EUROPEAN UNION REFERENCE LABORATORY

FOR PARASITES

WORK PROGRAMME

2015

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1. Providing national reference laboratories with details of analytical methods, including reference methods

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Objectives:	*Diagnostic support to NRL*
Expected outputs:	*Reference material, analytical methods, personnel training*
Performance indicators:	*Amount of reference material produced, diagnostic tests performed and number of trained persons*

1.2 Production of reference material for NRLs and developing countries.

One of the main problem in the field of foodborne parasites, is the lack of commercially available reference material (e.g., parasite strains, antigens, nucleic acids, reference sera). To overcome this problem, the EURLP is collecting and producing reference material which is aliquoted and stored to be provided to NRLs and developing countries on demand, or for the preparation of PT samples.

1.2.1 Serum/meat juice bank from *Trichinella*-infected pigs

Serum and/or meat juice samples will be collected from *Trichinella*-infected pigs. All samples will be tested by the validated ELISA and Western blot, distributed in aliquots, lyophilised and stored at +4°C. The database of the serum bank will be updated accordingly.

Objectives:	*Availability of* Trichinella*-positive pig sera/meat juices for serological tests*
Expected outputs:	*A statistically significant number of well characterized pig sera/meat juices*
Performance indicators:	*Increase of the number of available pig sera/meat juices*

1.2.2 Serum bank of *Trichinella*-infected humans

In the concept of One Health, and due to the lack on the market of reference serum samples from humans infected with *Trichinella*, serum samples and/or blood spots from people with a confirmed diagnosis of trichinellosis will be tested by the validated ELISA and Western blot, distributed in aliquots, lyophilised and stored at +4°C. The database of this serum bank will be updated accordingly.

Objectives:	*Availability of* Trichinella-*positive human sera for serological tests*
Expected outputs:	*A statistically significant number of well characterized human sera*
Performance indicators:	*Increase of the number of available human sera*

1.2.3 Production of reference *Trichinella* antigens for serology

Excretory/secretory (E/S) antigens will be produced from *Trichinella* spp. larvae in order to supply NRLs with the reference antigens for diagnostic purposes.

Objectives:	*Supply NRLs, labs in developing countries and the EURLP with* Trichinella *ES antigens*
Expected outputs:	*Production of* Trichinella *ES antigens*
Performance indicators:	*Amount of milligrams of produced* Trichinella *ES antigens*

1.2.4 Maintenance of *Trichinella* reference strains *in vivo*

Reference strains for each of the twelve taxa of the genus *Trichinella* will be maintained in laboratory animals. Fresh mouse carcasses infected with *Trichinella* species/genotypes will be provided to laboratories for training and as reference material for typing new isolates. *Trichinella* spp. larvae from reference strains will be stored in ethanol and forwarded to laboratories as reference material and for PT organization.

Objectives:	*Further development of the Bio-bank of* Trichinella *parasites for European, extra-European, and international institutions*
Expected outputs:	*Production of reference material*
Performance indicators:	*Number of* Trichinella *species and genotypes maintained in vivo*

1.2.5 Collection of Anisakidae worms and their genomic DNAs

Reference larvae will be collected from naturally infected fish; the DNA will be extracted and stored at -20°C. Alternatively, reference larvae will be requested to European and extra-European laboratories having an expertise in this subject. The database of this collection will be updated accordingly.

Objectives:	*Development of a genetic-bank of* Anisakidae *parasites for European, extra-European, and international institutions*
Expected outputs:	*Supply of reference material*
Performance indicators:	*Number of* Anisakidae *worms characterized and stored*

1.2.6 Genetic bank of the genus *Echinococcus*

Adult, larval and egg stages will be collected from different species of final and intermediate hosts originating from different geographical regions. The DNA will be

extracted and stored at -20°C. The database of this genetic bank will be updated accordingly.

Objectives:	*Further development of a genetic bank of* Echinococcus *parasites for European, and non-European institutions*
Expected outputs:	*Production of reference material*
Performance indicators:	*Number of* Echinococcus *isolates characterized and stored*

1.2.7 Serum bank of *Echinococcus*-infected humans

Serum samples from *E. granulosus* and *E. multilocularis* humans with a confirmed diagnosis of cystic or alveolar echinococcosis will be collected, aliquoted and stored at -80°C. The database of this serum bank will be updated accordingly.

Objectives:	*Availability of* Echinococcus-*positive human sera for serological tests*
Expected outputs:	*A statistically significant number of well characterized human sera*
Performance indicators:	*Increase of the number of available human sera*

1.2.8 Genetic bank of zoonotic cestodes of the genera *Taenia* and *Diphyllobotrium*

Adult, larval and egg stages of zoonotic cestodes not belonging to the genus *Echinococcus* will be collected from humans and animals. Genomic DNA will be extracted and stored at -20°C. The database of this genetic bank will be updated accordingly.

Objectives:	*Development of a genetic bank of cestode parasites for European, and non-European institutions*
Expected outputs:	*Production of reference material*
Performance indicators:	*Number of characterized and stored nucleic acids from cestode worms*

1.2.9 Genetic bank of zoonotic trematodes of the Opisthorchidae family

Adult, larval and egg stages of trematodes of the family Opisthorchidae will be collected from final, both humans and animals, and intermediate hosts. Genomic DNA will be extracted and stored. The database of this genetic bank will be updated accordingly.

Objectives:	*Development of a genetic-bank of Opisthorchidae parasites for European, and non-European institutions*
Expected outputs:	*Production of reference material*
Performance indicators:	*Number of characterized and stored nucleic acids from Opisthorchidae worms*

1.2.10 Serum bank of *Opisthorchis*-infected humans

Serum samples from *Opisthorchis* spp. infected humans with a confirmed diagnosis, will be collected, aliquoted and stored at -80°C. The database of this serum bank will be updated accordingly.

Objectives:	*Availability of* Opisthorchis-*positive human sera for serological tests*
Expected outputs:	*A statistically significant number of well characterized human sera*
Performance indicators:	*Increase of the number of available human sera*

1.2.11 Reference *Opisthorchis* excretory/secretory (E/S) antigens for serology

E/S antigens will be produced from *Opisthorchis felineus* adult worms for the in-house serodiagnosis and to supply NRLs and third countries with the reference antigens for diagnostic purposes.

Objectives:	*Supply NRLs, labs in developing countries and EURLP with* Opisthorchis *ES antigens*
Expected outputs:	*Production of* Opisthorchis *ES antigens*
Performance indicators:	*Amount of milligrams of produced* Opisthorchis *ES antigens*

1.2.12 Genetic bank of protozoa of the genus *Cryptosporidium*

Cryptosporidium spp. oocysts will be collected from domestic and wild animals, humans and environmental samples. Nucleic acids will be extracted and stored at -20°C until their identification by molecular tools. The database of this genetic bank will be updated accordingly.

Objectives:	*Further development of a genetic bank of* Cryptosporidium *parasites for European, and non-European institutions*
Expected outputs:	*Production of reference material*
Performance indicators:	*Number of* Cryptosporidium *isolates characterized and stored*

1.2.13 Genetic bank of protozoa of the genus *Giardia*

Giardia spp. cysts will be collected from domestic and wild animals, humans and environmental samples. Nucleic acids will be extracted and stored at -20°C. The database of this genetic bank will be updated accordingly.

Objectives:	*Development of a genetic bank of* Giardia *parasites for European and non-European institutions*
Expected outputs:	*Production of reference material*
Performance indicators:	*Number of* Giardia *isolates characterized and stored*

1.2.14 Genetic bank of *Toxoplasma gondii* isolates

Toxoplasma gondii strains and isolates belonging to either of the three major genotypes, denominated I, II and III, accounting for approximately 95% of *T. gondii* strains circulating in Europe and North America, and the so-called "atypical" genotypes will be collected. Viable tachyzoites, genomic DNA or tachyzoite protein lysates of any given strain will be supplied to labs on demand.

Objectives:	*Development of a genetic bank of* T. gondii *parasites for European, and non-European institutions*
Expected outputs:	*Production of reference material*
Performance indicators:	*Number of* T. gondii *isolates characterized and stored*

1.2.15 To establish and maintain a serum bank of *T. gondii*-infected sheep

Serum samples will be collected from *T. gondii*-infected sheep. All samples will be tested by ELISA, distributed in aliquots, lyophilised and stored at +4°C. A database of the serum bank will be established.

Objectives:	*Availability of* T. gondii*-positive sheep sera for serological tests*
Expected outputs:	*A statistically significant number of well characterized sheep sera*
Performance indicators:	*Increase of the available sheep sera*

1.3 Diagnostic activity

Diagnostic samples provided by NRLs or third countries will be tested by the following tests validated and accredited at the EURLP

1.3.1 Identification of anti-*Trichinella* IgG antibodies in swine sera. MI-01 Rev. 6, 2014
1.3.2 Identification of anti-*Trichinella* IgG antibodies in human sera. MI-03 Rev. 3, 2014
1.3.3 Detection of *Trichinella* larvae in meat samples by digestion
1.3.4 Identification of parasites of the genus *Trichinella* by a multiplex-PCR analysis. MI-02 Rev.6, 2014
1.3.5 Identification at species level of parasites of the family Anisakidae by PCR/RFLP. MI-04 Rev. 2, 2014
1.3.6 Identification of *Echinococcus granulosus* complex at genotype/species level by PCR and sequencing. MI-05 Rev. 2, 2014
1.3.7 Detection of anti-*Opisthorchis* antibodies in human serum by indirect ELISA. MI-07 Rev.2, 2014
1.3.8 Identification of *Opisthorchis* sp. by PCR. MI-08 Rev.1, 2014
1.3.9 Identification at the species level of oocysts of *Cryptosporidium* spp. by PCR/RFLP. MI-06 Rev. 2, 2014
1.3.10 Identification at the assemblage level of cysts of *Giardia duodenalis* by PCR/RFLP. MI-09 Rev.1, 2014
1.3.11 Identification of Anisakidae larvae at the species level by Multiplex PCR. MI-10 rev. 0, 2013
1.3.12 Identification of assemblage A and B of *Giardia duodenalis* by PCR. MI-11 rev.0, 2013

Objectives:	*Diagnostic support to NRLs and developing countries*
Expected outputs:	*Confirmatory diagnoses*
Performance indicators:	*Number of tested samples*

1.4 Screening of commercial kits to detect anti-*Trichinella* IgG in pig sera

Kits to detect anti-*Trichinella* IgG in swine are available on the EU market, but none of them has been validated by an independent body. Since one of the core duties of the EURLP is to give critical advices, we plan to invite companies to provide us with their kits in order to determine their performance and, in particular, their sensitivity, specificity, inter- and intra-assay variability, reproducibility and robustness. Validation will be performed using a panel of pig sera with known different levels of IgG.

Objectives:	*Availability on the EU market of commercial kits fitting for the intended purpose*

Expected outputs:	*Increased diagnostic quality*
Performance indicators:	*Number of evaluated kits*

2 Coordinating application by the National Reference Laboratories of the methods referred to in (1.), in particular by organizing comparative testing and by ensuring an appropriate follow-up of such comparative testing in accordance with internationally accepted protocols, when available

2.1. Proficiency Testing (PT)

According to the NRL requests expressed in the course of the ninth NRL workshop, held in Rome from 19 to 20 May, 2014, four proficiency testing (PTs) and a ring trial will be organised by the EURLP in the course of 2015.

2.1.1 PT on *Trichinella* larva detection in meat samples

The ninth PT on the detection of *Trichinella* larvae in meat samples, will be organised to evaluate the competence of NRLs. Test samples (100 or 35 g meatballs made with diaphragm tissue from pigs and/or horses) will be spiked with a known number of *T. spiralis* larvae obtained from experimentally infected mice. Each NRL will receive samples containing two different numbers of *Trichinella* larvae, plus a negative control sample. Samples will be packed and sent as bio-hazardous material in cool freeze containers to ensure a stable temperature. Each participating partner in the proficiency testing will be notified in advance about the timetable and when to receive the test panel along with the protocol. Test results from each laboratory will be evaluated, compared to those of the previous years, and possible critical points will be identified and corrected.

Objectives:	*To evaluate the PT performance of the NRL personnel*
Expected outputs:	*Increasing skill of the NRL personnel*
Performance indicators:	*Percentage of positive results in comparison to that obtained in the previous years*

2.1.2 PT on *Trichinella* larva identification

The fifth PT will be organised for NRLs to evaluate their skill to correctly identify *Trichinella* larvae at the species level. *Trichinella* larvae from reference strains belonging to the species circulating in Europe and those which have been occasionally imported from non-EU countries into Europe, will be collected from infected mice. Vials will be coded and forwarded to participating labs for species identification according to the molecular method used in each laboratory. Participant laboratories will be invited to identify single larvae instead of a pool of larvae.

Objectives:	*To evaluate the PT performance of the NRL personnel*
Expected outputs:	*Increasing skill of the NRL personnel*

Performance indicators:	*Percentage of positive results in comparison to the % obtained in the previous years*

2.1.3 PT on the detection of *Echinococcus* adult worms in intestinal contents

For the sixth time, this PT will be organised for NRLs to detect adult *Echinococcus* sp. worms, or their portions, spiked in the natural matrix (intestinal content). Each NRL will receive a panel of three samples. Samples will be packed and sent as bio-hazardous material in cool freeze containers to ensure a stable temperature. Each participating partner in the PT will be coded (lab code) and notified in advance about the timetable and when to receive the test panels along with the protocol. Test results from each laboratory will be evaluated, compared to those obtained the previous years, and possible critical points will be identified and corrected.

Objectives:	*To evaluate the PT performance of the NRL personnel*
Expected outputs:	*Increasing skill of the NRL personnel*
Performance indicators:	*% of positive results in comparison to the % obtained in the previous years*

2.1.4 PT on the detection of Anisakidae larvae in fish fillets

The PT to detect Anisakidae larvae in fish fillets by digestion will be organised for the fourth time. Anisakidae larvae will be collected from naturally infected fish on the market. A known number of larvae will be spiked in fillets from farmed fish, known to be negative for Anisakidae larvae. Samples will be packed and sent as bio-hazardous material in cool freeze containers to ensure a stable temperature. Each participating partner in the PT will be coded (lab code) and notified in advance about the timetable and when to receive the test panels along with the protocol. Participating NRLs will digest the fish fillets and count the larvae. The test results from each laboratory will be evaluated, compared to those obtained the previous years, and possible critical points will be identified and corrected.

Objectives:	*To evaluate the PT performance of the NRL personnel*
Expected outputs:	*Increasing skill of the NRL personnel*
Performance indicators:	*% of positive results in comparison to the % obtained in the previous years*

2.1.5 Ring Trial on the detection of anti-*Toxoplasma gondii* IgG in sheep sera by commercial kits

For the first time, a ring trial to detect anti-*T. gondii* IgG in sheep sera will be organised. A panel of characterized positive and negative sera will be packed and sent as bio-hazardous material in cool freeze containers to ensure a stable temperature. Each participating partner in the ring trial will be coded (lab code) and notified in advance about the timetable and when to receive the test panels along with the protocol. The serum panel will be tested by each participating NRL by a commercial kit or by an in-house method according to their preferences.

Objectives:	*To evaluate and to compare the performance of commercial kits or in-house tests used in the NRLs*
Expected outputs:	*Evaluation of sensitivity and specificity of commercial kits*
Performance indicators:	*Number of NRL participating at the ring trial*

3 Coordinating, within their area of competence, practical arrangements needed to apply new analytical methods and informing National Reference Laboratories of advances in this field

3.1 Validation and accreditation of new analytical methods developed at the EURLP or in other laboratories and published in the international literature

3.1.1 Validation and accreditation of an ELISA to detect anti-*Trichinella* IgG in swine muscle juices.

The collection of serum samples from swine can be costly and can result in haemolysed sera which can also be contaminated by bacteria. To overcome these problems, muscle juices has been successfully tested by ELISA to detect anti-*Trichinella* IgG in swine.

Objectives:	*To validate and accreditate an ELISA to detect anti-*Trichinella *IgG in swine muscle juices*
Expected outputs:	*Availability of a test to detect anti-*Trichinella *IgG in swine for epidemiological surveillance*
Performance indicators:	*Accreditation of the new ELISA test by the Italian accreditation body, ACCREDIA*

3.1.2 Validation and accreditation of a Western blotting test as confirmatory test for ELISA-positive pig serum samples.

The cut-off setting in the ELISA to detect anti-*Trichinella* IgG in pig sera is always dependent on the balance between sensitivity and specificity of the test. To increase sensitivity, specificity has to be reduced increasing the risk to obtain false positives. To overcome this problem, ELISA-positive sera need to be confirmed by another test with a higher specificity. The recognition of a triple band pattern by pig serum samples using a Western blotting method, has been published as a promising tool to confirm the presence of anti-*Trichinella* specific IgG in pig sera already tested positive by an ELISA.

Objectives:	*To validate and accreditate a Western blotting test to confirm the presence of anti-*Trichinella *IgG in pig sera*
Expected outputs:	*Availability of a confirmatory test for pig sera which are ELISA-positive for anti-*Trichinella *IgG*
Performance indicators:	*Accreditation of the Western blotting test by the Italian accreditation body, ACCREDIA*

3.1.3 Coordinating the collection of *Trichinella* isolates in MS for microsatellite-based mapping

In the past years, the identification of polymorphic microsatellite DNA sequences (MSAT) in both *Trichinella spiralis* and *T. britovi* genomes at the EURLP has allowed to differentiate single parasite isolates within each species. The developed MSAT allow the traceability of infected meat to improve consumer's protection. This approach has attracted considerable interest from several NRLs (e.g., Latvia, Poland and Spain), and

will provide maximum effectiveness if applied to the whole EU and neighbouring countries. The EURLP, in accordance with its duties, will promote the dissemination of this methodology to NRLs and third countries through the development of an appropriate SOP, sample analysis, and *ad hoc* training.

Objectives:	*To map* Trichinella spiralis *and* T. britovi *microsatellites in the European MS and neighbouring countries*
Expected outputs:	*Development of a map of* T. spiralis *and* T. britovi *microsatellites circulating in European livestock and wildlife*
Performance indicators:	*Number of screened* Trichinella *isolates for host species and country of origin*

3.2 Standard operating procedure

3.2.1 Development of SOP for the identification of taeniid cestode eggs in the definitive host (canids) faeces

The cestode family Taeniidae consists of two genera, *Taenia* and *Echinococcus*. In contrast to many other helminth infections, intra vitam diagnosis of taeniid tapeworm infections cannot reliably be achieved by detection of worm eggs in faecal samples because eggs are morphologically indistinguishable. Thus, the development of a molecular method is considered to be essential. A Standard Operating Procedure (SOP) will be developed using a multiplex PCR that detects target genes (NADH dehydrogenase subunit 1 and ribosomal RNA small subunit) useful for the differentiation of the genera *Taenia* and *Echinococcus.* This procedure will be also used to differentiate two important species (*E. multilocularis* and *E. granulosus*) within the genus *Echinococcus*.

Objectives:	*Development of an analytical method for the identification of taenidae eggs in the definitive host (dogs) faeces*
Expected outputs:	*Identification of a panel of primers for the identification of eggs at the species/genus level*
Performance indicators:	*Development of a SOP*

3.2.2 Development of SOP for the identification of nematode larvae, different from those of the genus *Trichinella*, detected in muscles by artificial digestion

Larvae of nematodes not belonging to the genus *Trichinella* can be detected by chance during routine meat inspection by artificial digestion. These larvae should be identified at the species, genus or family level to evaluate the zoonotic risk for humans. A test based on PCR amplification and sequencing will be developed to identify these larvae.

Objectives:	*To set up a method to identify nematode larvae different from those of the genus Trichinella*
Expected outputs:	*Identification of molecular markers which can be easily used in routine tests*
Performance indicators:	*Availability of a method allowing nematode larva identification*

3.2.3 Bioassay for *Toxoplasma gondii* bradyzoites/tachyzoites in mice

The role of some livestock species (e.g., cattle) as source of infection for humans is still debated. In fact, the detection of anti-*T. gondii* antibodies in animals does not imply

the presence of viable and infective *T. gondii* bradyzoites/tachyzoites in animal tissues. It follows that a bioassay is the only way to answer this question. Tissue samples, mainly from the heart, will be homogenized in saline and digested in a pepsin-HCl solution and the final suspension will be inoculated subcutaneously into mice. Serum samples will be collected from mice before and 30 days after the inoculum and tested by a modified agglutination test to detect the sero-conversion. This method will also allow the isolation of *T. gondii* isolates circulating in Europe and/or in livestock imported from third countries.

Objectives:	*To set up a method to detect the presence of live* T. gondii *parasites in host muscles and to allow their further identification at the genotype level*
Expected outputs:	*Identification of the risk for humans to consume raw meat of different species reared by different systems*
Performance indicators:	*Successful isolation in mice of* T. gondii *parasites from naturally infected host muscles*

4 Conducting initial and further training courses for the benefit of staff from national reference laboratories and of experts from developing countries

4.1 Training of personnel of NRLs and developing countries

In January 2015, the EURLP will invite NRLs to apply for one-week training at the EURLP (with or without a financial support for travel and accommodation costs). At the same time, the EURLP will evaluate all requests of training coming from developing countries. The personnel of NRLs and/or governmental institutions within EU or of developing countries, will be trained on different detection methods of foodborne parasites, production of antigens and nucleic acids, maintenance of parasite strains in vitro and/or in vivo, epidemiological surveillance programs, and quality control systems.

Objectives:	*Training of personnel in the field of foodborne parasites*
Expected outputs:	*Increasing the expertise to detect foodborne parasites in the MS*
Performance indicators:	*Implementation of the diagnosis and reporting data of foodborne parasites*

4.2 Workshop

In the first half of 2015, a two day-workshop will be held at the Istituto Superiore di Sanità of Rome, or in another venue, to present and discuss the results of the PTs and other issues including epidemiological problems related to foodborne parasitic zoonoses occurring in the MS. Some experts in the field of foodborne parasitic zoonoses will be invited to present the

most recent acquisitions on the epidemiology, diagnosis and control of these pathogens.

Objectives:	*To exchange the epidemiological and diagnostic information on foodborne parasites circulating in EU or at risk to be imported in the EU; training of NRL personnel on foodborne parasites*
Expected outputs:	*NRL staff training*
Performance indicators:	*Appreciation of the workshop by the NRL staff*

4.3 Visit to NRLs

Qualified personnel of the EURLP will visit NRLs to assist them as required by circumstances. The selection of the NRLs will be done with an agreement among NRL, EURLP and the Commission. The outcome of the visits will be reported to the Commission.

Objectives:	*Exchange information between NRL and EURLP, collection of epidemiological information on foodborne parasites circulating in the MS, identification of strengths and weaknesses of the NRL*
Expected outputs:	*Improvement of the lab weaknesses, acquisition of epidemiological information*
Performance indicators:	*Increasing number of diagnostic tests and increasing contact within the NRL-EURLP network*

5 Other activities

5.1 Update of the website of the EURL for parasites

The website will be updated by publishing the newly developed methods and SOPs to be accredited in 2015, as well as all presentations from the next Annual Workshop to be held in Rome on May, 2015. Moreover, educational sheets on the life cycle, epidemiology, diagnosis and distribution of foodborne parasites will be published in the section "*Foodborne parasites*".

Objectives:	*Continuous improvement of the EURLP web site*
Expected outputs:	*Increase of the available information and its friendly use*
Performance indicators:	*Number of the EURLP web site visitors*

5.2 Standardization of methods for the detection of parasites in food

The draft International Standard (DIS) "**Error! Reference source not found.**Microbiology of the food chain — Detection of *Trichinella* larvae in meat by artificial digestion method", will be hopefully published at the end of 2014 or at the beginning of 2015, following the final vote of ISO and CEN members. The ISO secretariat will launch to all SC9 members an enquiry on the need for an ISO standard for detection of Anisakidae larvae in fish fillets, as proposed by EURLP representative during the last ISO/TC 34/SC 9 meeting held in Washington, USA, in 2014. If the result of the enquiry will be positive, a new work item will be launched and the

standardization process will start. A EURLP representative will participate to the next meeting to be held in the Netherland, at the end of June, 2015, in order to report as convenor of the ISO/TC34/SC9/WG6 "Parasites" the ongoing activities on standardization process on methods for the detection of parasites in food.

Objectives:	*To standardize methods for the detection of parasites in food*
Expected outputs:	*Standardization of the digestion method for the detection of* Trichinella *larvae in meat and for the detection of anti-*Trichinella IgG in swine sera
Performance indicators:	*Publication of the 'Digestion method for the detection of* Trichinella *larvae in meat' as ISO standard*

5.3 Quality assurance system

The continuous improvement of the EURLP Quality Assurance System is confirmed every year by the annual surveillance audit carried out by ACCREDIA, the Italian accreditation body. Accreditation according to the ISO 17043:2010 standard as Proficiency Testing Provider, PTP: the next audit will be carried out on November, 2014, and the extension of accreditation as PTP on methods for the detection of Anisakidae parasites in fish fillets will be evaluated. Accreditation according to the ISO 17025:2005 standard: the next audit will be performed probably on July, 2015, and an ELISA to detect anti-*Trichinella* IgG in swine muscle juices and a Western blotting test as confirmatory test for ELISA-positive pig serum samples.

Objectives:	*Continuous improvement and control of the EURLP activities and management*
Expected outputs:	*Validation and accreditation of new diagnostic method in the field of foodborne parasites; accreditation of a new PT scheme*
Performance indicators:	*Number of new accredited PTs and diagnostic methods*

5.4 Support to International Institutions

Qualified personnel of the EURLP will support the ECDC, EFSA, FAO, OIE, WHO, and other international institutions in the field of foodborne parasitic zoonoses.

Objectives:	*Scientific and technical support to international Institutions in the field of foodborne parasites*
Expected outputs:	*Participations of the EURLP personnel to meetings and working groups organized by international institutions*
Performance indicators:	*Publications of reports*

5.5 Meeting at the DG SANCO

The Director of EURL for Parasites or a person designed by the director, will attend the meetings at the DG SANCO.

Rome, 8th August, 2014

The Director of EURL for Parasites
Dr. Edoardo Pozio