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SUMMARY OF OPINION

Opinion of the Scientific Panel on Animal Health and Welfare on the EFSA Selfmandate on bluetongue origin and occurrence

(Question N° EFSA-Q-2007-063)

Adopted by the AHAW panel on 27 April 2007

The current distribution of bluetongue (BT) in Europe deserves special consideration in regard to i) the spread and epidemiology of BT virus (BTV) into new regions, ii) the surveillance and monitoring activities of MS, iii) the clinical and laboratory diagnosis of BT, iv) a scientific approach being adopted in the use of vaccines against BTV, and v) possible control of the competent *Culicoides* vecors implicated in the spread of BTV.

Five countries in Northern Europe have reported infection due to BTV serotype 8 whereas different serotypes are responsible for the recent outbreaks of BT in part of Southern Europe (i.e. serotypes -1, -2, -4, -9 and -16).

In regard to the epidemiological follow-up of the outbreaks of BTV-8 in Northern Europe, the EFSA epidemiological working group is in the process of conducting a global analysis. In regard to surveillance, monitoring and the laboratory diagnosis of BT, a harmonised community-based approach has already been introduced. As a result that the Community Reference Laboratory (CRL) has prepared a working document and which was sent to all CVOs in October 2006 (SANCO/10581/2006/Rev 4).

On 19 September 2006 the EFSA AHAW Panel adopted a statement concerning the outbreaks of BTV 8 which had appeared in August in North-Western Europe. The introduction of the exotic serotype 8 of BTV is an event indicating the possibility of further threats emerging in the EU and for which their harmful impact on animal health is difficult to assess. For this reason, the AHAW Panel was requested to deliver a scientific opinion addressing i) the origin and occurrence of serotypes of BT exotic to the EU in order to obtain a better understanding of their evolution and subsequent spread, and ii) to make recommendations as to the potential preventive measures that could be implemented in order to minimise the reoccurrence of such events in the future.

For these reasons all the possible routes of introduction of serotypes of BTV were considered and in regard to BTV-8 four possible pathways were included:

- imported infected ruminants
- infected vectors introduced along with horses
- infected vectors introduced along with exotic plants
- contaminated or unstable vaccines

In spite of a lack of published data, the experts considered that the principal route of introduction of a new serotype of BTV into a hitherto free region is through the legal or illegal movement of infected ruminants, and, secondarily, through the introduction of infected *Culicoides* transported either in aeroplanes or on the wind. The level of risk associated with the persistence of, or re-introduction of, various serotypes of BTV was discussed taking into account also the opinions of

the French and Belgian food safety agencies. The level of risk is difficult to quantify. Nevertheless, the probability of BTV-8 re-occurring somewhere in Northern Europe in 2007 is considered to be "moderate to high".

In regard to the risk of introduction of BTV into free areas a variety of risk assessments were made and models developed, to support the conclusions reached in this Scientific Opinion, and therefore models are useful tools for assessing the impact of various measures to be taken for minimising the risk of introduction of BTV.

In the event of the introduction of an exotic pathogen into Europe, such as BTV-8, it is essential that appropriate surveillance systems are in place to detect it at the earliest possible stage since this is the time that eradication can be best effected and at minimum cost. To target such surveillance systems, criteria to identify emerging risks at risk areas and year periods should defined

Once an exotic infectious agent has been introduced into the MS, in order to determine the route and mode of entry and to assess the risk factors involved, allowing to minimise or eliminate future incursions via that route, exhaustive epidemiological investigations should be carried out; these investigations should be targeted at the movements of animals from infected countries, at their serological status or targeted at any event which could be associated with the introduction of the agent. All possible sources of introduction should be carefully, systematically and scientifically investigated, prioritised and reported.

To protect the EU southern countries, preventive vaccination with inactivated vaccines targeted to the serotypes circulating in neighbouring countries outside the EU should be considered to be used in the highest risk areas of free countries on a risk/benefit analysis, when the introduction of BTV by the wind is considered as highly probable.

In general to reduce the risk of introduction of BTV to the EU southern countries, systematic vaccination in the endemically affected EU neighbouring countries around the Mediterranean basin should be encouraged.

Keywords: bluetongue, origin, occurrence, risk assessment, surveillance, modelling, trade, waiting time.