (organiser)	20	<input checked="" type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East

ToR 12: To place expert consultants at the disposal of the OIE

24. Did your laboratory place expert consultants at the disposal of the OIE?

Yes

Kind of consultancy	Location	Subject (facultative)
Remote assistance	Legnaro, Padova (Italy)	Revision of book chapters of OIE Terrestrial Animal Code and related delegated Acts on Avian influenza and Newcastle disease

25. Additional comments regarding your report: