STATENS VETERINÄRMEDICINSKA ANSTALT

EURL – *Campylobacter*
Work programme for 1st of January 2016 to 31st of December 2017

INTRODUCTION

The activities in the work programme for 2016 and 2017 for the EU Reference Laboratory (EURL) - *Campylobacter* will follow EU legislation Regulation (EC) No 882/2004. The work programme contains a description of activities, objectives and expected outputs.

The work programme for 2016-2017 will consist of the following key activities:

1. Organisation of proficiency tests
2. Production and validation of analytical methods
3. Training and support to NRLs
4. Provision of expertise to stakeholders (EU Commission and agencies, Member States, candidate and third countries) and preparedness of staff for emergency situations
5. Reciprocal exchange of information with professional bodies
6. Communication

ACTIVITY 1
ORGANISATION OF PROFICIENCY TESTS, PTS, IN 2016 AND 2017

Regulation (EC) No 882/2004, Article 32 1b, 4a, b, d

Objectives: To provide NRLs with details of relevant analytical methods for performing PTs that mimic realistic diagnostic samples to be analysed for *Campylobacter* in the MSs. To assess the performance of the NRLs and to identify potential analytical problems that could be solved by assistance from the EURL in order to improve the performance.

The EURL has so far organized 16 proficiency tests for the NRLs plus a couple of extra PTs sent as follow-ups or requested by NRLs in order to improve performance and/or comply with accreditation demands. In addition to the NRLs in the EU MSs, three to four Official Laboratories (OLs) in third countries have participated in the PTs each year. The PTs have been developed to correspond to the type of analyses that are common in monitoring or official control of *Campylobacter* in the food chain in the EU Member States. Quantification of *Campylobacter* in samples taken from carcasses or meat samples has lately been identified as an important analysis. Therefore, a PT including enumeration of *Campylobacter* has been organized every year.

Until now, eight of the regular PTs have included both detection and enumeration of *Campylobacter* in chicken skin, chicken meat or minced meat. Basically, the protocols for analysis (the SOPs) have followed the standardised protocols of ISO 10272 Part 1 and Part 2: 2006 "Microbiology of food and animal feeding stuffs – Horizontal method for detection and enumeration of *Campylobacter* spp". The PT protocols have also included mandatory or voluntary adding different selective media and times for incubation. This has been done in order to obtain more knowledge about modifications of the ISO protocols for the revision of the standard (please see 2.2).

Since 2013, a second PT with different types of non- food matrices have been organized with the task to detect and identify *Campylobacter* species. The matrices have consisted of 'sock samples' and milk filters which have been inoculated with live *Campylobacter* and other bacterial strains. In reality, both sock samples and milk filters are samples often taken in monitoring programs or when tracing sources of infection.

In 2016 and 2017, the EURL plans to organize PTs that will be similar to before in order to be able to compare NRLs´ performances between years. In discussions about the PTs with the NRLs at the workshops, several NRLs have expressed their need to participate in a PT that includes enumeration of *Campylobacter*. The EURL will therefore continue to organize one PT on enumeration of *Campylobacter* and (at least) one other PT in which the NRLs should detect and speciate *Campylobacter*. The PTs in 2016 and 2017 will be of complexity grade 3 and the exact nature of the tests, number of samples, and time for delivery will be discussed with the NRLs in the EURL workshops in 2015 and 2016, respectively.

NRLs with poor performance will be contacted and the EURL will provide assistance to solve the problems leading to a poor performance. In case of a delay in distribution or in case the package with the PTs has been damaged, a new PT will be sent out. If the NRL asks for more 'hands-on' assistance, the EURL staff will suggest performing a mission to the NRL or NRL staff will be offered to visit the EURL for training.

"Detection and enumeration of Campylobacter in a food/meat matrix"

One PT each in 2016 and 2017 (probably numbered PT 17 and PT 19) will consist of detection and enumeration of *Campylobacter* in a food/meat matrix for example chicken meat, carcass skin or other relevant matrix, basically using the above mentioned ISO 10272 standards. Vials with freeze dried bacterial cultures will be used as reference material. The matrix will be thoroughly tested for stability and to ensure absence of *Campylobacter* before distribution to the NRLs.

"Detection and species identification of Campylobacter in non- food/meat samples"

One PT each in 2016 and 2017 (probably numbered PT 18 and PT 20) will consist of detection and species identification of *Campylobacter* in different matrices such as faecal (caecum) material, sock samples, milk filters, or environmental samples inoculated with *Campylobacter* spp. Live cultures of bacteria or freeze dried bacteria will be used for inoculation of the samples. The preparation of bacterial reference material is further elaborated on under Activity 2.1. The method for detection will basically follow ISO/DIS 10272 Part 1:2014.

The EURL will prepare standard operating procedures (SOPs) for the PTs. The reporting of test results will be done electronically by using QuestBack. Results will be analysed by relevant statistical methods. Preliminary reports of the results will be prepared and sent to the NRLs after the deadline for submitting the results. The results will be presented and discussed at the workshops in 2016 and 2017, respectively. Final reports will then be prepared and communicated with the participating laboratories and DG SANTE.

Expected output: At least four PTs of complexity grade 3 will be organised in 2016 and 2017. All EU NRLs are expected to participate in all PTs. OLs in third countries, e.g. BA, CH, IS, MK and NO will be invited to participate. It is expected that > 75% of the participating EU NRLs will provide results that are graded as 'acceptable' or higher in all PTs.

ACTIVITY 2
PRODUCTION AND VALIDATION OF ANALYTICAL METHODS

Regulation (EC) No 882/2004, Article 32 1a, 1c, 4a - b, 4e, 4g - h

Objectives: To provide information about new or modified methods for analysis of *Campylobacter* in different type(s) of sample (matrix), and to validate and/or participate in validation studies of methods. Furthermore, to test and modify molecular methods for detection, species identification and strain characterization ("typing") of *Campylobacter* in order to provide the NRLs with details about the methods and advances in the field.

2.1. Development and production of reference materials for preparation of PTs "Detection and species identification of Campylobacter in non-food/meat samples"

In the future, the EURL would like to use vials with freeze dried bacteria (as bacterial reference material) in all PTs. The technique for freeze drying *Campylobacter* is problematic due to the biology of this type of bacteria (genus *Campylobacter*). Staff of the EURL will learn the technique and work out a procedure for this purpose.
Materials for use as matrices in the PTs will be investigated and tested to make sure that they are stable in the test. The preparation of the PTs with testing strains and stability of the strains with different matrices will follow previous protocols which will be updated and optimized. More *Campylobacter* strains of different species and bacteria of related genera will be tested and prepared for the PTs. Volumes and concentrations of inoculums and stability of the tests will be tested.

Expected output: Stable reference materials for use in the PTs will be prepared. In the future, the bacterial reference material should consist of freeze dried bacterial cultures in all PTs. Freeze-dried reference material will be easier to handle and more stable compared to live cultures. Another expected output will be to achieve/extend the strain collection useful for future PTs.

2.2. Participation in validation of ISO 10272

Validation studies of ISO 10272 Part 1 and Part 2: 2006, were organized by the Food and Consumer Product Safety Authority and National Institute for Public Health and the Environment, The Netherlands, in 2013. The EURL collaborated in the studies and contributed with expert advice in 2014 when the results of the studies were evaluated and presented at the ISO/CEN meeting in Washington DC in June 2014. The EURL will continue to contribute to the final report which will published in 2016.

Expected output: Reports of the evaluations will be prepared by the organizers and the EURL will contribute to this activity.

2.3. Detection of Campylobacter in water samples

Contaminated water is an important vehicle for the transmission of *Campylobacter* to humans, both in sporadic cases and large outbreaks. Contaminated water could also be a source of infection/contamination of broiler flocks. The ISO 17995: 2005 standard "Water quality – Detection and enumeration of thermotolerant *Campylobacter* species" specifies a method for the detection and semi quantitative enumeration of *Campylobacter* in filterable water samples. However, the isolation of *Campylobacter* from water poses several problems. Large volumes of water are often required to reach desired sensitivity. The EURL has started to test filtration of large volumes (>50L) that are flushed or pumped through a dialysis filter. Preliminary results indicate that this technique may be a sensitive method for detection of C*ampylobacter* in water; possibly as low as 10 cfu of *Campylobacter*/liter.

Studies of methods for detection of *Campylobacter* in water will continue in 2016 and 2017 in order to confirm the sensitivity of the method with dialysis filter and to compare with other methods.

Expected output: A summary of the results of testing and comparing different methods for detection of *Campylobacter* in water will be communicated to the NRLs, other OLs, and DG SANTE.

2.4. Methods for species identification

Species identification of *Campylobacter* by traditional phenotypic tests ("biochemistry") is usually not as reliable as molecular methods. This has been very obvious in all PTs that the EURL has organized. When the EURL receives isolates from the NRLs for confirmation and species identification, a set of tests mainly PCR- based assays, are used in order to obtain a conclusive identification. The EURL will continue to evaluate PCR assays and other non-cultural methods, i.e. mass spectrometry (MALDI- TOF) for species identification of *Campylobacter*.

Since 2014, EURL staff participates in a working group: CEN/TC 275/ WG 6/ TAG 3, "PCR for the detection of food borne pathogens in food and animal feed". The mandate includes review of methods for confirmation and species identification of *Campylobacter*.

Expected output: Results of the EURL testing and review of assays will be communicated with the NRLs and other relevant laboratories.

2.5. Methods for strain characterization of Campylobacter

Strain characterization or 'typing' of *Campylobacter* isolates is important, especially when studying food borne outbreaks and for the identification of transmission routes and sources of infection. Although campylobacteriosis cases are often considered to be sporadic events, larger food-borne outbreaks are identified, much thanks to the use of molecular typing methods.

A 'Vision paper on the development of data bases for molecular testing of fooborne pathogens in view of outbreak preparedness' was prepared by DG SANTE (DG SANCO) in 2012. In this document, it is stated that molecular typing of food-borne pathogens could "substantially contribute to the epidemiological investigations of foodborne outbreaks and to the identification of emerging health threats". An initiative to collect molecular typing data (PFGE) from food, animal, feed, and human isolates in two data bases was presented with EFSA managing food and animal and ECDC managing the human typing data. In the pilot project, only four pathogens are included (not *Campylobacter*), but it is expected that also *Campylobacter* will be in focus for this activity, since campylobacteriosis is by far the most reported zoonosis in the EU and one of prioritized diseases by ECDC.

Many NRLs- *Campylobacter* perform molecular typing but there is a need for harmonization of methods and reference materials. The EURL- *Campylobacter* often receives questions about which protocols, equipment and other materials should be used.

To be prepared for the expected extension of the EFSA-ECDC databases to cover *Campylobacter* isolates and to be able to provide technical assistance to the NRLs it is important that the EURL is updated on the techniques and has experience and knowledge on the details of the methods. At the EURL, three techniques for molecular typing are being used and tested to gain experience and good knowledge of each type of technique:

Pulsed field gel electrophoresis, PFGE

Two standardised protocols are recommended for use: *Campynet protocol* (http://campynet.vetinst.dk/PFGE.html) and *the PulseNet (USA- PulseNet) protocol* (http://www.cdc.gov/pulsenet/PDF/campylobacter-pfge-protocol-508c.pdf). At the EURL- *Campylobacter* PFGE training course in 2011, the *USA- PulseNet* protocol was trained.

Multi locus sequence typing, MLST

The MLST method according to reference Dingle et al (2001) (1) has been established at the EURL. The details of the protocol are available at http://pubmlst.org/campylobacter/ . The PubMLST website also holds the database for sequences, determining the designations of the ST types. The advantage with MLST is that sequence data are unambiguous and can be exchanged between laboratories and compared with the big database at the PubMLST website.

Whole genome sequencing, WGS

In June 2014, EFSA staff participated in the EFSA Scientific Colloquium "Use of whole genome sequencing (WGS) of food-borne pathogens for public health protection". This EFSA initiative shows that WGS is becoming a method that is seriously considered for food safety applications in the near future.

The costs for performing WGS have decreased and the number of platforms for handling the large amount of sequence data have increased. The EURL has in collaboration with the NRL- *Campylobacter* at SVA, started to test WGS of *Campylobacter* using MiSeq (Illumina) in order to meet future needs for assistance and advice from NRLs and stakeholders. Different methods and platforms are tested to extract and analyze relevant information of the whole genome sequences, e.g. the DTU platform for defining MLST type (2) and a web-based platform, Ridom SeqSphere+ software (http://ridom.de/seqsphere/index.shtml). The EURL will continue to explore the possibilities to - in a user-friendly way - obtain relevant information from WGS data in 2016 and 2017.

The EURL collaborates with the Swedish NRL- *Campylobacter* in research projects that among other things include strain characterization by molecular techniques.

The EURL staff provides competence and expert advice on methodology and interpretation of results. In return, the EURL staff gains updates and valuable knowledge about relevant research questions. A repository of typing data is being developed, covering Swedish animal and environmental *Campylobacter* isolates. This repository could easily be adjusted to include also typing data from NRLs.

Expected outputs: More experience and knowledge will be acquired about strain characterization by molecular methods. This will provide a solid base for assisting the NRLs, EU agencies and other stakeholders.

ACTIVITY 3
TRAINING AND SUPPORT TO NRLS

Regulation (EC) No 882/2004, Article 32 1a, 1c, 1d, 4a –c, e, f

Objectives: To communicate about ongoing *Campylobacter* activities at EU and national levels to the NRLs, OLs and stakeholders. To assist NRLs with scientific and technical

advice and to train NRL staff in conventional and molecular techniques for *Campylobacter* analyses.

3.1 Organisation of annual workshops in 2016 and 2017. (EURL Campylobacter workshop no 11 and 12, respectively)

The workshop in 2016 is planned to be held in Uppsala, Sweden. The workshop in 2017 is planned to be organized as an associated meeting to the international *Campylobacter*, *Helicobacter* and Related Organisms (CHRO) conference which may be held in Nantes, France. The decision on location for CHRO in 2017 will be taken at the CHRO meeting in New Zealand in November 2015.

For both EURL workshops, the following will apply:
Representatives from the 28 MSs NRLs for *Campylobacter*, as well as experts from third countries and invited speakers will be asked to attend as reimbursed participants. As in previous years, experts from DG SANTE, the European Food Safety Authority (EFSA) and the European Centre for Disease Prevention and Control (ECDC) will be invited to present *Campylobacter* activities at EU level.

The agenda will include presentations and discussions on:
- *Campylobacter* activities at EU level. Results of zoonosis monitoring and surveys of *Campylobacter* in animals, food stuffs and humans. Strategies for control actions.
- Results of proficiency tests (PTs)
- Updates on analytical methods, including validation/assessment of methods for detection and enumeration of *Campylobacter* and molecular methods for identification and characterization of *Campylobacter* strains
- *Campylobacter* activities at national level (EU MSs and third countries), i.e. monitoring and research studies
- Information about proficiency tests to come
- Information about activities concerning ISO and CEN
- Future EURL-*Campylobacter*- NRL collaboration and activities, e.g. training activities, depending on recent and urgent matters of common interest, and workshops

At least one NRL representative from each EU MS is expected to participate in each workshop. Actions taken to ensure participation include:
- A date for the 11th workshop (in 2016) will be suggested already at the 10th workshop in 2015. A date for the 12th workshop (in 2017) will be suggested at the 11th workshop
- An announcement with details will be sent out about 4 months before the workshop
- Reminders will be sent out by emails and if necessary be made by phone
- If an NRL is unable to participate, the EURL will send an email and ask the NRL to provide a written explanation for the reason why they cannot participate.

In previous evaluations of workshops, the majority of participants have given high points and positive comments about the workshops. Actions to address negative feedback will include discussion within the EURL to evaluate the feedback and possibilities to make changes if relevant. The EURL may contact the NRLs or make a survey by use of QuestBack to find ways to change things that have received low points or negative comments in the evaluation of the workshop.

Expected output: Representatives from all EU MSs NRLs- *Campylobacter* and from OLs in approximately 5 countries will participate. It is expected that positive responses will be

given in the evaluation survey by the majority of participants. Presentations given at the workshop and a summary of the workshop will be posted on the website.

3.2 EURL staff visits (missions) to NRLs for training of NRL staff

If an NRL repeatedly underperforms with the *Campylobacter* analyses in the PTs, the EURL will suggest different activities to assist the NRL. One alternative is that the EURL visits the NRL for training of the staff. Before such a mission, the EURL staff will prepare laboratory material, relevant literature and presentation material needed for the visit.

Expected output: Depending on the situation, one such visit (mission) is planned for each year (2016 and 2017).

3.3. Training course and study visits to EURL

Training courses for improvement of technical performance in enumeration and identification of Campylobacter will be organized when necessary. Training in the application of molecular techniques (PCR or other) will also be organized. A maximum of 5-6 participants is regarded optimal for the hands- on laboratory training courses. One training course for 5 days, will be planned for each year.

If requested, the EURL will also offer training for NRL staff on an ad hoc basis for shorter periods, e.g. 1-2 persons making study visits to the EURL for 2-3 days.

Before a training course or an ad hoc training activity takes place, preparations will be made by the EURL, i.e. testing assays, bacterial strains, making up laboratory protocols and lists of suppliers of reagents, chemicals, equipment, etc., and collect relevant literature for the participants/visitors.

Expected output: One training course is planned for each year. In addition, the EURL can organize ad hoc training and/or study visits.

3.4. Ad hoc assistance to NRLs

Upon request from the NRLs, the EURL will perform confirmatory testing of isolates that the NRLs send to the EURL. Usually, the NRL asks for species identification and the number of submitted isolates per year has ranged from 1 to 30 from a single laboratory. The EURL also provides assistance on questions about methodology, techniques, equipment, etc. NRLs are also provided with "reference material" consisting of well characterized strains from the EURL, to help when the NRL is setting up a new method, for example PCR or typing by a molecular method, i.e. MLST.

Expected output: It is difficult to foresee how many requests will be received, but the EURL always provides assistance as soon as possible when these types of questions occur.

3.5. Preparation of learning material for the website (under link "Analytical methods")

For some NRLs, changing of staff and/or limited experience of routine analysis of *Campylobacter* could be reasons for poor performance of PTs. Some steps in the standard analysis of *Campylobacter* are more problematic than others. Phenotypic tests for confirmation and species identification are sometimes misinterpreted and some NRLs have problems with enumeration of *Campylobacter* on agar plates with contaminating flora. The EURL has prepared photos and text material for website presentation. Basic steps in the analysis following the standard ISO 10272 Part 1 and 2 (2006) such as the motility test is presented. The intention is to offer a useful and easily accessed material as complement to

other assisting activities provided by the EURL, such as training courses and missions to NRLs. The preparation of learning material for the website will continue in 2016-2017.

Expected output: Texts and photos demonstrating details in the basic procedures of *Campylobacter* analysis according to the ISO 10272 procedures will be prepared and posted on the website.

ACTIVITY 4

PROVISION OF EXPERTISE TO STAKEHOLDERS (COMMISSION AND AGENCIES, MEMBER STATES, CANDIDATE AND THIRD COUNTRIES) AND PREPAREDNESS OF STAFF FOR EMERGENCY SITUATIONS

Regulation (EC) No 882/2004, Article 32 1e, 1f, 4a, 4e, 4h

Objectives: To ensure that the EURL staff is well trained, up-dated and knowledgeable about the area of *Campylobacter* so that appropriate expertise can be provided to stakeholders and emergency situations can be handled in a proper way.

4.1. Provision of expertise to stakeholders

Requests from the Commission and agencies for scientific and technical assistance will have priority and be handled by the EURL scientific staff in a timely manner.

One person of the EURL staff (Elina Lahti) will continue to be a member of the EFSA Scientific Network for Zoonoses Monitoring Data in 2016-2017.

EURL staff will participate in meetings and seminars organized by EFSA, similar to the International Conference on "Prevention and control of *Campylobacter* in the poultry production system" (August 2015) and contribute with presentations when requested.

EURL staff will be involved in training programmes or courses within the European Training Platform for Safer Food Programme (BTSF), and workshops organised by TAIEX. As an example, EURL staff will act as tutors in a course on Zoonoses within the BTSF initiative as a result of the BTSF tender on Zoonoses and Antimicrobial resistance (Chafea/2014/BTSF/05) that was awarded the AETS consortium in 2015. Four courses are planned in 2015- 2017.

EURL staff will also give presentations and act as lecturers at other seminars or meetings both internationally and nationally.

Campylobacteriosis is one of the diseases in focus for ECDC's program on Food and Waterborne Diseases and Zoonoses (FWD). The EURL will continue to collaborate with ECDC and participate in meetings and provide assistance in the work with harmonizing surveillance including analytical methods for campylobacteriosis in humans.

DISCONTOOLS was an EU funded project in 2008-2013. Within this project a disease database of 52 prioritized diseases was prepared and published on the website www.discontools.eu. One of the diseases was campylobacteriosis. EURL staff was leading the *Campylobacter* expert group for this work. EURL staff will from 2015 be the leader for a group that will update the data on *Campylobacter* on the website.

EURL staff participates in and provides expert assistance to a project with third country Egypt in 2015-2017. The project "Molecular epidemiology of *Campylobacter* spp in broiler meat and quantitative modelling of the risk of human campylobacteriosis in the Egyptian

setting" is funded by the Swedish Research Council and is a collaboration between the Swedish University of Agricultural Sciences, Swedish National Veterinary Institute (SVA), Alexandria University (Egypt) and Murdoch University in Perth, Western Australia.

Meetings with the Commission services that are of relevance for EURL staff to participate in:

- Coordination meeting(s) of EURLs in the area of veterinary public health- biological risks, organized by DG SANTE
- One meeting with Commission working groups under the Standing Committee on Plants, Animals, Food and Feed – if the topic of the meeting is of relevance for the EURL- *Campylobacter*.

Expected output: Scientific and technical support will be given to stakeholders

4.2. Preparedness of staff

To ensure high quality and competence within the area of *Campylobacter*, the issues of skills of the EURL staff and continuous professional development are of fundamental importance. The EURL staff will thus collaborate with and visit other expert laboratories and participate in international and national networks, scientific seminars, conferences and workshops, ie:

- Relevant national and international seminars and research meetings in order to assure competence and knowledge on recent advancement within the *Campylobacter* area.
- In 2017, members from the EURL staff plan to participate in the international conference *Campylobacter, Helicobacter* and Related Organisms (CHRO). This is the largest international conference on *Campylobacter*, it is organized every second year, and will probably be held in Europe (in Nantes, France) in 2017.
- Other meetings of relevance for microbiological analyses of samples in the food chain, e.g. FoodMicro in Dublin, Ireland in 2016 http://www.foodmicro2016.com/dublin/

Participation of EURL staff in meetings/conferences will be co-funded by SVA and other sources

Expected output: The members of EURL staff will maintain high technical competence in laboratory analyses and acquire new important knowledge in the field of *Campylobacter*. Members of the EURL staff will author/co-author at least 2 scientific publications in peer reviewed journals annually and contribute with oral/poster presentations at scientific meetings, eg. CHRO in 2017.

ACTIVITY 5

RECIPROCAL EXCHANGE OF INFORMATION WITH PROFESSIONAL BODIES

Regulation (EC) No 882/2004, Article 32 1f, 4e

Objectives: To exchange information and assist with expertise when requested from professional bodies, and to actively participate in CEN/ISO standardization activities:

Provision of consultant expertise to FAO/WHO/OIE

The EURL- *Campylobacter* is not a reference laboratory for FAO/ WHO, or reference laboratory or collaborating centre of OIE, but provides consultant expertise on an ad hoc basis to these professional bodies whenever requested.

Participation in CEN/ISO activities

EURL staff participates in CEN/ISO standardization activities and one staff member (Ingrid Hansson) is active member of working groups:

- Revision of ISO 10272: 2006, Part 1 and Part 2
- Group leader of CEN/TC275/WG6 TAG19
- Working group ISO/TC34/SC9 WG4 'Proficiency testing'. Revision of ISO/TS 22117, Microbiology of food and animal feeding stuffs -- Specific requirements and guidance for proficiency testing by interlaboratory comparison

The following meetings will be attended in 2016 and 2017:

- The 35th meeting of ISO/TC34/SC9 and the 23rd meeting of CEN/TC275/WG6, which will be held in France 2016. Total duration of the two joint meetings will be 5 days. In 2017 it is expected that the corresponding number of meetings/meeting days will be organized for these ISO/CEN activities. The annual ISO/CEN meeting in 2017 will probably not be held in Europe, possibly in Asia.
- One –two meetings with working group ISO/TC34/SC9 WG4 ISO/TS 22117, no date(s) has (have) been set yet. Duration probably 2 days. The same will apply in 2017.

EURL staff will continue to participate in meetings with CEN/TC 275/WG 6/TAG3, "PCR for the detection of food-borne pathogens in food and animal feeding stuffs". Concerning *Campylobacter*, the task is to make a recommendation for a method for confirmation and species identification of *Campylobacter*.

It is expected that one one-day meeting per year will be attended with this TAG3 group.

Expected output: Reports from the meetings will be prepared and the EURL will contribute to this activity.

ACTIVITY 6
COMMUNICATION

Regulation (EC) No 882/2004, Article 32 1a- f, 4b-c, g

Objective: To communicate relevant information with the Commission and its agencies, with NRLs, OLs and stakeholders and to provide quick assistance whenever asked for.

The website is used for communication of basic and relevant information about the EURL activities (http://www.sva.se/en/About-SVA/EURL-campylobacter/). The EURL will maintain and continuously update the list of NRLs- *Campylobacter* contact persons in EU MSs and at the corresponding official laboratories in other European countries that are participating in activities organized by the EURL- *Campylobacter*. Presentations given at the workshop will be posted as pdf-files on the website and technical information about PTs will be provided. Other relevant information will be posted, e.g. "learning material".

Most communication with NRLs, the Commission, other EURLs and stakeholders is done by emails and consists of both short questions and more complicated issues, sometimes on ad hoc basis. The time periods before and after workshops and PTs are those with most intensive contacts with NRLs. The web based form for reporting results of PTs (QuestBack) is very useful and has been well received by the NRLs. The reporting form is designed to fit each individual PT and the NRLs are encouraged to send their comments in order to make improvements. Problems (at the NRLs) with using the QuestBack will be

addressed. The EURL prepares draft and final reports of the PT results which are then distributed to the NRLs and DG SANTE by email. The annual technical and financial reports are sent to DG SANTE both by regular post and email.

Expected outputs: The website will be updated and improved. Technical and financial reports will be sent to DG SANTE within deadlines. Final PT reports will be sent to the NRLs after the workshops in 2016 and 2017, respectively.

References

1. Dingle KE, et al. 2001.Multilocus sequence typing system for *Campylobacter jejuni*. J. Clin. Microbiology,39: 14-23.
2. Larsen MV, et al 2012. Multilocus sequence typing of total-genome-sequenced bacteria. J. Clin. Microbiol, 50: 1355.