



Request for a scientific opinion concerning the risk of introduction and spread of Rift Valley Fever in the EU neighbouring countries of the Mediterranean region

Montpellier, 13 November 2012

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Animal Health and Welfare Unit

Outline presentation

- What is EFSA's role?
- How is an EFSA opinion produced?
- Why the RVF mandate?
- ToR's of RVF mandate
- Proposed methodology
- RVF working group and EKE workshop
- Needs of data and expertise
- Timeline

What is EFSA's role?

EFSA's mission and tasks

Provide **scientific advice, scientific and technical support** for the Community's legislation and policies in all fields with direct/ indirect impact on food and feed safety



...in providing that support EFSA needs to reach **scientific excellence**, be **independent** and **transparent** and to **communicate** the risks assessed.

Organisational Structure on 16/05/2012

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HUMAN CAPITAL & KNOWLEDGE MANAGEMENT
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G. FUGA (*ad interim*)

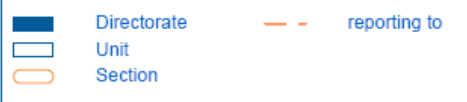
GMO
E. WAIGMANN

FOOD INGREDIENTS & PACKAGING
...

CONTAMINANTS
M. ESKOLA (*ad interim*)

BIOLOGICAL MONITORING
P. MAKELA

BIOLOGICAL HAZARDS
M. HUGAS

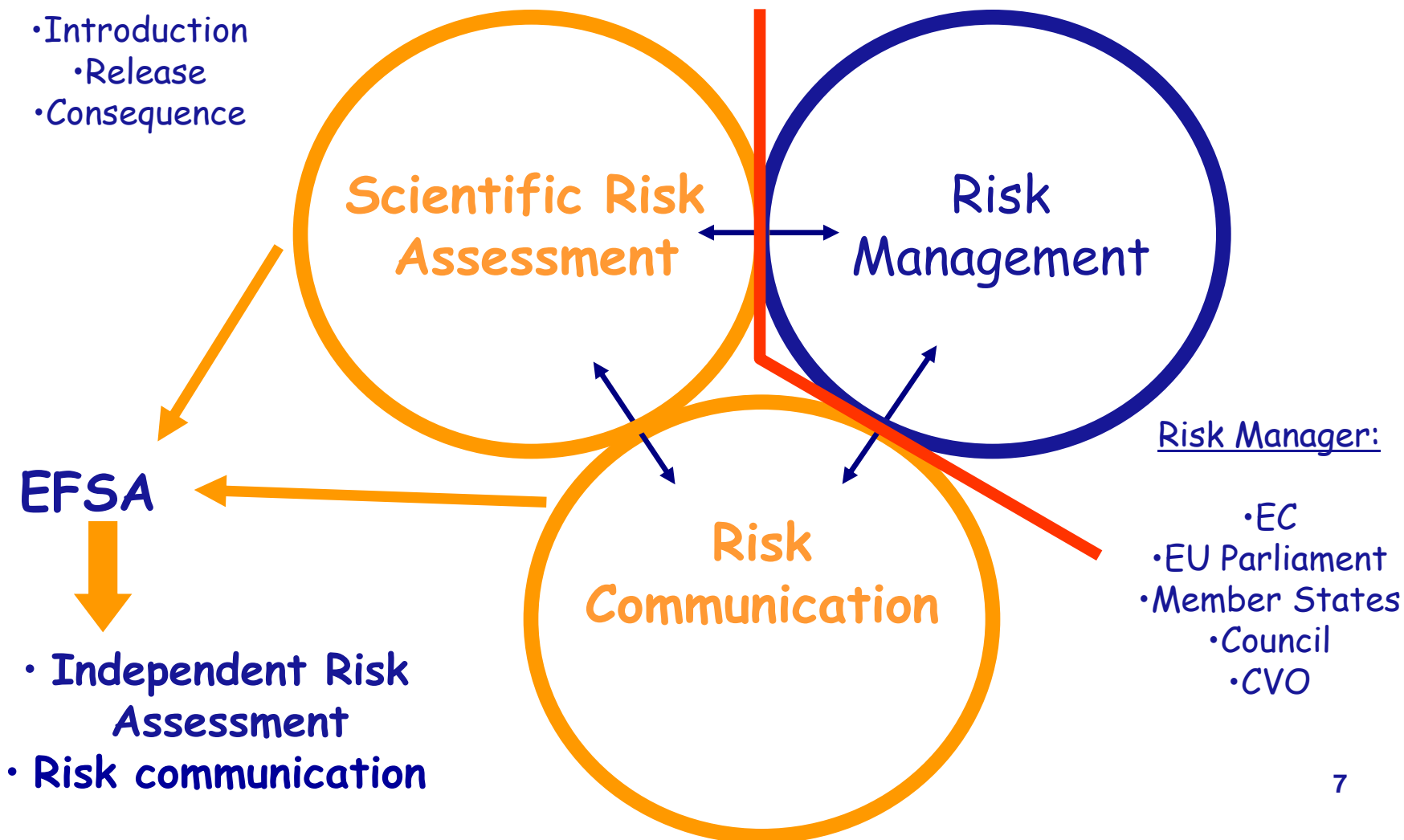


1. Additives and products or substances used in animal feed (FEEDAP)
- 2. Animal health and welfare (AHAW)**
3. Biological hazards (BIOHAZ)
4. Contaminants in the food chain (CONTAM)
5. Dietetic products, nutrition and allergies (NDA)
6. Food additives and nutrient sources added to food (ANS)
7. Food contact materials, enzymes, flavourings and processing aids (CEF)
8. Genetically modified organisms (GMO)
9. Plant health (PLH)
10. Plant protection products and their residues (PPR)
11. Scientific Committee (SC)

EFSA's role is risk analysis

OIE framework:

- Introduction
 - Release
 - Consequence



How an EFSA Opinion is produced (from “question” to “answer”)

From “question” to “answer”



European Commission



European Parliament



Member States



EFSA (“self mandate”)

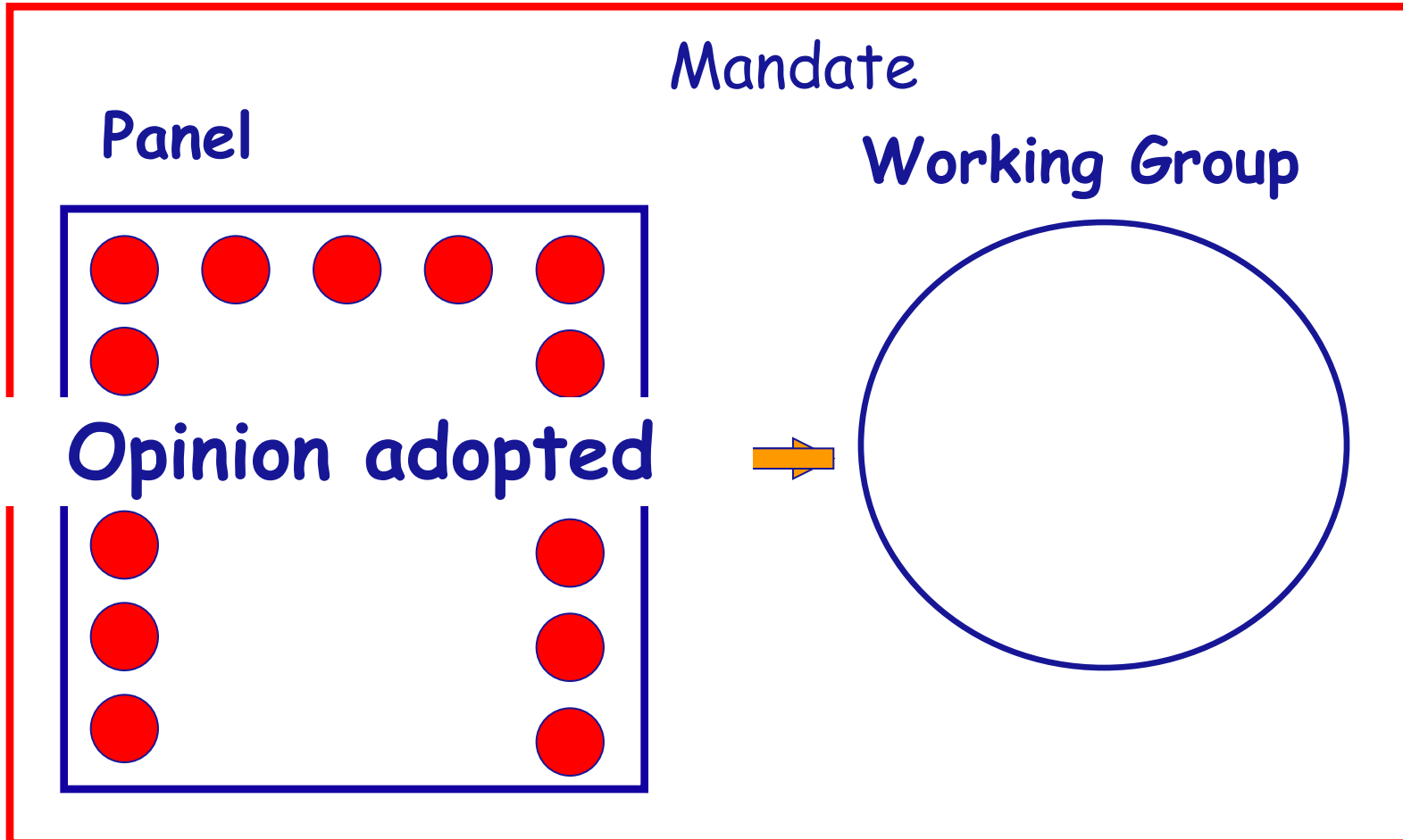


Question?

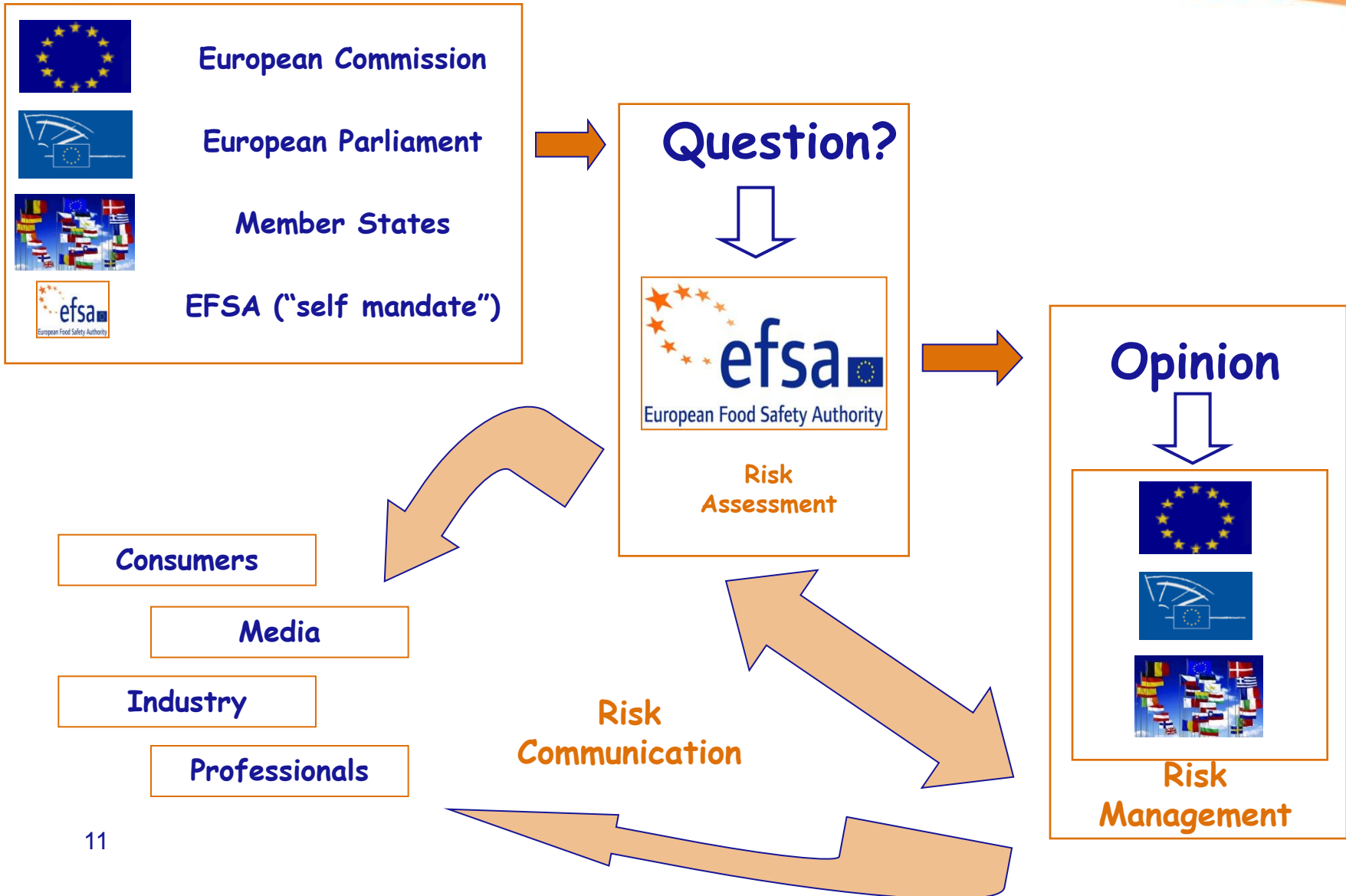


Risk
Assessment

From "question" to "answer"



From “question” to “answer”



Why the RVF mandate?

- Highly contagious, multiple vector-borne infection of ruminants
- Transboundary disease
- Serious socio-economic impact
- Impact on food security
- Impact on human health

- The possible occurrence of RVF in the EU neighbouring countries would represent a major challenge for animal health risk managers. It is therefore necessary to:
 - Determine the extent of the problem to better manage risk
 - Manage aspects of disease that are subject to uncertainty

ToR's of the RVF mandate

1. Provide an update on the **global occurrence** of Rift Valley Fever and possible changes in the distribution during the last 10 years.
2. Provide maps of the region of concern* and other countries of the Mediterranean Basin (including EU Member States), displaying the **geographical distribution of potential invertebrate hosts**, taking into account their vector competence and seasonal variation in abundance.
3. Assess the **risk of introduction of RVF** into the region of concern* especially through the movements of live animals and vectors.
4. Assess the **risk of RVF becoming endemic**, with clinical outbreaks or not, in animal and vector populations in the region of concern*.

Concerned region (ROC) for risk assessment:

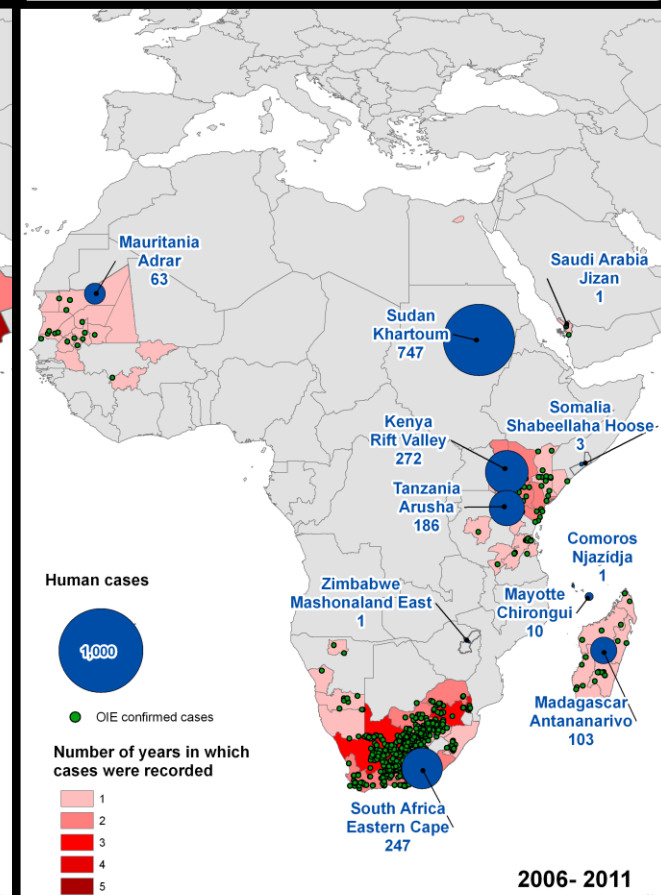
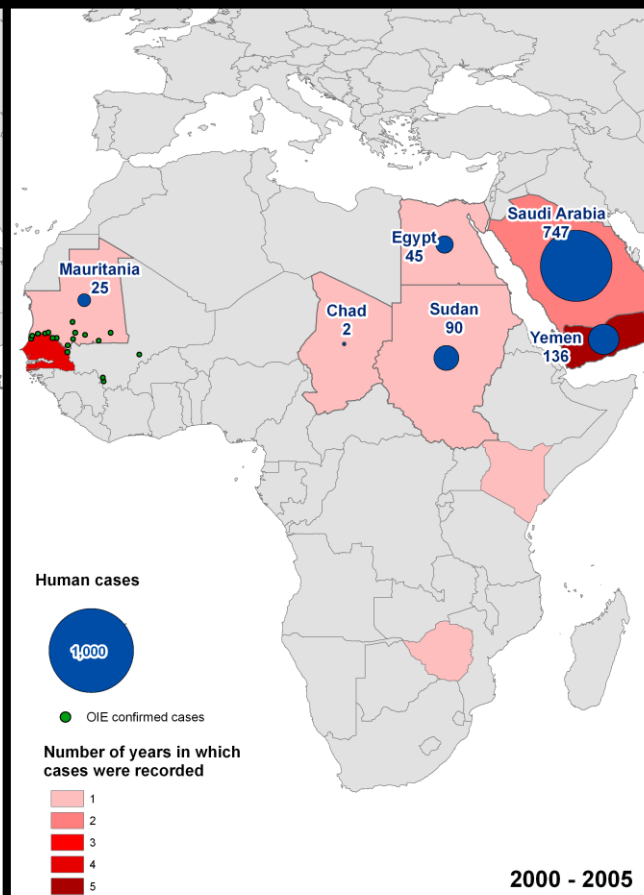
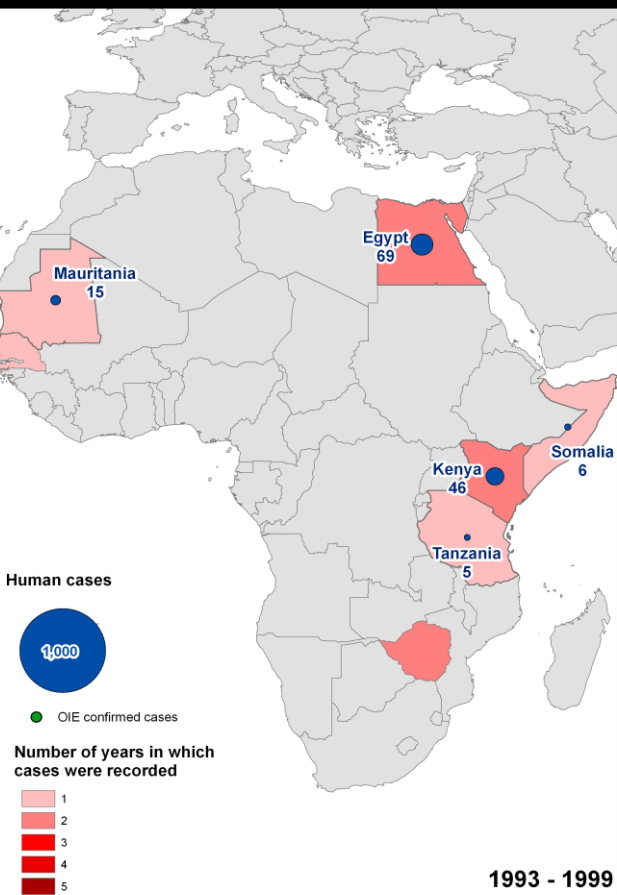
Mauritania, Morocco, Algeria, Tunisia, Libya, Egypt, Jordan, Israel, The Palestinian Territories, Lebanon and Syria



Methodology

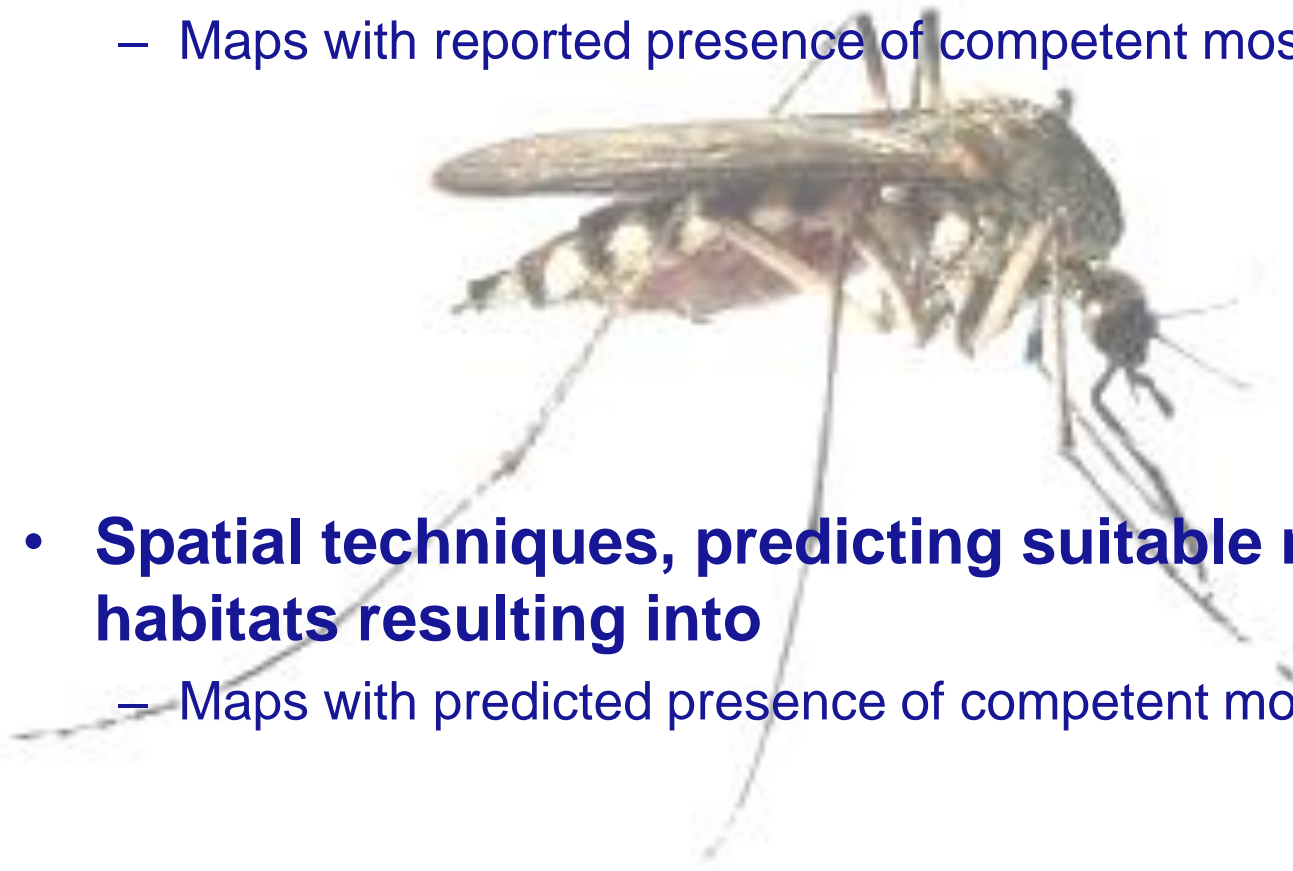
- **Narrative literature review, resulting into:**
 - Maps showing countries with different colour codes in relation to the frequency of outbreaks
 - Detailed tables in annex listing all information on outbreaks or prevalence data found over the last 2 decennia

Preliminary results TOR1:



- **Systematic literature review, resulting into:**
 - Maps with reported presence of competent mosquitoes vectors

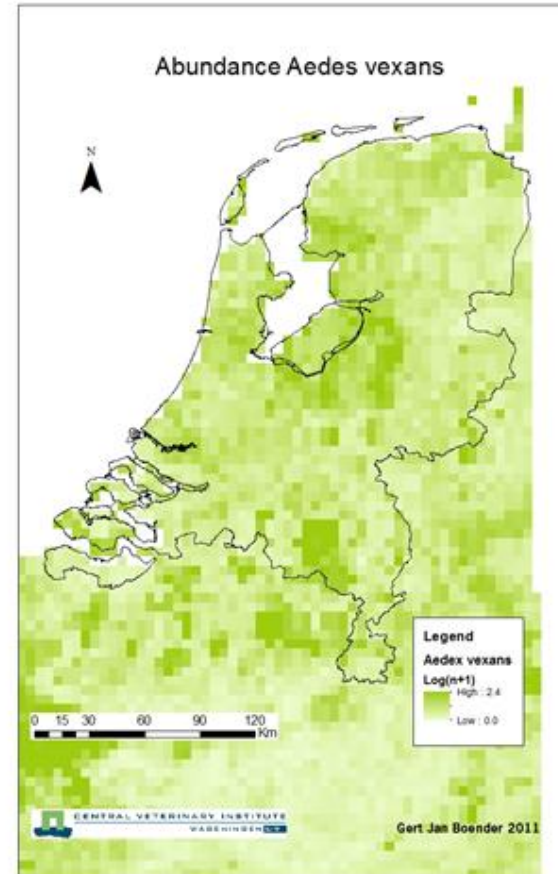
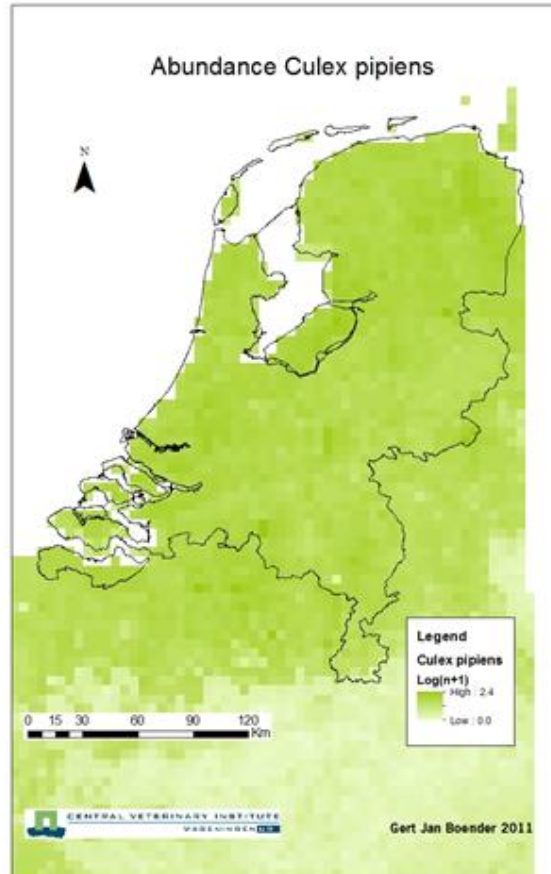
- **Spatial techniques, predicting suitable mosquito habitats resulting into**
 - Maps with predicted presence of competent mosquito vectors



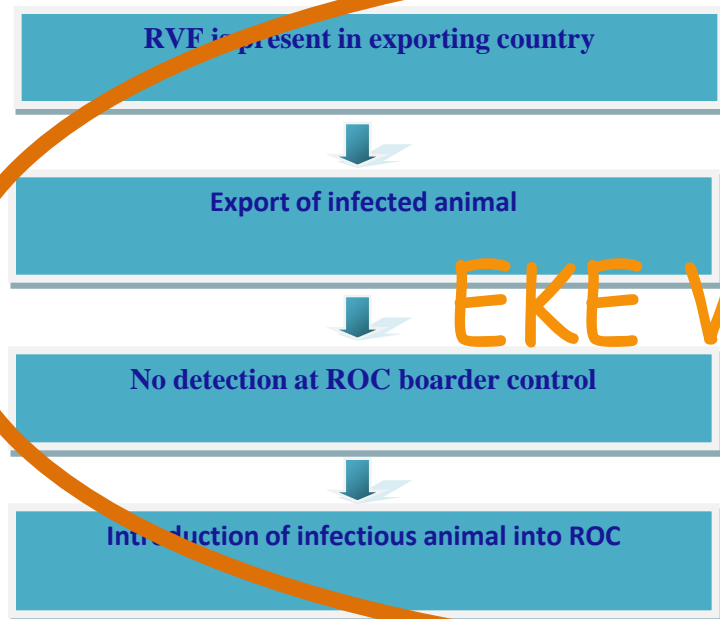
Predicted presence of competent mosquito vectors



Creation of similar maps for Concerned region



TOR 3: risk of introduction RVFV into concerned region



-Introduction via infectious animals = semi-qualitative assessment, based on:

- Prevalence in exporting countries
- Number of imported, infected animals into ROC
- Sensitivity of testing system at border control

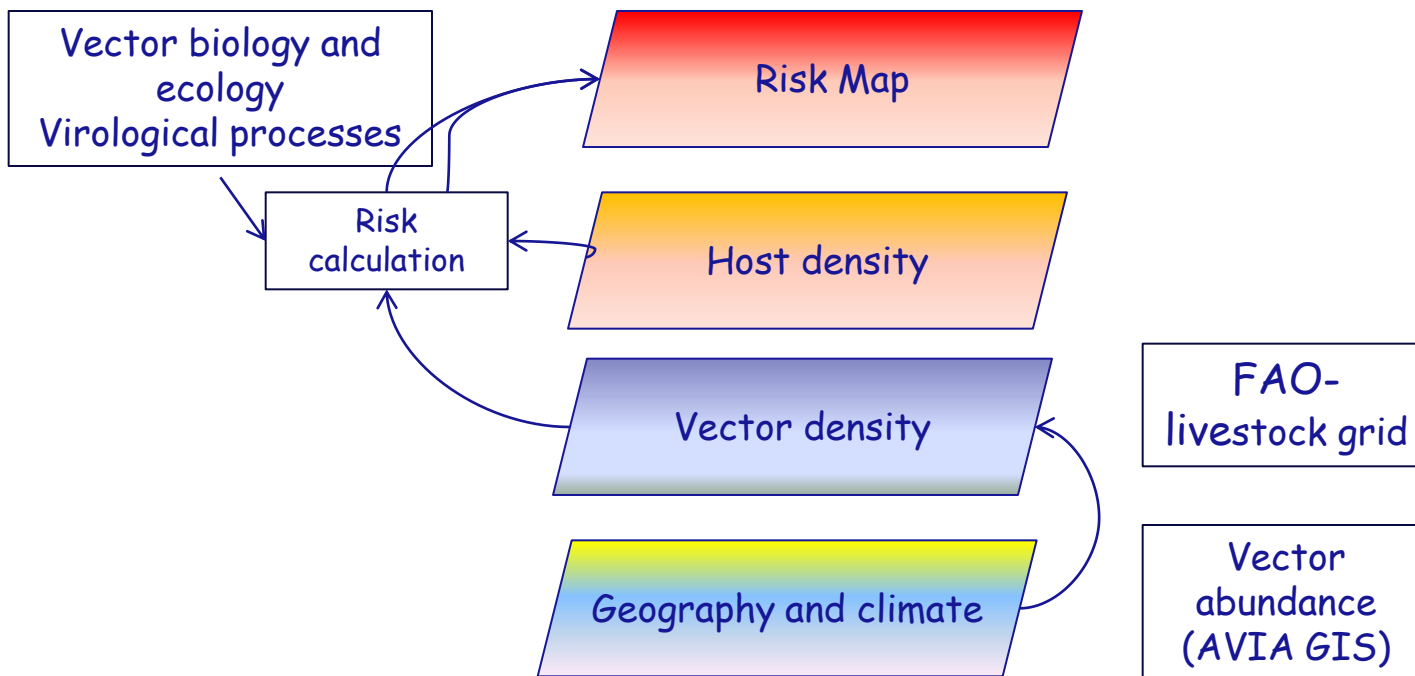
-Introduction via infectious vectors, contaminated meat, = qualitative assessment, based on expert opinion

-Introduction via contaminated meat = qualitative assessment, based on expert opinion

EKE Workshop

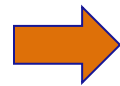
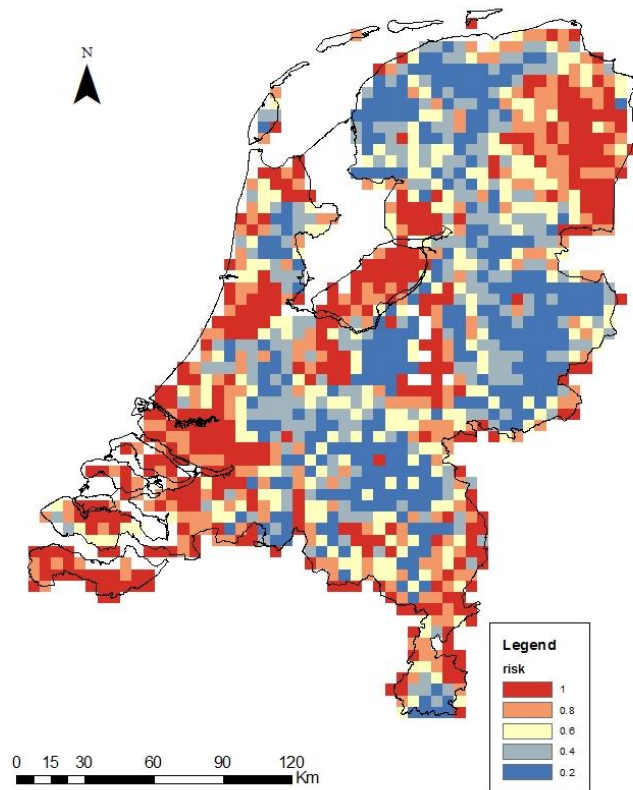
TOR 4: RVF becoming endemic,

- Model the potential of an **outbreak** of Rift Valley fever and the likelihood to **persist** in the ROC?
 - Model, seasonality & reproduction number
 - Risk maps based on livestock density and “known” vector species



TOR4

- Risk maps



Creation of
similar
maps for
Concerned
region

Timeline Mandate

4 April 2012	24 May 2012	10-11 July 2012	27-28 Sept 2012	14-15 Nov 2012	Jan 2013	Feb 2013	Mar 2013
EFSA accepted Mandate	Working group meeting 1: -Discuss ToR's -Discuss methodology	Working group meeting 2 -Fine-tune methodology -Decide on needs of data and expertise	Working group meeting 3 -Preparations EKE-workshop	EKE workshop	Working group meeting 4 -Draft opinion -Discuss conclusions and recommendat ions	Present opinion for discussion to AHAW Panel	Present for adoption to AHAW Panel

EKE workshop

Information needed for the assessment

- **Trade routes and volumes of ruminants traded to destination countries**

Parameter that will be elicited based on this information: the number of animals traded from Source area to Receiver area

- **Prevalence in resource areas**

Parameter that will be elicited based on this information: proportion of traded susceptible animals that are infected in Source area

- **Sanitary measures before export, and after import of susceptible ruminants from potentially infected areas**

Parameter that will be elicited based on this information: the proportion of infected animals that are cleared for departure from Source and the proportion of infected animals arriving at Receiver that are cleared for entry into the ROC in a given year.

RVF – Expert knowledge elicitation (EKE) workshop

	13 Nov p.m.	14 Nov a.m.	14 Nov p.m.	15 Nov a.m.
Objectives	Information session	Expert knowledge elicitation	Expert knowledge elicitation	Feed back
Participants	CVO's of ROC	Regional Experts RVF Virology Epidemiology Entomology	Regional Experts RVF Virology Epidemiology Entomology	Regional Experts RVF Virology Epidemiology Entomology
Facilitator	REMESA-EFSA	O'HAGAN Anthony	O'HAGAN Anthony	O'HAGAN Anthony

Participants EKE workshop

<u>1</u>	<u>Soheir Hassan Abd El Kader</u>	<u>Egypt</u>
<u>2</u>	<u>Taoufik BOUZID</u>	<u>Morocco</u>
<u>3</u>	<u>Ahmed Bezeid EL MAMY</u>	<u>Mauritanie</u>
<u>4</u>	<u>Mervat Fathy Mohamed Ali EMARU</u>	<u>Egypt</u>
<u>5</u>	<u>Ouafaa FASSI FIHRI</u>	<u>Morocco</u>
<u>6</u>	<u>Djamila HADJ AMAR</u>	<u>Algeria</u>
<u>7</u>	<u>Mervat Mari HASSAN AI Nuaimat</u>	<u>Jordan</u>
<u>8</u>	<u>Eyal KLEMENT</u>	<u>Israel</u>
<u>9</u>	<u>Modou Moustapha LO</u>	<u>Senegal</u>
<u>10</u>	<u>Imad MUKARKER</u>	<u>Pal. Territories</u>
<u>11</u>	<u>Nadav GALON</u>	<u>Israel</u>
<u>EU</u>		<u>Israel</u>
<u>12</u>	<u>Anca HANEA</u>	<u>The Netherlands</u>
<u>13</u>	<u>Jorge FERNANDEZ</u>	<u>Tunis/FAO</u>
<u>14</u>	<u>Lilian PUECH</u>	<u>Tunis/FAO</u>
<u>15</u>	<u>Vincent Brioude</u>	<u>Tunis/OIE</u>
<u>16</u>	<u>Andrea Capobianco</u>	<u>Italy</u>
<u>17</u>	<u>Renaud LANCELOT</u>	<u>France</u>
<u>18</u>	<u>Gregorio TORRES</u>	<u>Spain</u>
<u>19</u>	<u>Ana ALBA</u>	<u>Spain</u>
<u>20</u>	<u>Anthony O'HAGAN</u>	<u>UK</u>
<u>21</u>	<u>Sofie Dhollander</u>	<u>EFSA</u>

ANY QUESTIONS?



THANKS FOR YOUR ATTENTION!
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