

BLUETONGUE Epidemiological Situation in Slovakia

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Bluetongue Situation - Slovak Republic

HISTORY

- Slovak Republic was bluetongue free country, without vaccination (till 2014)
- On 10th November 2014 a restriction zone on the territory of the Slovak Republic was established due to BT outbreak on the territory of Hungary
- Subsequently - On 23rd of November 2015 the whole territory of the Slovak Republic was declared as restriction zone due to BTV4 outbreak in the territory of Hungary and Austria
- April 2018- Slovakia - still included in the restriction zone BTV4 , vector free period season 2017/2018 still active (started on 11/12/2017)

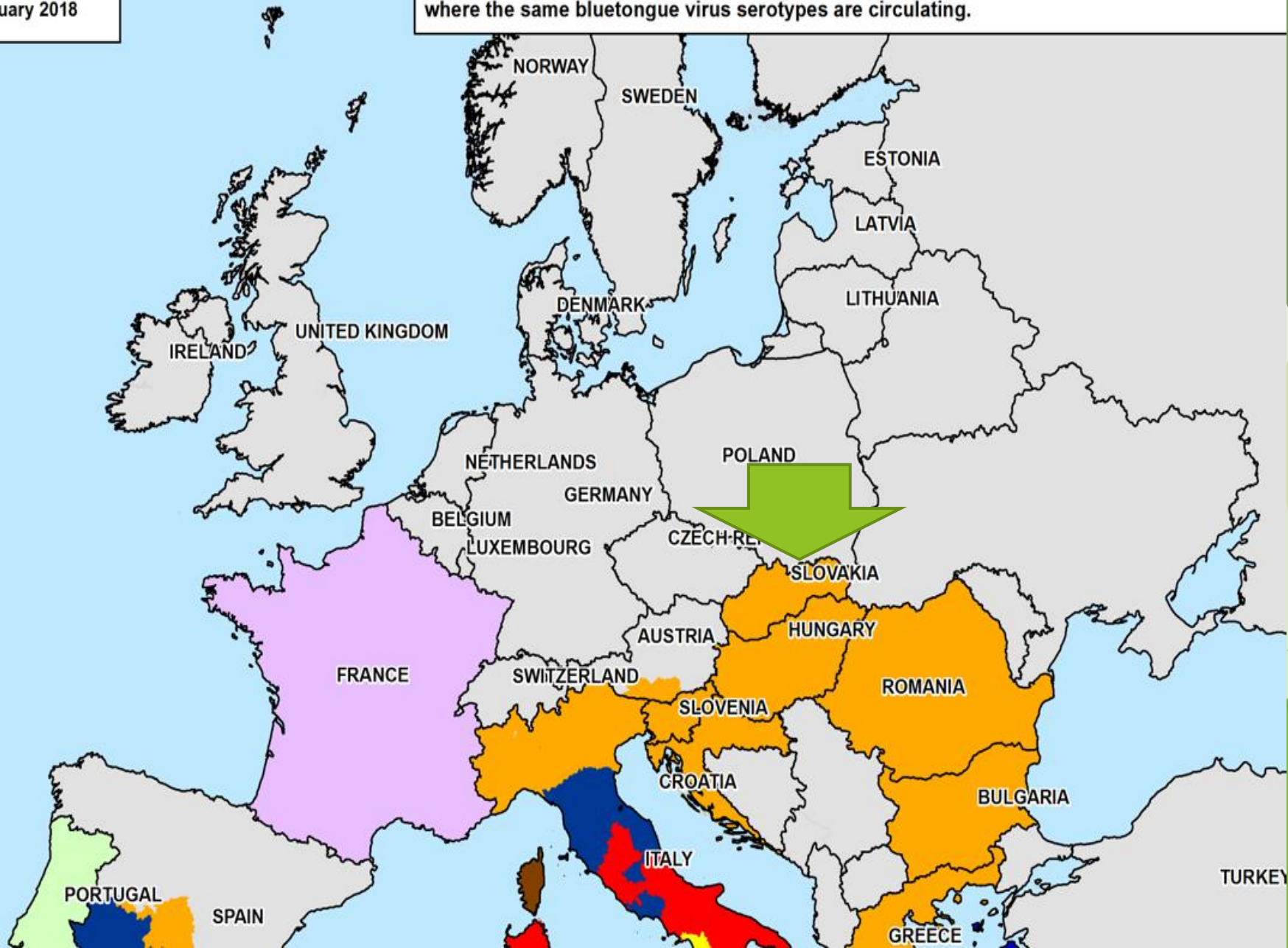
Bluetongue

Restricted zones* as of 30 January 2018

This map includes information on the bluetongue virus serotypes circulating in each restricted zone, which permits, for the purposes of Articles 7 and 8 of Regulation No 1266/2007, the identification of the restricted zones demarcated in different Member States where the same bluetongue virus serotypes are circulating.

Zone (serotypes)

- G (1,2,4,16)
- I (1,4)
- J (1)
- T (1,2,4,8,16)
- X (4,16)
- Y (8,4)
- A3 (4)
- A4 (1,4,8,16)
- A5 (1,3,4,16)
- A6 (1,4,16)
- A7 (4,16,8)
- A8 (16)



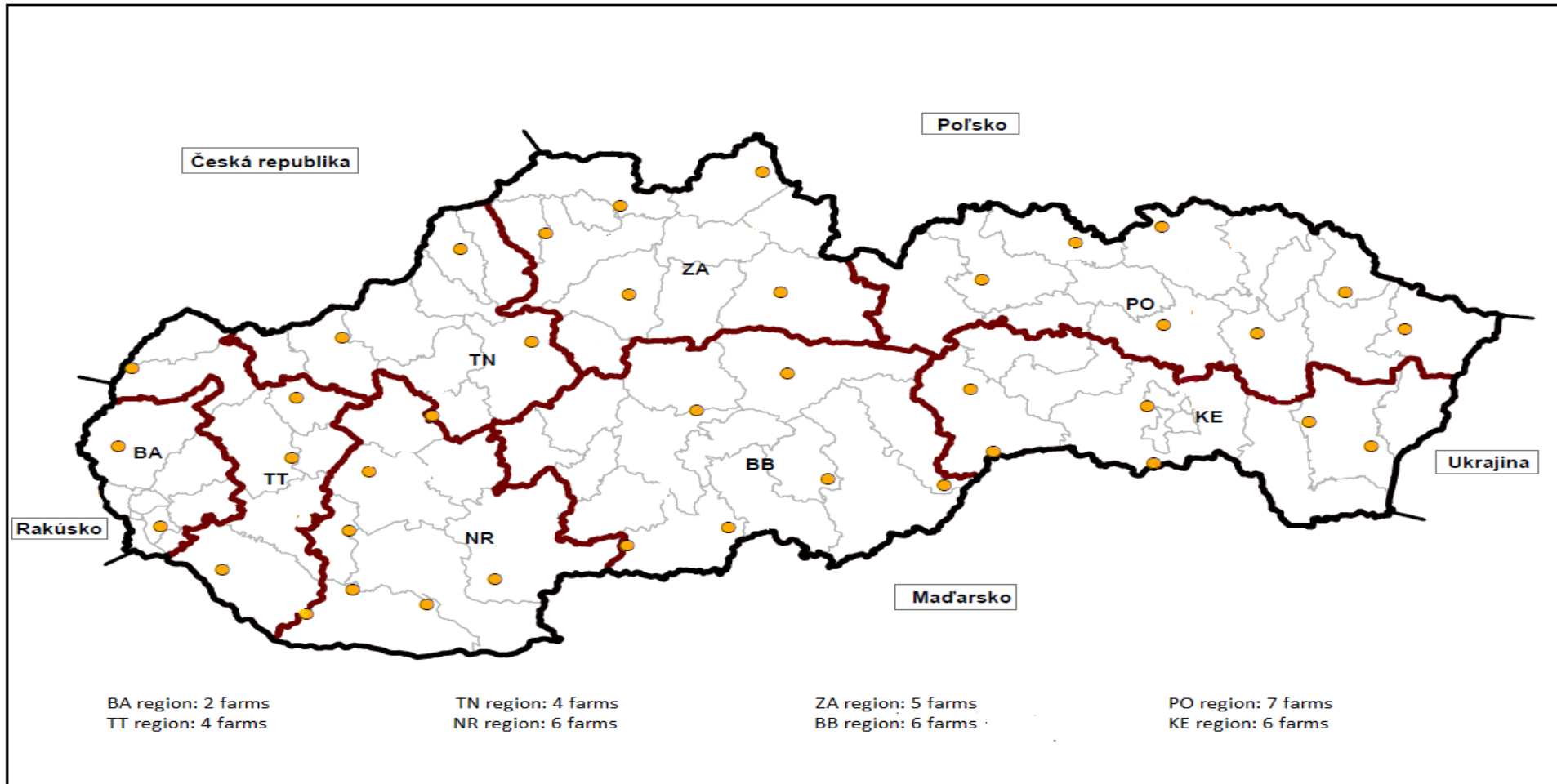
Requirements to demonstrate the absence of BT virus for the purpose of removing a restricted zone according EC 1266/2007 -Slovak activities carried out in 2015-2017

No BT suspicion in the period of last 3 years

- ▶ **Serological testing** (2015-2017) calculated to detect a 5% prevalence with 95% confidence in the cattle population.
- ▶ In 2015-2016 - only serological testing
- ▶ **Virological testing** - 2017 (in 2017 combination serological/virological testing)
The system follows - Annex 1, art. 2.2.- Reg.1266/2017
- ▶ **Entomological testing** - in the period of vector activity /vector free period - data from traps 2015-2017 (each year)
- ▶ **Vaccination** not preformed
- ▶ **Systematic checks of health status of susceptible species as well as clinical examination of suspected animals** - It covers the checks during whole year, specially focused on the period with the highest vector activity.
- ▶ **Specific monitoring** - focused on sentinel animals - **cattle** - all results were negative
- ▶ In **small ruminants population** we have set up the control programme only in case of suspicion of BT - PCR method in order to detect a 10% prevalence with 95% probability, with preference being given to animals with typical clinical signs.
- ▶ The investigation of small ruminants is indicated in case of movement, if necessary /applicable

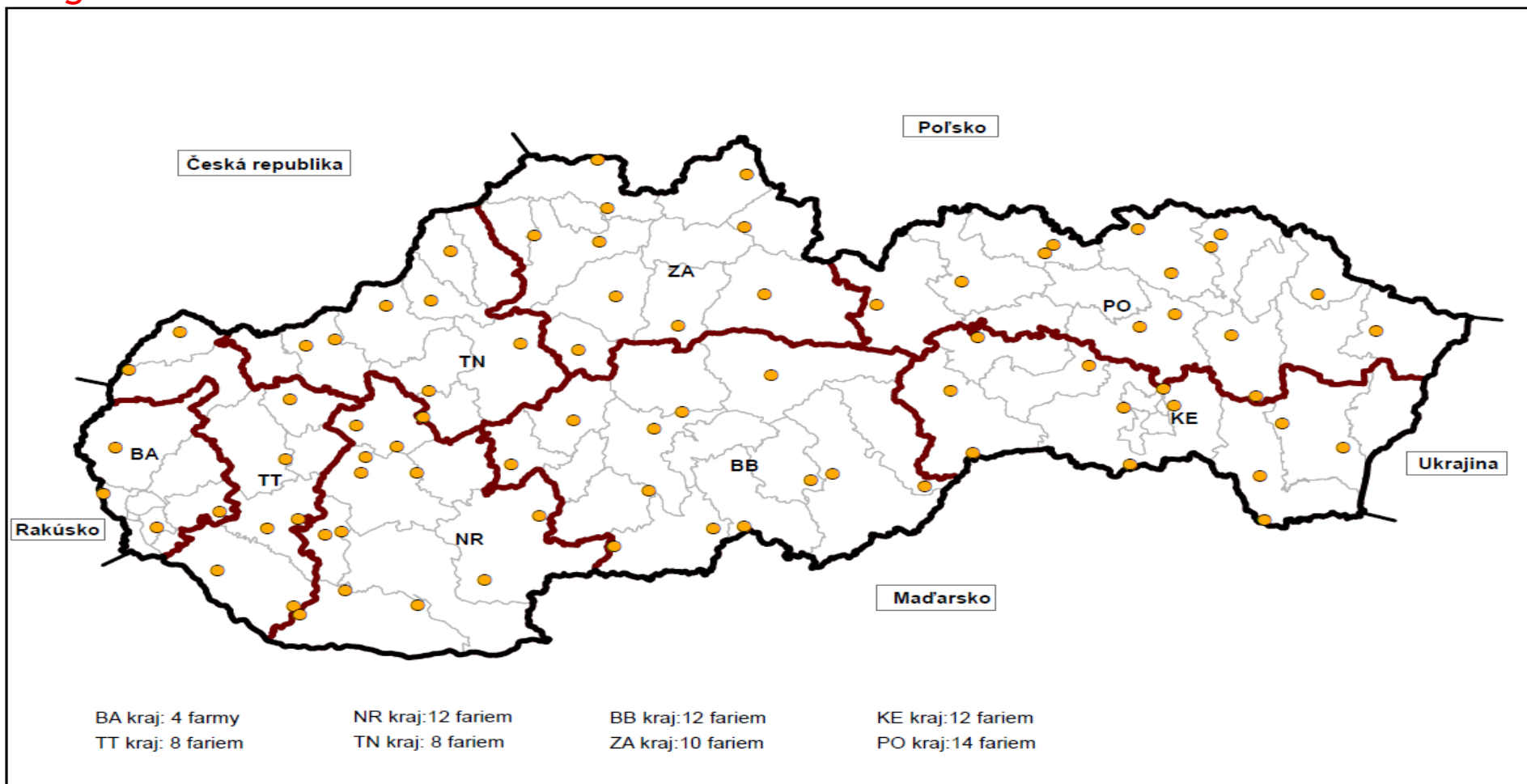
Serological monitoring - geographical distribution of farms in 2015 (sentinel animals)

2015 - monitoring was carried out in 40 selected Holdings and in each of them there are 8 selected (sentinel) animals, from which are taken blood samples ones per month for serological examination during the period of occurrence of the vector. Nr. Of animals (cattle) tested results : 2536



Serological monitoring - geographical distribution of farms in 2016 - 2017 (sentinel animals)

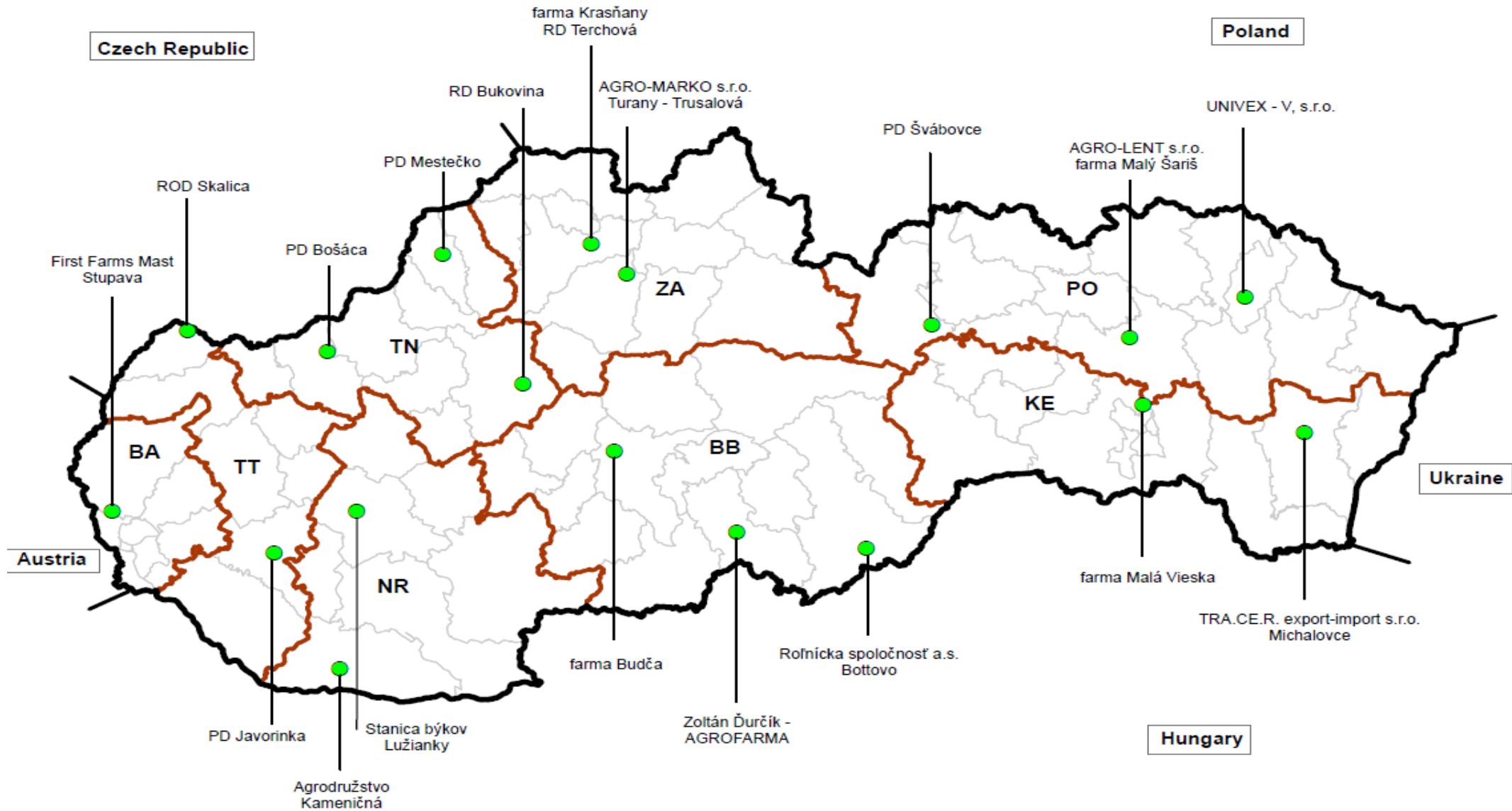
2016/2017 - The monitoring was carried out in 80/80 selected Holdings and in each of them there are 8/15 selected (sentinel) animals, from which are taken blood samples ones per month for serological examination during the period of occurrence of the vector. Competitive ELISA (C-ELISA) testing performed. All results were **negative**. Nr. of animals tested results 2016-2017: 11 337



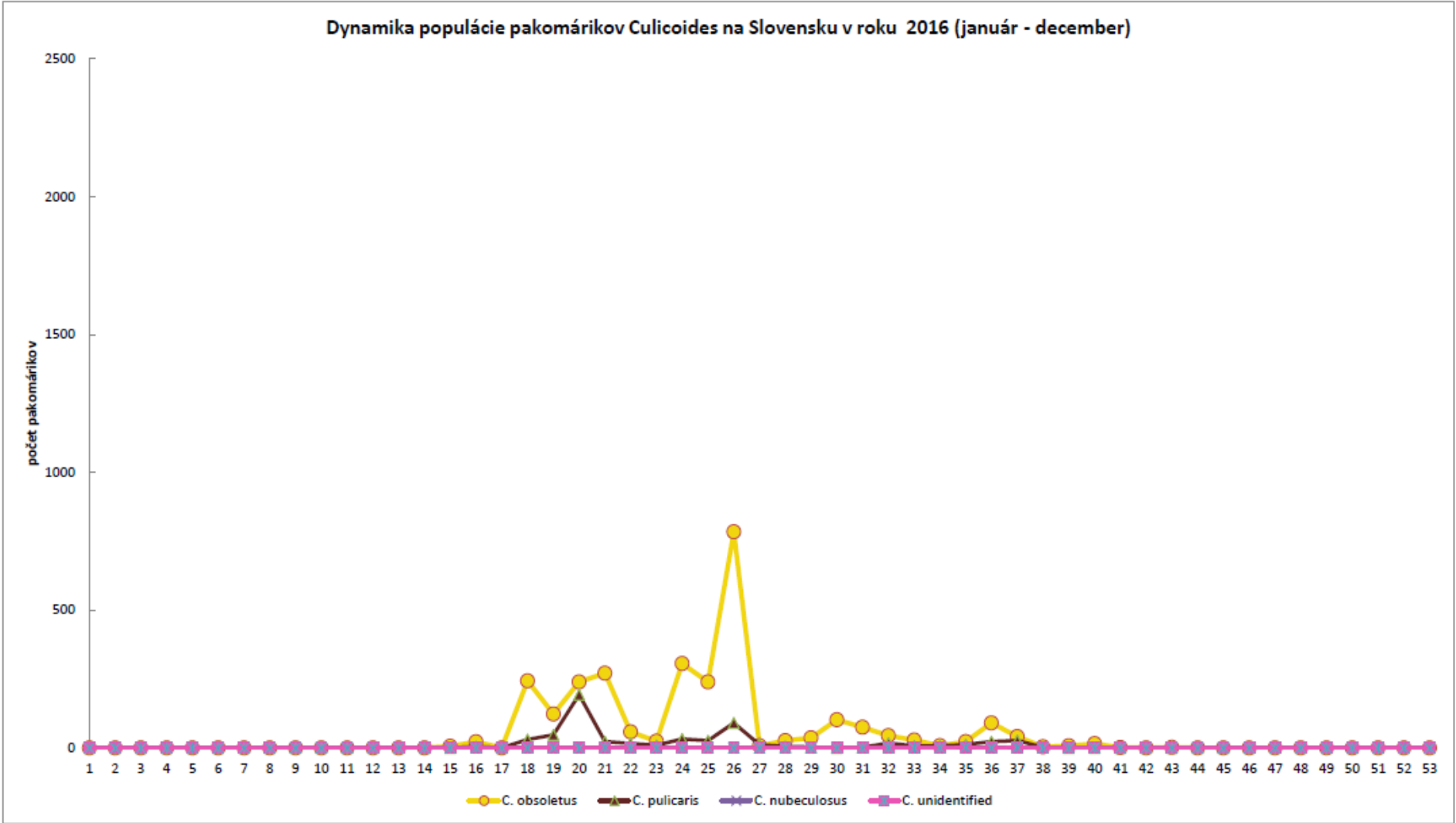
Entomological monitoring of BT in Slovak Republic in the years 2014-2017

- Entomological monitoring consists of an annual program of active capture of vectors using traps in selected cattle holdings, which is focused on collecting information on proven and potential vector species, their distribution and seasonal profiles throughout the SR territory
- Established criteria:
 - 1. At the time of the declaration of the SR for the seasonally vector free period within the meaning of Annex V and Annex 1, of Commission regulation(EC) 1266/2007, the traps must be operated throughout the night and operate at least as follows :
 - one night per week during the month before the expected beginning and during the month before expected end of the seasonally vector free period,
 - one night per month during the seasonally vector free period
 - 2. During vector season activity , traps must be operated for one night in each week of the month
- 2015 - entomological monitoring was carried out on 8 holdings within the scope of selected DVFAs
- 2016 - entomological monitoring was carried out on 12 holdings within the scope of selected DVFAs
- 2017 - entomological monitoring was carried out on 18 holdings within the scope of selected DVFAs.

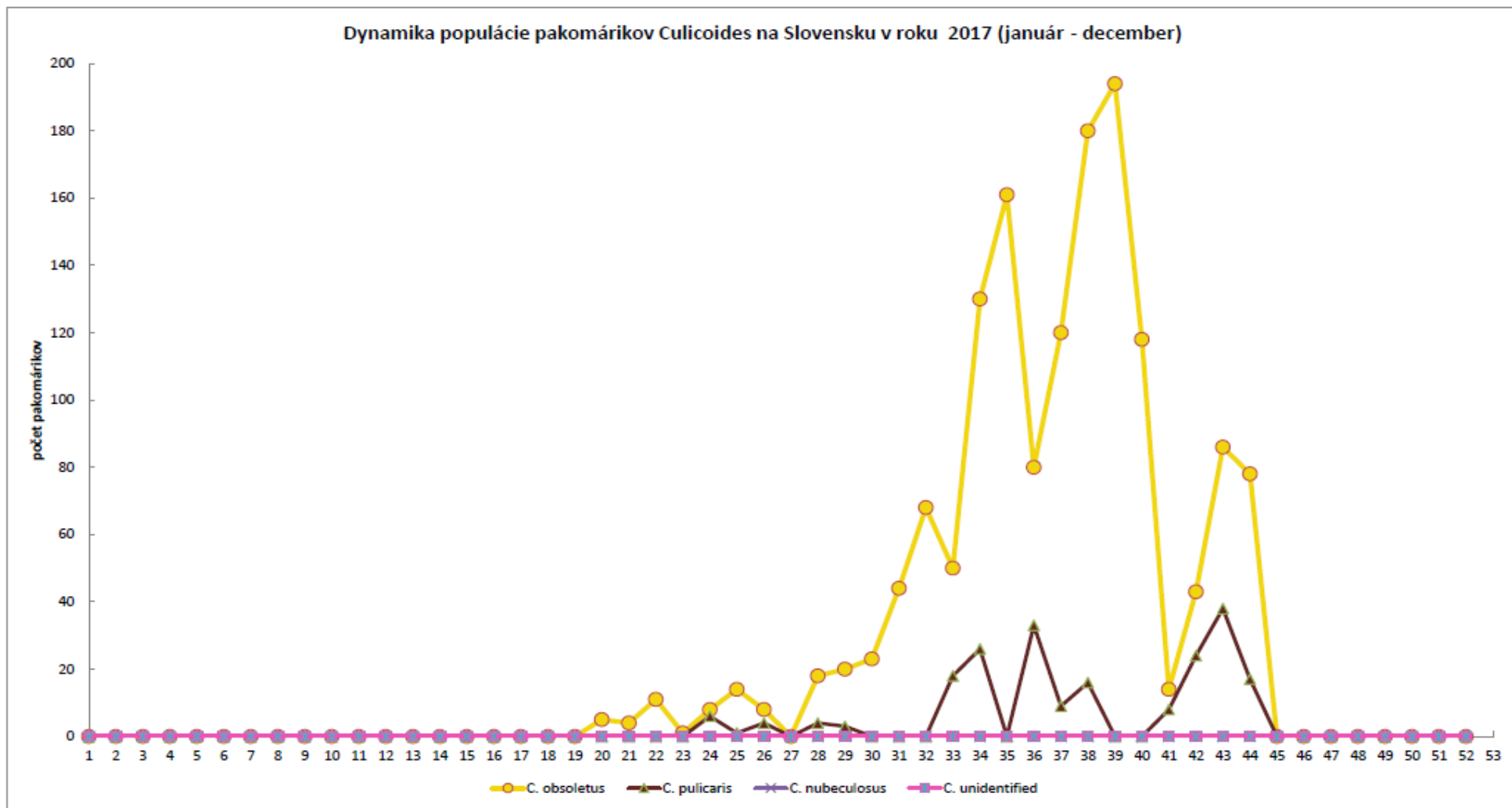
Entomological monitoring in 2017 - geographical distribution of traps



Dynamics of the population of Culicoides in Slovakia in 2016



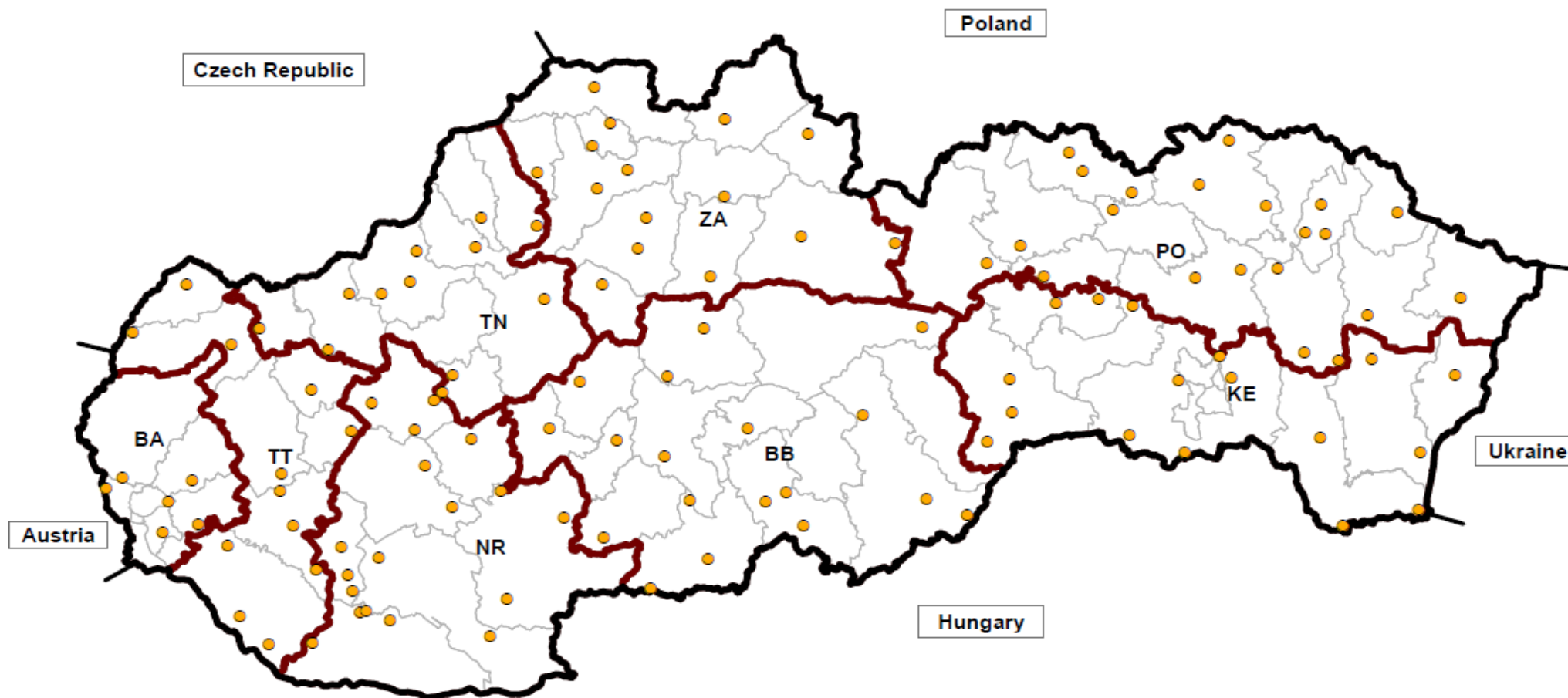
Dynamics of the population of Culicoides in Slovakia in 2017



Virological monitoring to demonstrate the absence of BT virus circulation in 2017

- Special monitoring performed between the 15th October - 30th October 2017 on the whole territory of the SR
- to detect a 5% prevalence with 95% probability
- The plan: on each DVFA (40 together in Slovakia) - 3 cattle holdings were selected in which blood samples were taken from 10 animals - total 30 samples per DVFA
- PCR diagnostic tests were performed
- All 1191 samples - sampled and reported from NRL Zvolen -
were tested with negative result

Geographical distribution of farms in Slovakia involved in virological monitoring of BT in 2017.



Region BA: 6 farms
Region TT: 12 farms

Region NR: 18 farms
Region TN: 12 farms

Region BB: 18 farms
Region ZA: 15 farms

Region KE: 17 farms
Region PO: 21 farms

Additional monitoring activities- No of animal samples tested in relation to BT - imports and before movement in the period from 2015-2017 (all results - negative)

No of tested animals	Serological test	Virological tests
year 2015	ELISA	PCR
Before movement	1467	469
import	28	0
total	1 495	469

Animals tested	serological tests	Virological tests
year 2016	ELISA	PCR
before movement	4 968	11 351
import	15	3
total	4 983	11 354

No of tested animals	Serological tests	Virological tests
year 2017	ELISA	PCR
before movement	10 025	14 474
import	28	2
total	10 053	14 476

Conclusions

1. Slovak Republic is still included in the BTV4 restricted zone
2. To demonstrate the absence of virus on our territory- Slovakia has followed the relevant EU legislation
3. The virus presence/ circulation has not been confirmed
4. All tests were performed in our NRL Zvolen
5. Taking into account the results achieved and actions performed in the Slovak Republic in the past three years, Slovakia fulfils the requirements for lifting the restrictions /restriction zone BTV4 which was connected to outbreaks of bluetongue in both Hungary and Austria
6. Slovakia continues to perform programme approved by the EC, programme is cofinanced by the EC by using rate of 50 %

Thank you for your attention