



# EU coordinated Scientific Studies on Schmallenberg Virus

*Francesco Berlingieri*

**European Commission**

**DG SANCO**

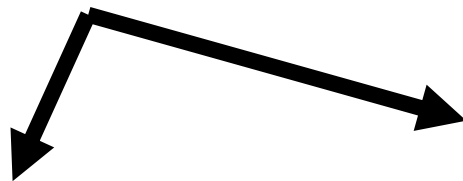
**Brussels 2 April 2012**

# Identification of Schmollenberg virus

*Coordinated action at EU level*

*Which control measures?*

***Knowledge Gap***



Extrapolate Data

Research Required



# Reduce the Knowledge Gap

*Existing EU network of laboratories*

- **Work had already started**
- **Already exchange of data**

*Need for coordination and support*

- **Increasing interest and n. of laboratories**
- **Avoid gaps and duplications**

***Provide financial support to Member States for specific studies***





# Legal Basis for Financial Support

*Council Decision 2009/470 on the expenditure in the veterinary field (Article 22)*

Under European Agricultural Guarantee Fund (Council Regulation (EC) No 1290/2005)

*Similar approach taken for the Q fever event in the Netherlands*

Commission Decision 2011/89/EU





# Working Group with Member States

## *Identified priorities*

- **Pathogenesis**
- **Epidemiology**
- **Diagnostics**
- **Public health**

## *Need for **synergy** and **complementarities***

- **Consortia encouraged to minimise duplication**

## *By 5 March 2012*

- **23 projects submitted by 7 MS**

3 main consortia





## Projects Under Review: Pathogenesis

*6 projects*

- **Pregnant animals**
- **Non-pregnant animals**
- **Sero-positive and sero-negative animals**

*Scope: Cattle, sheep and goats*

*Experimental infections :*

- **Different gestation stages**
- **Animals of different age**





## Projects Under Review: Pathogenesis

### *Outcomes:*

- **Data on pathogenesis (viremia duration, incubation time, virus distribution, virus shedding and possible persistence of the virus)**
- **Description of the current spread of SBV**
- **The impact of SBV infection and the risk factors for introduction, transmission, morbidity at holding and animal level**
- **Analysis of the route of entry**
- **Role of natural immunity**
- **Collection of reference materials for test validation**



## Projects Under Review: Epidemiology

*5 projects*

- **Transmission pathways**
- **Transmission-competent vectors**
  - Vector competence
  - Retrospective and prospective investigations
- **Role of semen and embryos in transmitting the infection**
- **Determine the host range**
  - Pigs, horse, rabbits, mice or birds (chicken)
- **Identify reservoirs**
  - Wild animals and zoos

*Scope: broad*







## Projects Under Review: Epidemiology

### *Outcomes:*

- **Competent vectors and their epidemiological role**
- **Are there other transmission routes?**  
Horizontal transmission?
- **Clarify if semen and embryos can play a role in transmitting the virus**
- **Identification of susceptible species and the epidemiological role of wildlife**





# Projects Under Review: Diagnostics

*2 projects*

- **Identification and refinement of best diagnostic test**
- **Validation of diagnostic tests (private sector)**

*Outcomes:*

- **Development and evaluation of a competitive or blocking ELISA**
- **Common protocol and minimum criteria for the validation of molecular and serological diagnostic tools**





# Timeline

*Several projects already started*

*Preliminary results in 2013 ?*

*Finalisation?*





## **DG SANCO web page**

**[http://ec.europa.eu/food/animal/diseases/schmallenberg\\_virus/index\\_en.htm](http://ec.europa.eu/food/animal/diseases/schmallenberg_virus/index_en.htm)**

