

**Work programme and expected outputs for 2013**  
**EURL for Fish Diseases**

	Description	Objectives	Expected outputs	Performance Indicators
<b>1. Coordination and training</b>				
1-1	Annual workshop	Organise and prepare for the 17th Annual Workshop for the National Reference Laboratories for Fish Diseases (NRLs) in 2013	To be held May 2013	AH NRL 1 AH NRL 2 AH NRL 3 AH NRL 4
1-2	Annual workshop report	Produce a report from the Annual Workshop 2013.	To be finalized and submitted August 2013	AH NRL 3 AH NRL 4
1-3	Survey & diagnosis	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 2013 and data collated for the Annual Workshop in May.	AH R&D 1
1-4	Training	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.	Provided the necessary cost for conducting training courses will be provided the courses will be held primo February 2013; two courses lasting 3-4-day with expected 15 participants are foreseen.	AH NRL 5 AH NRL 6
<b>2. Proficiency test</b>				
2-1	Proficiency test	Prepare the Annual Inter-laboratory Proficiency Test year 2013 for the NRLs. The test will include VHSV, IHNV, EHNIV, ISAV, KHV and <i>Aphanomyces invadans</i> .	To be shipped October, 2013	AH PT 1
2-2	PT report	Collate and analyse information gained from the Inter-laboratory Proficiency Test	Report for the proficiency test 2012 will be submitted February 2013, while results of the 2013 test will be finally collated December 2013	AH PT 4 AH PT 5 AH PT 6
<b>3. Reagents and products</b>				
3-1	Reagents	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 15 laboratories in 2013	AH PT 2
3-2	Antisera	Production of antisera against selected isolates when necessary	Rabbit antisera are foreseen to be produced e.g. against the emerging pathogen nodavirus	AH PT 2
3-3	Pathogen library	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 (EHNIV) and <i>Aphanomyces invadans</i> .	The library will be updated with approximately 20 pathogen isolates	AH PT 2
3-4	Tissue library	Maintain a library of tissue material from fish infected with listed pathogens	The tissue library will be maintained and updated with new specimens.	AH PT 2

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<b>4. Scientific advice and activities</b>			
4-1 Webpage	Update the webpage for the EURL, <a href="http://www.eurl-fish.eu">www.eurl-fish.eu</a>	Current task making the webpage more interactive and easy accessible.	AH R&D 1
4-2 Diagnostic manuals	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. Based on the 16 <sup>th</sup> AM more focus to sampling procedures will be given.	AH ANA 1 AH R&D 1
4-3 Fishreflabnet	Establish an interactive network with the NRLs, Fishreflabnet, in order to promote a more proactive data sharing and communication with and between reference laboratories in member states.	An internet based platform for communication and data sharing will be established	AH R&D 1
4-4 Pathogen characterization	Identify and characterise selected isolates of listed viruses (pathogenicity testing in vivo and in-vitro, 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	AH PT 2
4-5 <a href="http://www.fishpathogens.eu">www.fishpathogens.eu</a>	Update and expand <a href="http://www.fishpathogens.eu">www.fishpathogens.eu</a> 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, etc.)	AH PT 2 AH R&D 1 PI under Other Activities
4-6 Molecular epidemiology	Perform molecular epidemiology analysis to improve knowledge on diseases spreading mechanisms of viral pathogens.	A study involving isolates from several Continental European countries is envisaged.	AH PT 2 AH R&D 1 PI under Other Activities
4-7 Real-time PCR	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)	AH ANA 1 AH ANA 2
4-8 Emerging diseases	In collaboration with specialised experts WW to review selected emerging fish diseases in Europe and assess their potential listing as exotic or non-exotic diseases (e.g. using discontools and similar tools)	It was agreed among the NRL's in EU that more focus should be given to emerging diseases and rapid response. An assessment of risk for contracting and spreading emerging and re-emerging diseases in EU will be continued in 2013	AH R&D 1
<b>5. Missions</b>			
5-1 Missions	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 2012)	AH PT 5
5-2 International meetings	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.	AH R&D 1 PI under Other Activities