

Work programme for the EU Reference Laboratory for Classical Swine Fever, 2012

I. Contractual duties

The contractual duties of the EURL are specified in Council Directive 2001/89/EC (OJ L 316 of 1.12.2001) and were taken as basis for setting up the work programme.

II. Objectives for the period January 2012 - December 2012

Coordination of methods employed in diagnosing classical swine fever, harmonisation of methods and further activities related to the support of National Swine Fever Laboratories (NSFLs)

Activity 1: Production and supply of (reference) material(s)

- a. Storing and supplying cell cultures for use in diagnosis;
- b. Maintenance and enlargement of a classical swine fever (CSF) virus collection;
- c. Propagating and supplying strains of CSF virus;
- d. Updating and maintenance of a World Wide Web database for CSF virus collection (including genome sequence data);
- e. Updating and maintenance of a World Wide Web database for CSF reference sera and tissue samples;
- f. Producing, storing and supplying standardised sera and other reference reagents to the national laboratories upon request in order to standardise the tests and reagents employed in the Member States, e.g.
 - reference material (sera, monoclonal antibodies, viruses, clinical specimens, cell cultures);
 - serum panels for validation of ELISA and PCR tests;
 - highly virulent CSFV for direct use in (vaccination) challenge experiments;
 - provision of photographs or slideshows depicting clinical disease features.

Activity 2: Inter-laboratory comparison test (ILCT)

Organising comparative tests of diagnostic procedures at Community level;

- Set up of CSF ILCT panel 2012 in cooperation with and according to the advice of the scientific advisory board;

- Production of reference material for the inter-laboratory comparison test (ILCT) panel 2012;
- Validation and evaluation of CSF ILCT panel 2012;
- Notification of participating laboratories, packaging of CSF ILCT panel 2012 and shipment of test panels;
- Evaluation of results;
- Follow-up of non-conformities;
- Presentation of results to the participating laboratories and the EU Commission (DG SANCO).

Activity 3: Characterisation of virus isolates

Characterising isolates of CSF virus by the most up-to-date methods available to allow greater understanding of the epizootiology of classical swine fever;

- Laboratory testing of diagnostic samples for confirmation, exclusion or differential diagnosis;
- Virulence and pathogenesis studies in animal experiments on recent CSF virus isolates;
- Sequence analysis of recent CSF virus isolates from primary outbreaks of CSF in the EU and Third Countries (upon request) and evaluation of data from Member States on molecular epidemiology of CSF;
- Establishing routine performance and validation of advanced sequencing techniques to improve the capabilities and the sensitivity in analyzing CSF virus phylogeny in outbreaks;
- Publication and provision/transfer of the new methods (sequence analysis of whole E2 gene and further genes of structural proteins) to NRLs.

Activity 4: Quality management

- Assuring compliance of the laboratory with ISO/IEC 17025;
- CSF virus inter-laboratory comparison testing following ISO/IEC 17043 (General requirements for proficiency testing).

Activity 5: Gathering of information and expertise

- a. Maintaining and extending a network of laboratories and scientists working in the field of CSF virus;
- b. Collecting and collating data and information on the methods of diagnosis and the results of tests carried out;
 - o Collection of the country report data on CSF diagnostic activities for the year 2011 via a web based template;
 - o Collection of the country report data on the CSF situation in wild boar for the year 2011 via a web based template and in parallel generation of the wild boar report 2011 for the first time directly through the “CSF in wild boar” surveillance database;
 - o Editing of data and reporting to NRLs and EC;
- c. Keeping abreast of developments in CSF surveillance, epizootiology and prevention throughout the world;
- d. Retaining expertise on the virus causing CSF and other pertinent viruses to enable rapid differential diagnosis;
- e. Acquiring a thorough knowledge of the preparation and use of the products of veterinary immunology used to eradicate and control CSF.

Activity 6: “CSF in wild boar” surveillance database

Further extension and maintenance of the CSF in wild boar surveillance database to all EC Member States and interested third countries in Europe (subcontracting with Friedrich-Loeffler-Institute, Wusterhausen, Germany).

Making the necessary arrangements for training or re-training of experts in laboratory diagnosis with a view to harmonising diagnostic techniques

Activity 7: Conducting a joint workshop for NRLs on CSF and ASF diagnosis and control (in cooperation with the EURL for ASF)

- o Preparation of programme for CSF part of the joint workshop and working documents;
- o Making necessary arrangements for the workshop and conducting the workshop;
The EURL for CSF will be host for the workshop in 2012;
- o Scientific contribution: presentation of ILCT results, EURL and research activities;
- o Collection and editing of material for a report on the workshop;

- Preparing the report on the workshop and making presentations available on the website of the EURL in a restricted area.

Activity 8: Provision of individual training in laboratory diagnosis at the EURL.

Providing individual training in laboratory diagnosis in case of need for re-training or in case of establishment of new techniques in the NRL.

Budget for training activities was calculated for two visitors for a time period of two weeks each.

The training offer may include, upon request of the European Commission or TAIEX, the training of experts from non-EU countries.

Having trained personnel available for emergency situations occurring within the Community

Activity 9: Missions and permanent training of staff

- Provision of trained personnel for missions to NSFLs/Member States asking for assistance;
- Provision of trained personnel for missions on demand of DG SANCO;
- Permanent training of staff to keep abreast of new developments (includes attendance of international meetings and conferences);
- Prof. Moennig acts as Chair of EU CSF Task Force.

Performing research activities and whenever possible coordinate research activities directed towards an improved control of CSF

Activity 10: Research activities related to improved CSF virus diagnosis and control

- Further studies on optimization of CSF virus sequence analysis in case of outbreaks (e.g., comparison of results of phylogenetic analyses using complete E2 gene sequences to using whole CSFV genome; sequencing additional CSFV genes in addition to E2);
- Development of new tools to enhance usability of the World Wide Web database for CSF virus isolates and sequences;

- Taking over and maintaining the former EPIZONE databases on CSF;
- Participation in international research projects and networks, e.g. European Research Group (former “EPIZONE”), CSF Task Force of DG SANCO, DISCONTTOOLS;
- Investigating the properties of potential candidates for CSF (marker) vaccines and evaluating matching/ accompanying diagnostic tests;
- Preparation and publication of articles and reports associated with above work, attendance of international meetings and conferences.

Involvement in further research activities funded by other sources

- Participation in international research projects and networks (e.g. CSF_goDIVA, European Community's Seventh Framework grant agreement n° 227003 CP-FP);
- OIE Twinning project with CENSA, Cuba.

It is understood that the above mentioned objectives are not exclusive to other work of more immediate priority which may arise during the given period.