



Mission of the Community Veterinary Emergency Team in the former Yugoslav Republic of Macedonia in relation to bluetongue situation

24-25th June 2015

A. Pina Fonseca and L. Romero

PAFF Committe, Brussels

7-8th July 2015



Terms of Reference

To provide assistance to the scientific, technical, managerial and practical on-the-spot aspects required for the development and refinement of the control strategy for bluetongue (BT) under local conditions taking into account sound scientific basis. A particular attention should be given to use of vaccination as a control measure.





European
Commission

The former Yugoslav Republic of Macedonia

- ✓ Surface: 25.713 km²
- ✓ Population: 2.022,54
- ✓ Borders with Albania, Serbia, Bulgaria and Greece





European Commission

Orography

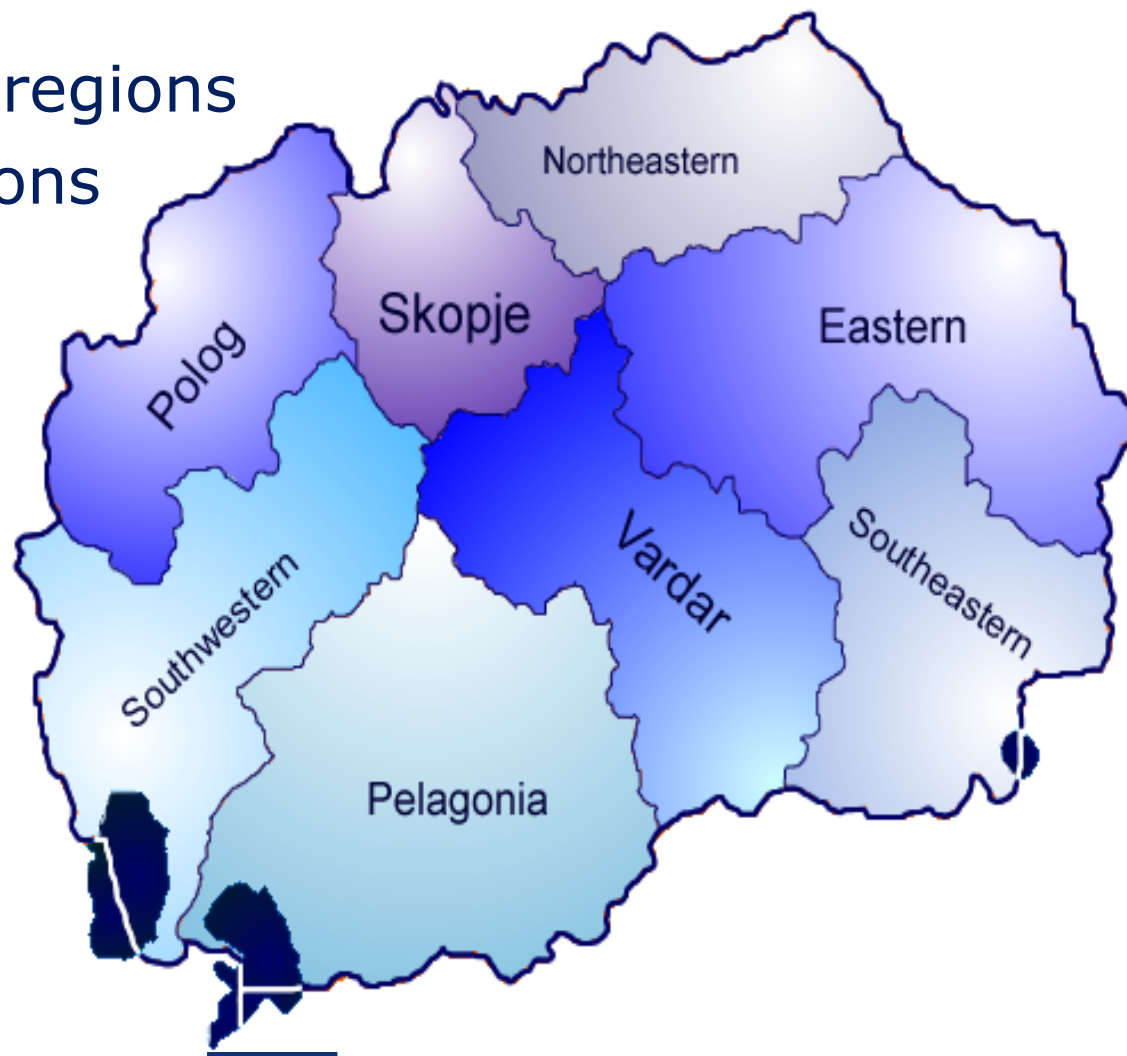




European
Commission

Territorial organisation

- ✓ 8 Administrative regions
- ✓ 7 veterinary regions
- ✓ 84 municipalities





Levels of Veterinary service

First Level

- **FVA Central office (17 veterinarians)**

Second Level

- **Local units (29 local units with 46 official veterinarians)**

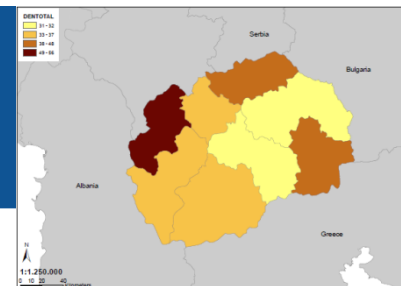
Third Level

- **Private Veterinary Practices (118 vets under official contracts)**



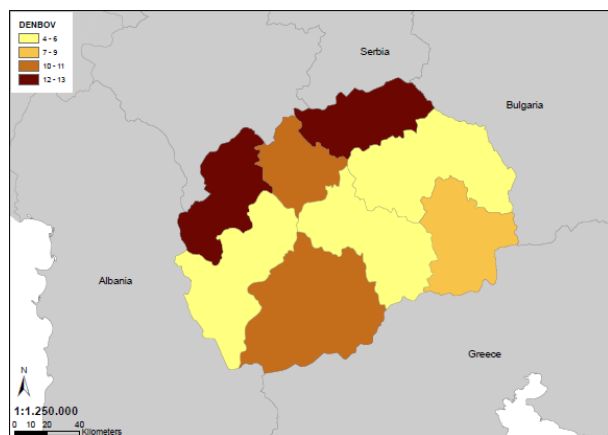


European Commission

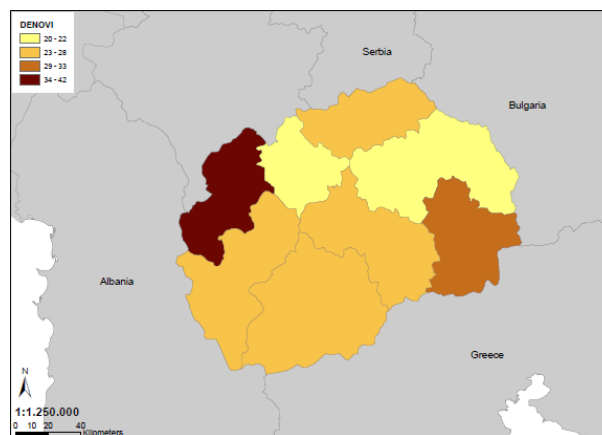


Animal population distribution

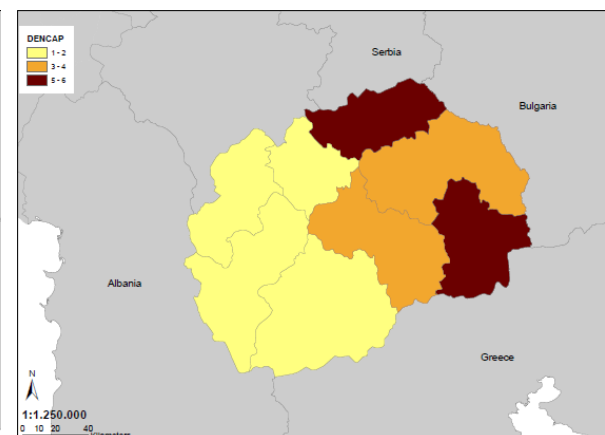
Region	Cattle	Sheep	Goat	
Skopje	20649	37239	4061	61949
North East	29546	59089	11354	99989
East	50004	182839	30465	263308
Vardar	16949	80033	10303	107285
Pelagonija	48437	126303	6415	181155
South West	16057	101887	7346	125290
Polog	31936	102548	4184	138668
TOTAL	213578	689938	74128	977644



Cattle



Sheep



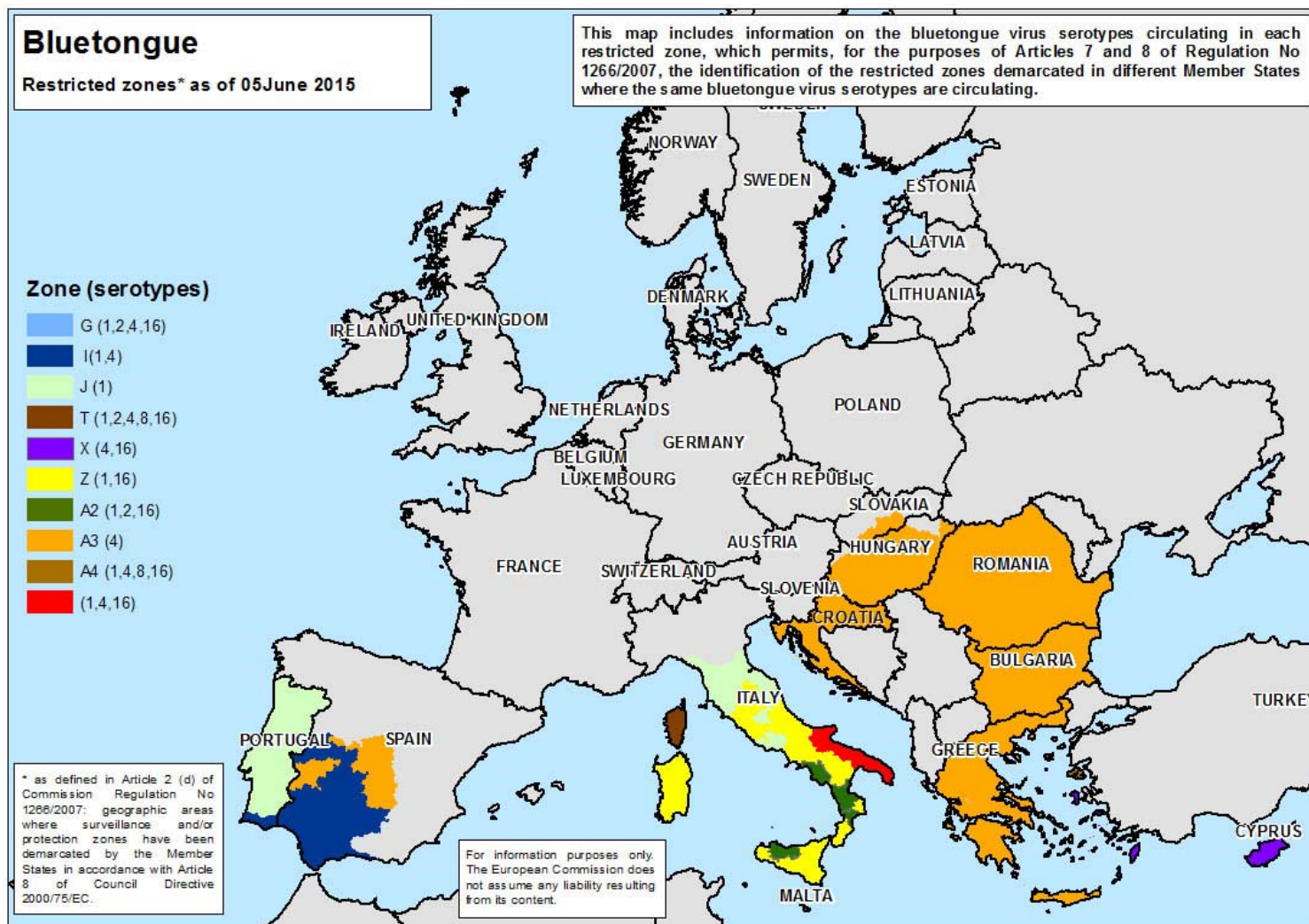
Goat





European
Commission

Bluetongue situation in EU

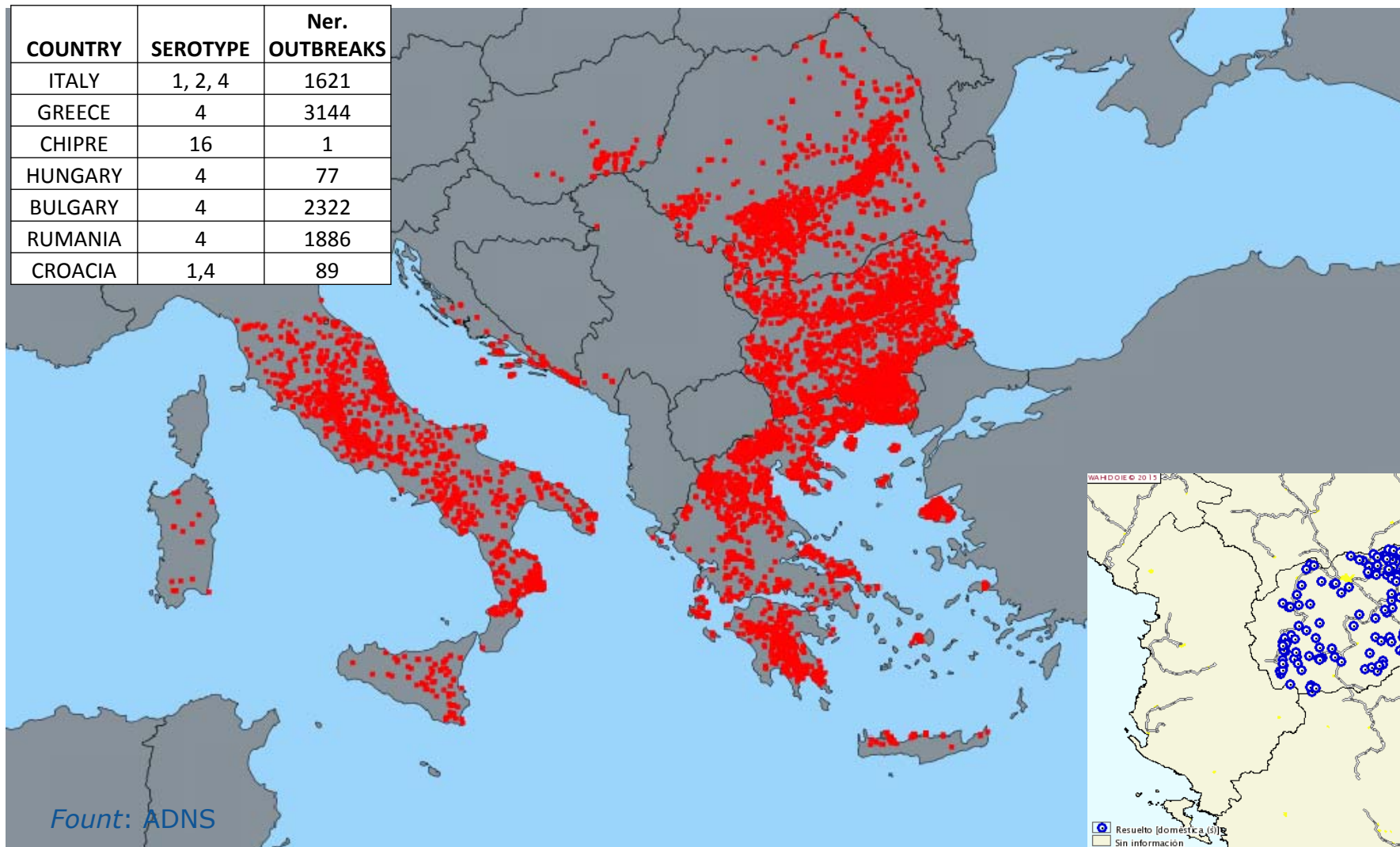




European
Commission

BTV epidemiological situation 2014-2015

COUNTRY	SEROTYPE	Ner. OUTBREAKS
ITALY	1, 2, 4	1621
GREECE	4	3144
CHIPRE	16	1
HUNGARY	4	77
BULGARY	4	2322
RUMANIA	4	1886
CROACIA	1,4	89



Fount: ADNS

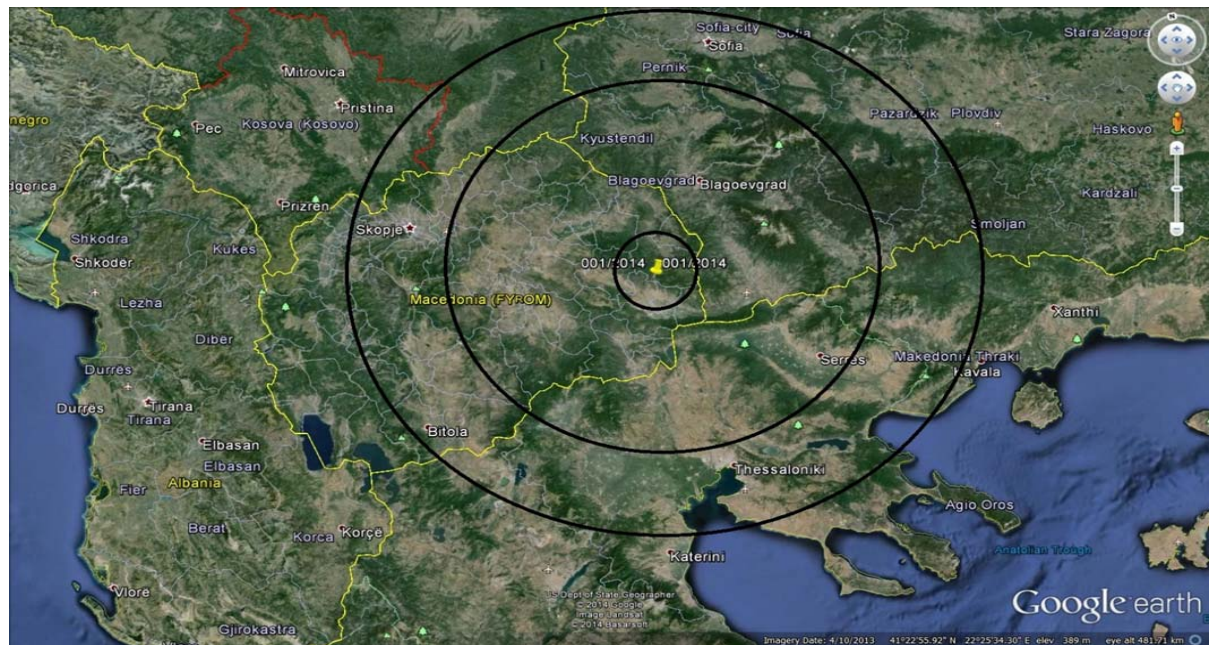


BTV situation in the country 2014

BTV passive surveillance in place (neither serological nor entomological surveillance)

30th of July 2014 first clinical suspicious

BTV-4: NRL and Pirbright



Source: Food and Veterinary Agency



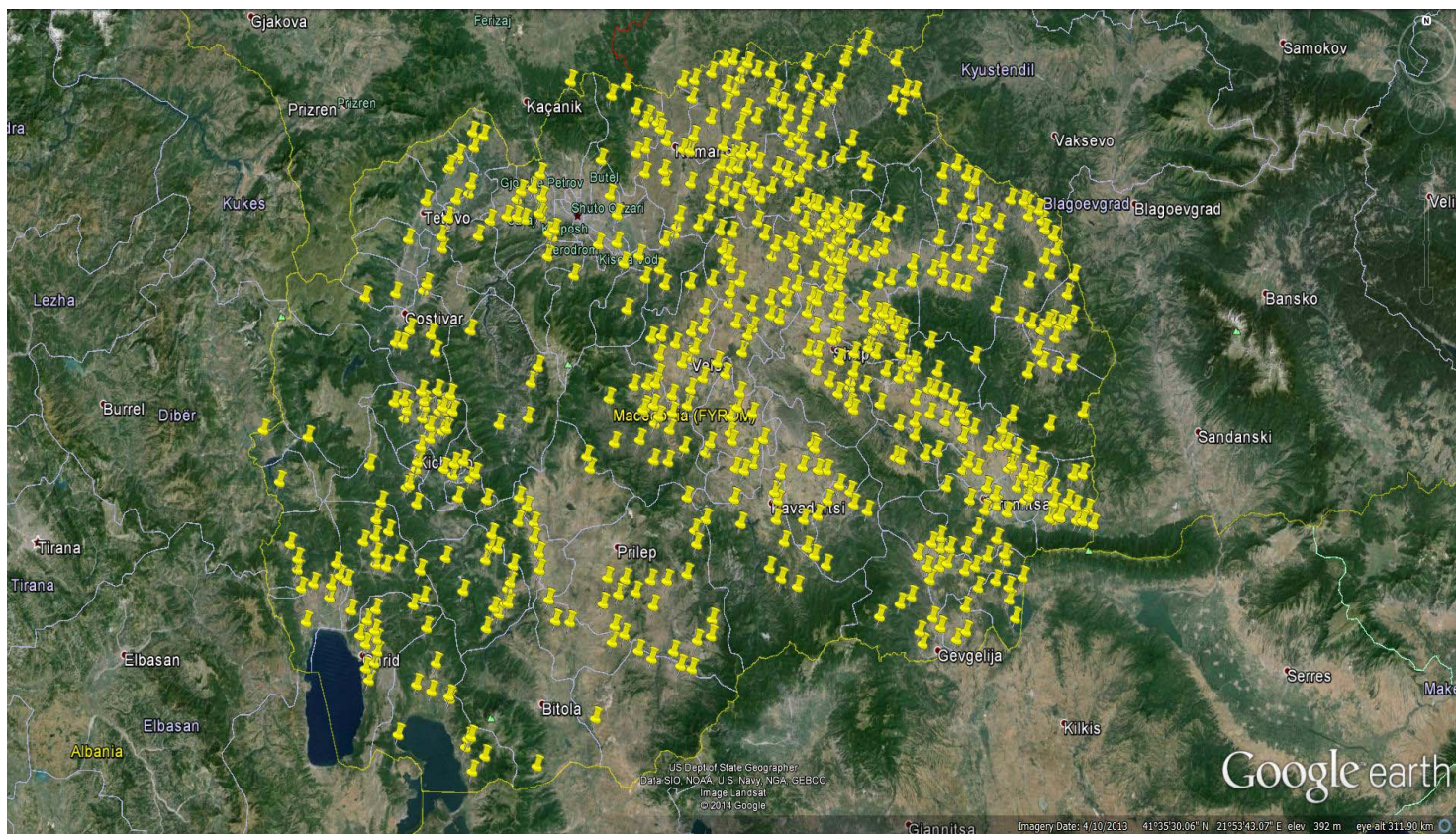
Epidemiological data BTV outbreaks 2014

Last BT outbreak: 4th November 2014

Total number of BT outbreaks: 1,898

Species	No. of animals in the outbreaks	No. of sick animals	Morbidity %	No. of dead animals	Mortality %
Cattle	5814	173	2.98%	31	0.53%
Sheep	300686	47174	15.69%	23006	7.65%
Goats	10607	283	2.67%	162	1.53%
TOTAL	317107	47630		23199	

Total BTV4 outbreaks 2014





BTV control measures

The legislation regarding restrictions on movements of susceptible animals in relation to BT is according the European legislation

The whole territory of the country is under restriction

The biosafety measures in the farms were reinforced:

- ✓ cleaning and disinsectization,
- ✓ use of repelents,
- ✓ manure elimination in order to avoid Culicoides breeding sites,
- ✓ treatments of waters, etc.

Farmers have been compensated for dead animals





BTV situation 2015

No BTV viral circulation has been detected since 4th November 2014, but...

- Neither serological nor virological surveillance is in place
- No information about vector activity
- No vaccination program





Laboratory capability

Serological test: c-ELISA

Virological test:

- RT-PCR generic for all BTV serotypes,
- Specific RT-PCR for BTV 1, 2, 4, 8, 9 and 16,
- Virus isolation in embrionated eggs and cell culture.

8 entomological traps are available, but no specific entomological expertise for Culicoides identification is available in the country



Conclusions

- *The main impact of BT infection in the country is related to the direct losses due to animal mortality and other farmers' losses due to the disease and the reinforcement of the biosafety measures in the farms*
- *Considering BT characteristics it is very likely that, in absence of a vaccination strategy, a new BTV4 epidemic wave will occur in 2015*

Conclusions

- *Absence of an active and entomological surveillance in the country*
- *Only the vaccination of susceptible animals can be considered an effective control tool for this disease*

Recommendations

- *It is strongly recommended to proceed toward the compulsory vaccination of all susceptible domestic ruminants in the country no later than the next vector activity season on 2016*
- *The vaccination should cover at least 80% of susceptible animals in a multiannual program and it should be carried out under a regional strategy in Balkan area*
- *A BTV surveillance system should be implemented all along the country, including passive, active and entomological surveillance*



Acknowledgements

The CVET would like to express their thanks to all colleagues from the former Yugoslav Republic of Macedonia for their hospitality, great cooperation and assistance during the mission.





Questions?

Thanks for your attention

