Minutes of the 4th meeting of the EFSA Scientific Network for Risk Assessment in Animal Health and Welfare

Parma, 21 and 22 November 2012

Participants

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EFSA	Ana Afonso (AA), Franck Berthe (FB), Denise Candiani (DC), Sandra Correia (SC), Sofie Dhollander (SD), Chiara Fabris (CF), Maria Ferrara (MF), Andrea Gervelmeyer (AG), Per Have (PH), Karen Mackay (KM), Frank Verdonck (FV)

1. Welcome and agenda

The meeting was chaired by Andrea Gervelmeyer. The chair welcomed the participants. The agenda was adopted.

2. Declarations of interest

In accordance with EFSA's Policy on Declarations of Interests, EFSA encouraged participants to fill in the Annual Declaration of interest (ADoI). No conflicts of interests related to the issues discussed in this meeting have been identified during the screening process or at the beginning of this meeting.

3. Report on recent and current activities

3.1. Recent and current activities of EFSA

3.1.1. Infectious Salmon Anaemia Virus (ISAV)

PH provided a short introduction and background of the mandate. The ToR's were presented. The scientific opinion (SO) was adopted in November 2012[1]. The mandate focused on the capability of the HPR0 variant of ISAV (HPR0 ISAV) to cause clinical disease and the risk of HPR-deleted ISAV (HPRΔ ISAV) to emerge from HPR0 ISAV.

The assessment was based on published data. HPR0 ISAV does not cause clinical disease. The risk of virulent HPRΔ ISAV developing from HPR0 ISAV is low, but not negligible. The risk of emergence of HPRΔ ISAV is expected to be related to the overall replication rate of HPR0 ISAV. Monitoring is needed to estimate the prevalence of HPR0 ISAV in farmed as well as in wild fish in proximity to farming facilities.

[1] EFSA Journal 2012;10(11):2971 [22 pp.]. doi:10.2903/j.efsa.2012.2971, http://www.efsa.europa.eu/en/efsajournal/pub/2971.htm

Comment from IS: This is a very important SO for Iceland as the disease has never been found, yet HPR0 ISAV has been detected in a small number of samples from Iceland. What are the best specimens for testing for HPR0 ISAV?

PH: Initial replication of HPR0 ISAV takes place in the in gills, in internal organs only very low amounts of virus can be found, thus, it is recommended to sample gills when looking for HPR0 ISAV.

3.1.2. Flurisk

EFSA outsourced this project through the Art 36 framework. The aim of this project is to develop and validate a risk assessment (RA) framework capable of assessing the pandemic potential of new influenza viruses or viral subtypes emerging in animals.

This project is a follow-up of the SO on animal health implications of the pandemic H1N1, published in 2010[2], and the SO on monitoring for the emergence of possible new pandemic strains of influenza in animals, published in 2011[3].

PH referred to the WHO pandemic phases and highlighted the need for monitoring of animal influenza viruses during the first 3 phases with view to preventing sustained human-to-human transmission of viruses (pandemic phase 4). The project includes an overview of the current influenza monitoring in animals, the development and validation of an RA framework as well as the identification of data gaps and constraints for data sharing. The consortium partners and the progress of the project were presented.

NL asked about EFSA's intention regarding the use of the project outcome and DE asked about any involvement of the human medical side in the project.

PH stated that the outcome of this project will be not limited to EFSA. He stressed that international organisations involved in pandemic influenza preparedness, such as OIE, WHO, OFFLU, as well as ECDC and CDC, are involved in the project providing scientific steering. The framework could for example be used by institutions capable of carrying out the surveillance activities and collecting the necessary information for the RA.

3.1.3. Review of the EU summary report on zoonoses

AA presented the work carried out related to this internal mandate. The mandate was prepared by the BIOMO Unit of EFSA and requests the AHAW Panel to review the EU summary report on zoonoses. The AHAW panel was asked to: 1) review the European Union Summary Report on trends and sources of zoonoses, zoonotic agents and food-borne outbreaks in 2009 and 2010. This review should in particular focus on data related to bovine tuberculosis, echinococcosis, Q-fever, brucellosis, and non-food-borne zoonoses including the current analyses of the available data; 2) evaluate the appropriateness of the data collected at EU level; 3) consider what data are needed at EU level to provide an accurate picture of the epidemiological situation in the EU and the Member States; 4) assess if the analyses methods used in the report are appropriate; 5) consider if collection of sampled based data for the report's aim instead of aggregated data would improve the quality and analyses of data at EU level; 6) consider if the data collection should be extended to additional zoonoses, or zoonotic agents, such as vector-borne zoonoses; and 7) propose any improvements to the data collection, the presentation of the data and their analyses, as appropriate.

The first TOR has been addressed separately in an SO that was published in May 2012[4]. The remaining TORs 2-7 are addressed in the on-going opinion which will be presented for adoption in the

[2] EFSA Journal 2010;8(10):1770 [57 pp.]. doi:10.2903/j.efsa.2010.1770, http://www.efsa.europa.eu/en/efsajournal/pub/1770.htm

[3] EFSA Journal 2011;9(3):2109 [36 pp.]. doi:10.2903/j.efsa.2011.2109, http://www.efsa.europa.eu/en/efsajournal/pub/2109.htm

AHAW December plenary meeting. AA remarked that one of the important issues dealt with in this scientific opinion is the data needed for animal health RA.

3.1.4. Risk categorisation for aquatic animal health surveillance

The objectives of this Art 36 project are to describe and critically asses the various factors needed to categorise fish farms, taking into account characteristics of the diseases listed in Part II of Annex IV of Council Directive 2006/88/EC. The work is divided in two work packages. The first deals with the a review of the current levels of implementation of risk based surveillance in aquaculture and the second deals with risk categorisation contemplating both disease characteristics and farm level risk factors and ranking of aquaculture businesses. The consortium partners, the deadlines of the project and its expected deliverables were presented.

NL stated that the provision of a generic tool for risk-based surveillance would be very interesting and asked whether this would be achieved by the project or whether the outcome would only be applicable to aquatic animals.

AA responded that it is possible to extrapolate the principles of ranking to terrestrial animals and referred to the DG Research project on risk-based surveillance. A discussion on how this could be applied should follow the completion of the project and it was suggested that a specific network meeting involving aquaculture experts could be one way of moving this issue ahead.

3.1.5. Public health hazards to be covered by meat inspection

KM gave a brief update on the on-going activities of the mandate. The mandate deals with six groups of animals. For each of them a separate scientific opinion will be delivered. The role of the AHAW Panel is to identify implications for animal health and welfare of the changes to the current meat inspection system, as proposed by CONTAM and BIOHAZ.

3.1.6. Risk of introduction and spread of Rift Valley Fever in the EU neighbouring countries of the Mediterranean region

SD presented the ToRs of the mandate and the methodology followed to deal with the questions. A literature review will address the first TOR on the occurrence of the disease. The second TOR on the geographic distribution of the competent mosquito vectors will be dealt with by a systematic literature review. The risk of introduction of RVF in the region concerned will be addressed during an expert knowledge elicitation workshop. Finally, the last TOR, which assesses the risk of endemicity in the region concerned, is being answered with a deterministic model, assessing the average outbreak rate over time. The deadline of the mandate is March 2013.

3.1.7. Risk of entry of Aethina tumida and Tropilaelaps spp. in the EU

The ToRs of the mandate were presented, focusing on the risk of entry of Tropilaelaps spp. and Aethina tumida, the Small Hive Beetle (SHB), through importation from third countries of live queen bees, queen bumble bees, bumble bee colonies and bee products, through the natural movements of live bees and of SHB, and through importation from third countries of products other than bee products (e.g. fruits, vegetables, other possible vectors and fomites). In addition, risk reduction options, which are or could be effective to ensure safe international trade, are to be assessed in the SO. The methodological approach followed to address the ToRs , which is based on the plant health

[4] EFSA Journal 2012;10(6):2765 [13 pp.]. doi:10.2903/j.efsa.2012.2765, http://www.efsa.europa.eu/en/efsajournal/pub/2765.htm

guidance of pest risk assessment[5], was presented. The SO will be submitted to the AHAW panel for adoption at the plenary meeting in February 2013.

3.1.8. Bee Task Force

SC presented the Bee Task Force in EFSA. It addresses cross-cutting issues related to bees, to achieve a more integrated approach on the evaluation of risk to bees. Specific activities of the task force are the production of an inventory of all EFSA activities and outputs dealing with the monitoring of bees and risks posed to bees and pollination services, which has been published in October 2012[6], a review of the state of art of the work and research produced outside EFSA in the area of bee RA (e.g. ANSES, EU bee Reference laboratory, DG-Research, OECD) and a gap analysis on the data collected to highlight cross-cutting issues in risk assessment as well as data gaps and research needs. The task force should make recommendations on how to further integrate the work to provide risk managers with comprehensive advice on which to base their decisions. It will publish its second report in May 2013.

3.1.9. Characterisation of the impact of canine leishmaniosis and modelling of the role of animals in spreading Leishmania infantum within the European Union

SD presented the on-going procurement project on canine leishmaniosis. The project has been launched in preparation of a mandate on *Leishmania infantum* infections in dogs expected for 2013. One ToR of the project is to carry out a systematic review to identify, evaluate and synthesize evidence on the efficacy of interventions for the preventative control of natural *Leishmania infantum* infection in dogs. The project should also assess the role of animals in the spread of *L. infantum* within the EU and evaluate potential mitigation measures. This should include the review and evaluation of models that could be used or adapted, taking into account the data availability and accessibility, the collection of the necessary data for the most appropriate model, and the implementation of the model that best fit the purpose, using the collected data. In addition, the impact of canine leishmaniosis in those areas where the disease is endemic should be evaluated. To this end, the necessary data to characterise the impact of canine leishmaniosis should be collected applying the guidance of the manual created by PHYLUM (OIE, 2010[7]). The project is expected to be finalised in May 2013.

DE stated that the presence of the competent vector is unknown in DE and in other MS. EFSA should be careful not to produce models for which no data has been generated in EU.

[5] EFSA Journal 2010; 8(2):1495 [68 pp.]. doi:10.2903/j.efsa.2010.1495, http://www.efsa.europa.eu/en/efsajournal/pub/1495.htm

[6] Inventory of EFSA's activities on bees, EFSA Technical Report, http://www.efsa.europa.eu/en/supporting/pub/358e.htm

[7] OIE study: "Listing and Categorisation of Priority Animal Diseases, including those transmissible to Humans" - Methodological Manual, http://www.oie.int/doc/en_ListDocument.php?line_0%5Bvalue%5D=4008819&line_0%5Bfield%5D=reference&typerec=Index

3.2. Recent and current activities of the AHAW network

Animal Health

Disease / Country	RVF	AHS	BTV	FMD	WNF	TB	Bees	SBV	Brucellosis	Echinococcus multilocularis	QB/ Q-Fever	Lepto-spirosis	TBE	CWD	EIA	IBR/ IPV	VBD	ASF	AI	PRV/ Aujeszky	Rabies	Scrapie	Campylo	PRRS	BVD	Aquatic diseases	CSF
IT	**RA**	**RA**	**MS**		**MS**																						
FR						**EI**	**RA**	**EI**	**EI**																		
HU			**MS**					**MS**																			
EE										**MS**	**MS**	**MS**	**MS**														
UK														**RA**	**EI**												
IS																**EI**											
ES	**RA**					**EI, MS**		**IA**									**RA**										
BG		**RA**	**MS**	**MS**		**RA**		**MS**										**RA**									
BE							**RA**	**MS RA**	**RA**		**RA**	**MS, RA**			**RA**				**RA MS**	**RA**							
FI			**MS**					**MS**		**MS**	**MS**							**RA**			**RA**	**MS**					
LU			**MS**					**MS**							**RA**								**MS**				
CH		**RA**						**MS**			**RA**				**RA**									**RA**		**MS**	
DE			**RA**					**MS, EI**			~~**MS**~~				**RA**			**RA**	**RA**						**MS**		
SE								**MS**																	**EI**		
IE						**MS, RA**				**MS**																	
DK				**RA**	**MS**	**EI**		**MS**		**MS**								**RA**							**EI**		
NL																	**RA**										
CZ						**MS**		**MS**		**MS**																	
LV			**MS**			**MS**		**MS**	**MS**												**EI**						**MS**

MS: Monitoring and/or surveillance; RA: risk assessment; EI: epidemiological investigation, IA: impact assessment

Animal Welfare

Country	Welfare during slaughter	Electrical stunning	On –farm welfare	New legislation	Animal based indicators	Reptiles and amphibians	Research	Biological farms	transport	Marking	Bedding material	Early warning
Italy												
FR	**All species/ Cows, emphasis on ritual slaughter**											
HU	**All species**	**pigs**	**poultry**		**Comparison of official control methods with welfare quality methods**							
IS				**Active as from Sept. 2013**								
BE					**Implementation of welfare checks**	**Stress**						
FI							**Welfare research**	**Risk assessment**				
DK									**all species**			
NO										**Wild animals**		
IE												**Develop early warning signs**
NL											**Dairy cows**	

Other activities:

DE: Disease awareness building for FMD and ASF

CH: Research on bio-security measures: different approaches on effectiveness of measures on farm level

FI: RA on risk related to biological farming systems (both ecological risks as well as animal health and welfare risks)

CH, DE: RB-surveillance in slaughterhouses

SE: centralisation of all databases (farmers organisations, slaughterhouses,…)

NO: RA on influence of production factors on animal health and welfare of organic food production systems compared to conventional production systems

NL: risk mapping program

4. Forecast on short and medium-term planning

- SC presented the new mandate on possible risks posed by influenza A (H3N2v) virus for AH. The timeline for the different activities was presented, as well as the collaboration intended to take place for this mandate.
- DC presented the mandate concerning monitoring procedures at slaughterhouses. The ToRs were presented. A short discussion on slaughter without stunning took place. The network expressed the wish to take part in the stakeholder meeting.
- CF presented the art 36 project on "Identification, validation and collection of data on animal-based measures (ABMs) to create a database for quantitative assessment of dairy cow welfare". The context, scientific background and specific objectives of the call for proposals were presented. The project has a duration of 18 months and consists of a series of steps, leading to a pilot study involving several EU Member States. The aim is to collate a data set of robust and validated ABMs, compiled into a single database for analysis and quantitative assessment of the welfare of dairy cows. It was specified that the project is not intended for a benchmarking of the farms, but considered a proof of concept for the collection of data on ABMs and on the use of ABMs for quantitatively assessing the welfare of farmed animals.
- AG presented the Art 36 project on *Echinococcus multilocularis* infection in animals. This project is preparatory work for a future mandate in 2015 linked to the future revision of Regulation (EU) No 1152/2011 in 2016 and will collate scientific evidence and data needed for the opinion. The draft ToRs were presented, which include both definitive and intermediate hosts, as well as a brief overview of the methodological approach. The timeline and the potential involvement of the network were presented.
- DE will continue monitoring and epidemiological studies of Schmallenberg virus. Strategies for control of FMD and specifically the role of (emergency) vaccination will be assessed. Network analysis will be utilized for potential zoning or compartmentalisation, applying it to swine diseases and risk of milk contamination.

5. Feedback from Special Network activities:

5.1.1. Bovine Tuberculosis

AA presented an overview of the bovine Tuberculosis (bTB) situation in the EU, the bTB-free countries and the proportion of positive samples in the different countries. During the network meeting in November 2011, a clear interest to share information on the testing or research related to bTB and to assist EFSA in collecting information relevant for future mandates had been expressed by many participants. A meeting with bTB experts nominated by the AHAW network was organised in February 2012. The technical report of this meeting will be published in December together with the EFSA opinion on the subject of bTB testing. The ToR's of EFSA's mandate were presented, as well as the approach and the outcomes of the Scientific opinion.

GS presented the bTB situation in France. Dordogne and Cote d'Or: serial testing is used to increase specificity. The results of the ANSES mandate on IFNy, which addressed serial testing, was presented.

5.1.2. Schmallenberg virus

AA presented the network activities concerning Schmallenberg virus (SBV). The disease was notified in December 2011 after the identification of SBV by the FLI. EFSA was requested by the EC to provide scientific advice on the possible risks of disease spread and its impact. The AHAW network was activated to guide the data collection on the SBV outbreak. A series of teleconferences were organised with the network. An update was given of the current situation, including outbreaks up to October 2012. Underreporting is an issue and data gaps are still large. DE presented the German situation. Generally, the AHAW network activity was perceived as very useful, and the EFSA Data Collection Framework (DCF) was found a useful tool to collect data. Both UK and CH pointed out the usefulness of following farmers' chatrooms and veterinary practitioners' email-exchanges in identifying the presence of the disease.

5.1.3. Echinococcus multilocularis

AG presented the ToR's of the request for technical and scientific assistance. The reporting of results from *E. multilocularis*-specific surveillance programmes carried out in the 4 *E. multilocularis*-free MS will be mandatory from 2013 onwards. Reports received in 2012 highlighted a need to harmonise the reporting and therefore EFSA has proposed a tool for the description of the surveillance system data model and a data reporting framework indicating all relevant data that must be reported to enable assessment of the surveillance results. This proposal has been reviewed by four experts on *E. multilocularis* infection in animals and two experts on animal disease surveillance and modelling and was discussed and agreed with representatives of the four Member States at a meeting in October. UK stated that this initiative has been very helpful to harmonise reporting and inquired if the results of the Art. 36 cooperation project on *E. multilocularis* infection in animals are likely to lead to recommendations to change the current requirements for *E. multilocularis* surveillance. AG confirmed that changes to the Regulation (EU) No 1152/2011 will only be made after its revision in 2016.

5.1.4. Rift Valley Fever

An expert knowledge elicitation (EKE) workshop took place, from 14-15 Nov in CIRAD, Montpellier, with the objective to assess the risk of introduction of 5.1.4. Rift Valley Fever (RVF) into the southern Mediterranean area through the movement of RVF infected animals. The French, Spanish and Greek network members were invited for the workshop. A short explanation of the EKE methodology was given, as well as the preliminary outcomes of the first elicitated parameters for the assessment. A follow-up workshop is foreseen to take place on 29-30 January in EFSA, Parma.

5.1.5. Collaboration at the animal-human interface on non-foodborne zoonotic and potential zoonotic diseases

AG reported on the network activity that took place to explore the possibilities of improving the collaboration between the animal and the human health sectors on non-foodborne zoonotic and potential zoonotic diseases. A summary of the discussions was presented. The ToRs's for a joint animal health-human health network were presented, as well as its scope, potential activities and the establishment of a dedicated IT-platform for information exchange. Network members agreed on the need to improve the cross-sectoral collaboration on these issues and underlined the coordinating role of ECDC and EFSA in transboundary issues. They also emphasised the usefulness of early sharing of information and data, as well as risk-assessments. However, confidentiality has to be maintained, especially if weak signals of potential outbreaks and threats should be shared within the network.

6. EFSA opinion on electrical requirements for waterbath stunning of poultry

KM presented the background to the mandate, including the requests received from the Dutch and UK authorities, the Terms of Reference of the mandate, the methodological approach used, which

comprised of a systematic literature review, and the main conclusions and recommendations of the scientific opinion, which was adopted in May 2012 by the AHAW Panel.

7. Animal-based welfare measures

CF presented the activities related to animal-based measures (ABMs) that have been carried out in 2012, and those that are still ongoing. ABMs are important from the perspective of the Member States as the use of animal welfare indicators has been introduced into the EU animal welfare law and MSs are asked to build up systems for recording the relevant data. Data on the use of ABMs are relevant for EFSA in the shift from qualitative to quantitative assessment of animal welfare.
In 2012, the AHAW Panel has adopted three scientific opinions on the use of ABMs to assess the welfare of dairy cows, pigs and broilers, respectively. The AHAW Panel has also adopted a Statement that provides general concepts and principles, and that represents a guideline for future scientific outputs on the use of ABMs in animal welfare: the "risk assessment approach", developed in previous EFSA outputs (based on hazard identification), has been integrated with the new "outcome-based approach", which is focused on the response of the animals exposed to the hazards. In order to present the EFSA scientific outputs on the use of ABMs, the AHAW Unit has arranged a technical meeting with its stakeholders and interested parties in 2012. Other goals of the meeting were: i) to exchange views on the use of the ABMs listed in the EFSA publications; and ii) to exchange experience and information on measures/indicators already recorded and collected in the field, their fitness for purpose and relevance for possible future data collection.

All these outputs and activities were taken into account as scientific background for the call for proposals on "Identification, validation and collection of data on animal-based measures (ABMs) to create a database for quantitative assessment of dairy cow welfare" that EFSA launched at the end of July 2012. The aim is to provide a list of validated ABMs, and to use them (like diagnostic tests are used for detecting diseases and infections) as tools for identifying and quantifying the welfare of the animals. The AHAW Network could provide valuable inputs to achieve this goal by sharing and providing data from their activities on the use of ABMs.

8. Conclusions and planning for next network meetings

The meeting participants discussed the activities that could be tackled by the AHAW Network in 2013. It was concluded that the Network should

- Meet twice a year
- Have meetings of 2 half days, the second being slightly longer (e.g. until 3-4 pm)
- Have a scientific colloquium on emerging diseases and their origins (if not possible at least a Network workshop with invited speakers), ideally in 2013
- Have other ways of communicating between meetings to make this a real network; e.g. through electronic means (the use of a dedicated area on the EFSA IEP, Extranet and other means should be explored)
- Go ahead with the collaboration at the animal-human interface on non-foodborne zoonotic and potential zoonotic diseases