

Annex I

EURL for Fish Diseases: Work program and expected outputs for 2012

	Objectives 2012	Expected outputs
1	Organise and prepare for the 16th Annual Workshop for the National Reference Laboratories for Fish Diseases (NRLs) in 2012	To be held in Copenhagen, Denmark, May 2012
2	Produce a report from the Annual Workshop 2012.	To be finalized and submitted July 2012
3	Prepare the Annual Inter-laboratory Proficiency Test year 2012 for the NRLs. The test will include VHSV, IHNV, EHN, ISAV, KHV and <i>Aphanomyces Invadans</i> .	To be shipped October, 2012
4	Collate and analyse information gained from the Inter-laboratory Proficiency Test	Report for the proficiency test 2011 will be submitted March 2012, while results of the 2012 test will be finally collated December 2012
5	Supply reference reagents to the NRLs in Member States.	Reagents as monoclonal antibodies, rabbit antisera, pathogen isolates or cell cultures are expected to be sent to approx 25 laboratories in 2012
6	Production of antisera against selected isolates when necessary	Rabbit antisera are foreseen to be produced against <i>Aphanomyces Invadans</i> the causative agent of EUS
7	Update and maintain a library of isolates of Infectious salmon anaemia virus (ISAV), Viral Haemorrhagic Septicaemia virus (VHSV) and Infectious Haematopoietic Necrosis virus (IHNV), Koi Herpes virus (KHV) and enzootic haematopoietic necrosis virus (EHN) and <i>Aphanomyces Invadans</i> .	The library will be updated with approximately 30 pathogen isolates
8	Maintain a library of tissue material from fish infected with listed pathogens	A tissue library with approx. 100 tissue specimens from fish infected with various genotypes of VHSV will be collected.
9	Update the webpage for the EURL, www.eurl-fish.eu	Current task making the webpage more interactive and easy accessible.
10	Update the diagnostic manuals for VHS, IHN, ISA, KHV disease, EHN and EUS on the EURL web page.	As the diagnostic manuals were very recently adopted a number of amendments are foreseen to be done.
11	Collect information on strain variation occurring within pathogens causing the listed diseases VHS, ISA, EHN and KHV disease and provide recommendations on how to discriminate between various strains.	Strain variation has in recent years caused several disputes and uncertainty. The EURL will seek to provide recommendations for the EU and the OIE on how to deal with case definitions and strain variations of the listed disease pathogens
12	Collect and report data on the fish disease situation in EU, including all the listed non-exotic fish diseases given in Council Directive 2006/88/EC Annex IV Part 2.	A questionnaire will be submitted in February 2012 and data collated for the Annual Workshop in May .
13	Identify and characterise selected isolates of listed viruses (serological and genetic characterisation).	The EURL receive every year strains and samples for corroboration of diagnostic results in EU Member states. Regularly these strains must be characterised properly as an emergency response to avoid unwanted spreading of new pathogens in EU
14	Update and expand www.fishpathogens.eu with more pathogens.	The database have proved to be valuable for virus characterisation and molecular epidemiology . The more isolates included the stronger a tool. New databases on other listed and emerging pathogens are in the pipeline. At least 50 new VHS and IHN isolates are envisaged to be included and 1-2 new databases opened (KHV, ISA, SVC, Nodavirus

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		etc.)
15	Perform molecular epidemiology analysis to improve knowledge on diseases spreading mechanisms of viral pathogens.	Basic studies were made in some Member states in 2011 (Denmark and Poland), in 2012 a larger study including several Continental European countries is envisaged.
16	Assessment and standardisation of real-time PCR tests for the diagnosis, identification and typing of the listed non-exotic fish diseases.	Real-time PCR have shown to be a highly sensitive and specific tool for diagnosis and surveillance of a number of listed pathogens. Published and non-published methods will be assessed in our premises in order to offer validated protocols for the NRL's (KHV, IHN, ISA)
17	Facilitate and provide training in laboratory diagnosis. The yearly training courses in methods used for diagnosis of fish diseases will be offered at the EURL laboratory facilities. The courses will primarily be for training of staff from NRLs and the content will depend on request from participants.	The courses will be held primo February 2012, 2 3-courses with expected 15 participants.
18	Organizing missions to relevant laboratories. Missions will focus on NRLs where on-site communication would be beneficial.	1-2 missions will be conducted, the laboratories to visit have not been appointed yet (await results from the proficiency test 2011)
19	In collaboration with experts WW to collate and forward information on exotic and endemic diseases, that are potentially emerging in European Union Aquaculture. When necessary most appropriate diagnostic methods will be assessed and informed to the NRLs	It was agreed among the NRL's in EU that more focus should be given to emerging diseases and rapid response. The EURL will provide a report at the end of 2012 on exotic and endemic diseases that are potentially emerging in EU, and provide information on most appropriate diagnostic methods.
20	Attending missions, international meetings and conferences in order to be updated on emerging and listed exotic and non-exotic fish diseases.	The EURL expect to participate in 2 to 3 international conferences.

