



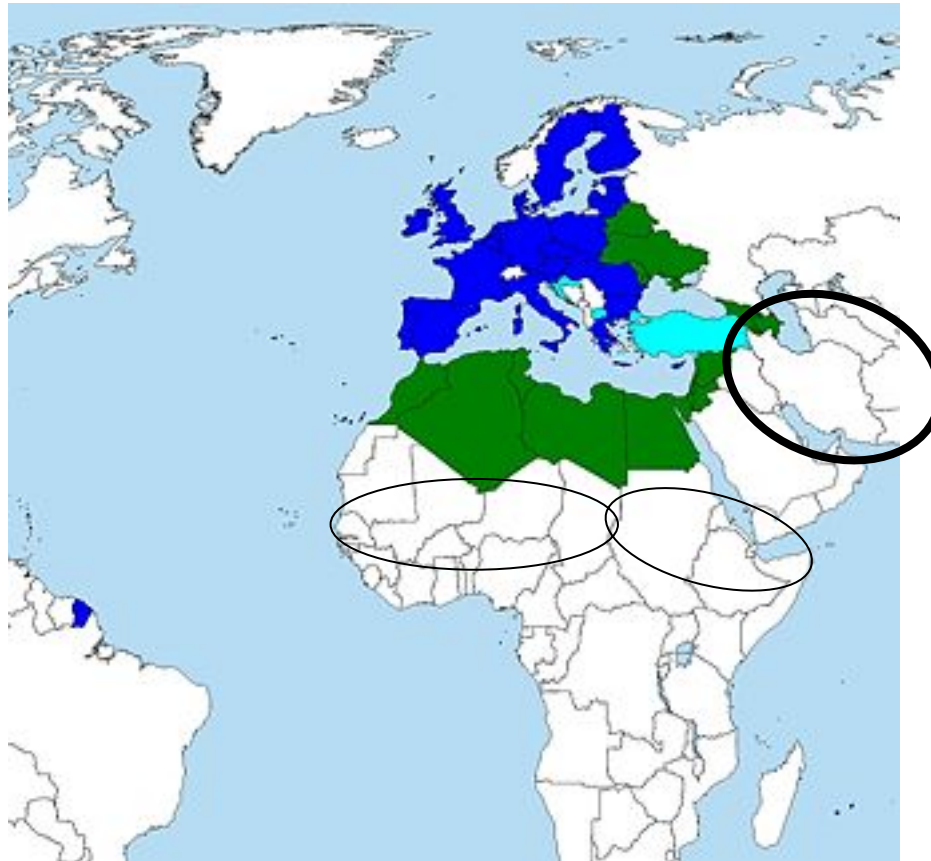
# FMD control in the European neighbourhood - priorities/actions of the EuFMD Commission to reduce risk to member states

Keith Sumption  
*Secretary,  
European FMD Control Commission  
(EuFMD)*

*FAO, Rome*



## The European neighborhood

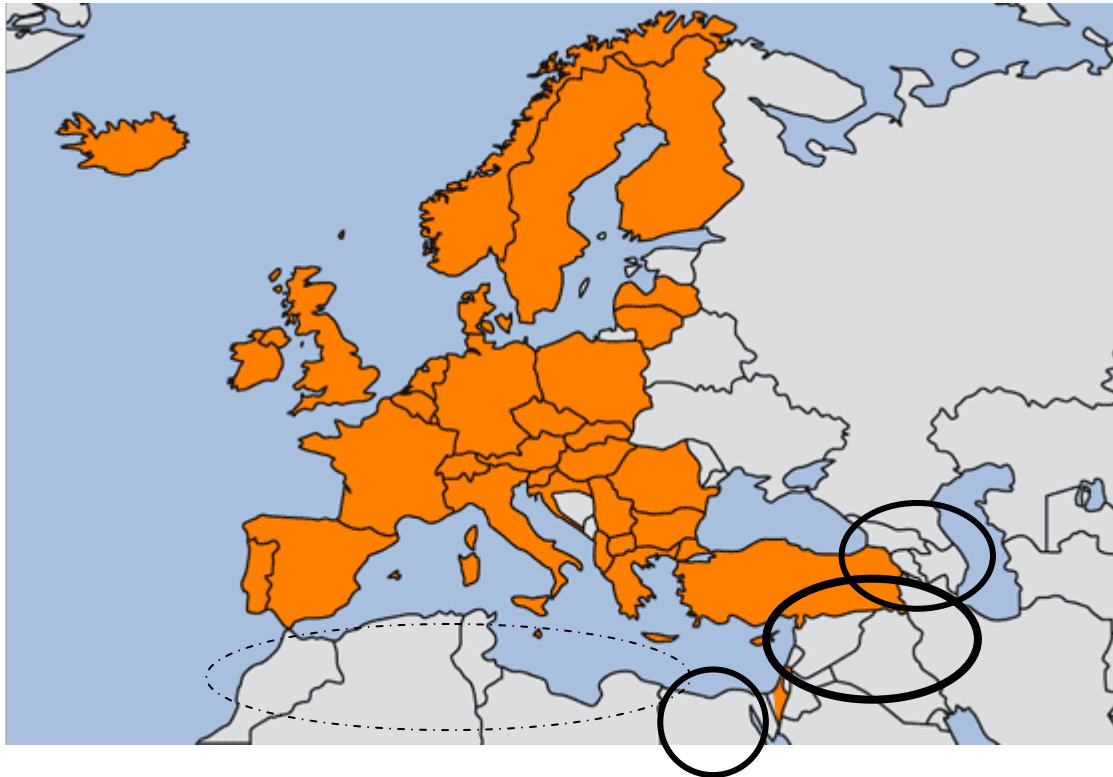


wider group of countries in connection with the EU

and which interface with major FMDV reservoirs in West Eurasia and Africa



## Current FMD status in the European neighborhood



EuFMD: 35 member states of which 26 EU+ 9 others

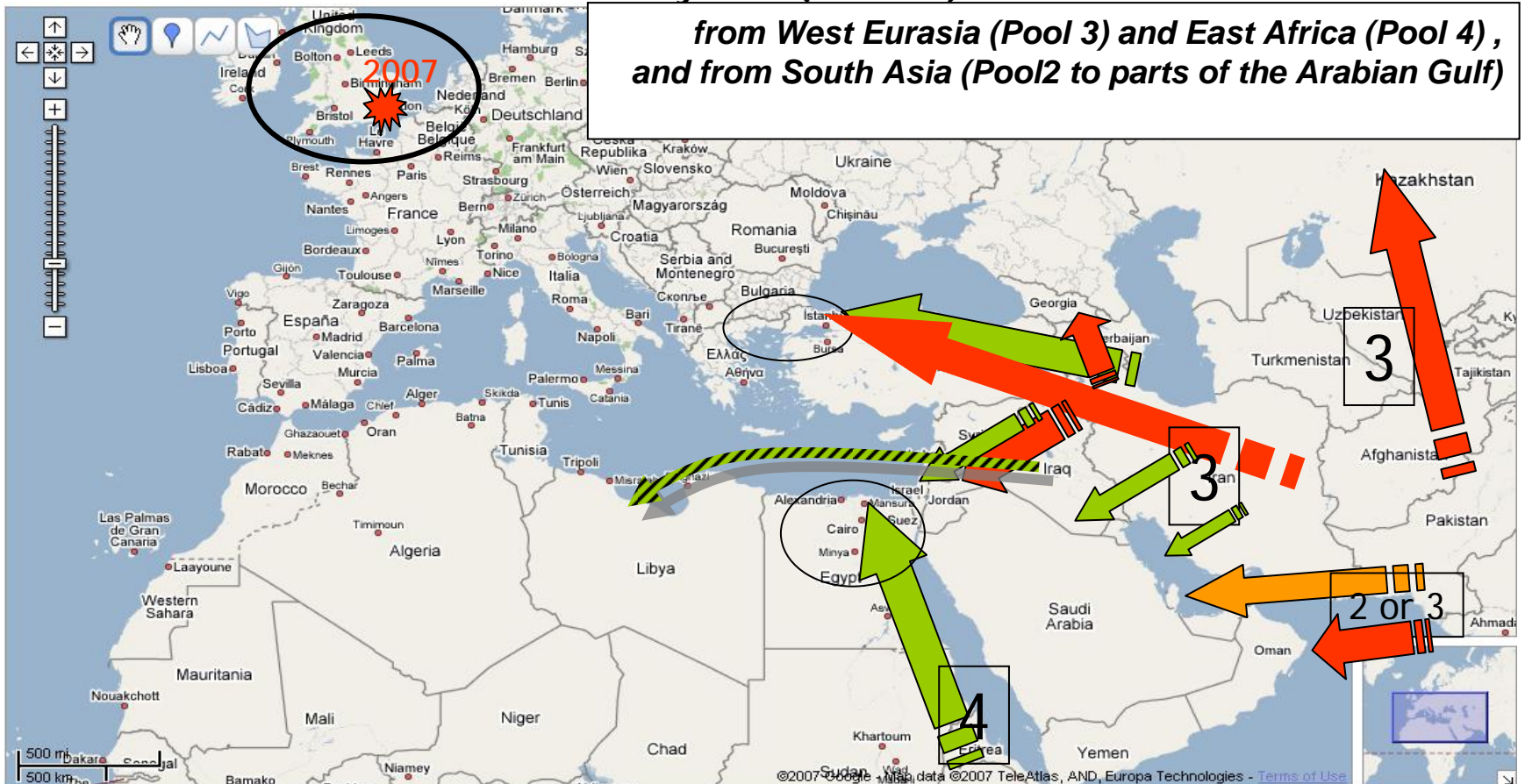
Two member states (Turkey, Israel)

+14 neighboring countries are NOT free of FMD



## Current status: EU27: last outbreaks in 2007

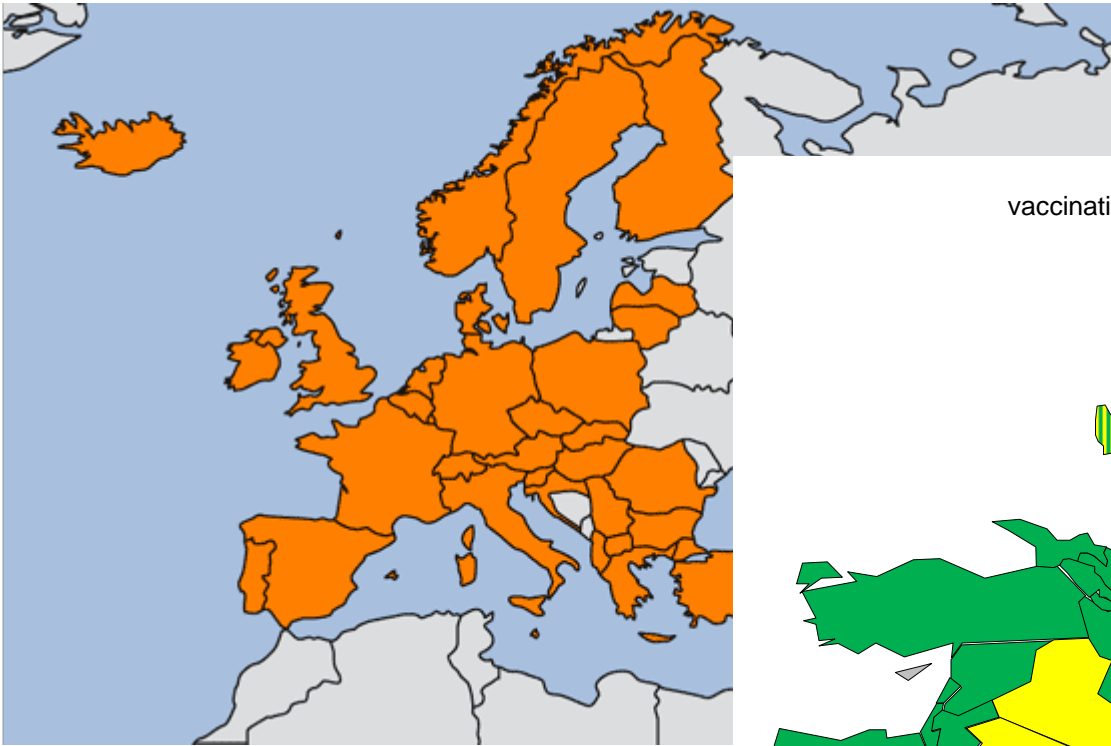
but continued incursions of FMDV to the European neighborhood  
Past 3 years (2006-9)



Type O, Type A, Type Asia-1, Type SAT2



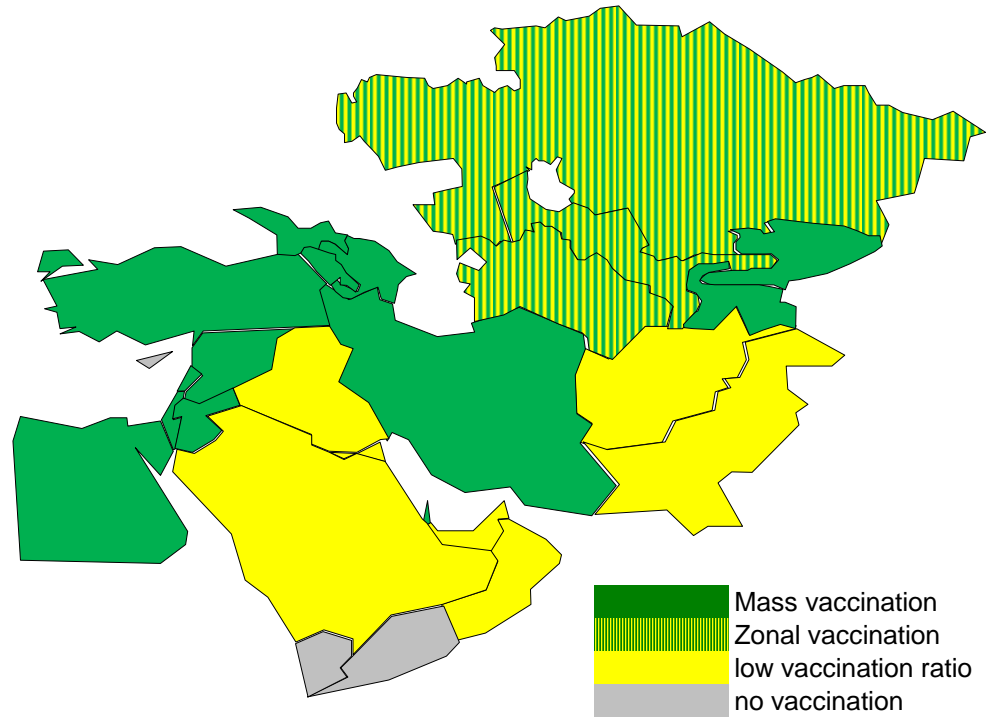
## FMD Vaccination policy:



Non-vaccination – EU27+

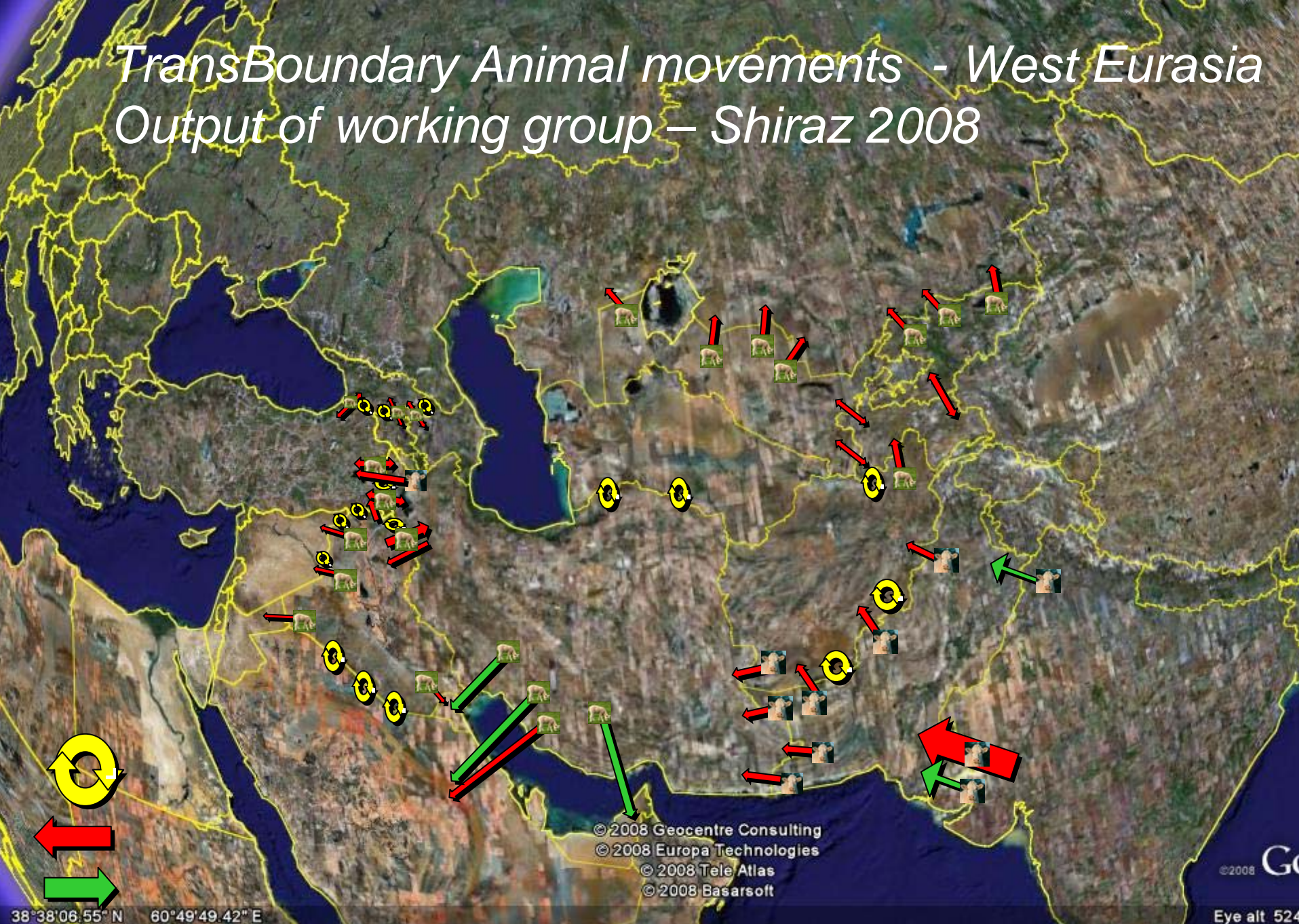
Vaccination use – West EurAsia

vaccination against FMD in 2008 in West Eurasia-Middle East



# TransBoundary Animal movements - West Eurasia

Output of working group – Shiraz 2008



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© 2008 Europa Technologies  
© 2008 Tele Atlas  
© 2008 Basarsoft

© 2008 Google Earth  
Eye alt 524



## EUFMD STRATEGY :Priorities for action

### Second 4 year Plan : 2009-2013

*Adopted -38<sup>th</sup> Session*

1. Risk reduction -
  - Turkish neighbourhood/West EurAsia
2. Viral surveillance for Vaccine bank prioritization.
3. Global FMD risk information and control program progress monitoring - across 7 virus pools.
4. FMD Training program
  - European/EuFMD Member States 4 year rolling program.
5. Technical networking and applied research- Euro-Med, West Eurasia region
  - focus on vaccine selection, vaccination performance, FMD risk, surveillance and survey design.



# Viral surveillance for Vaccine bank prioritization. re-assessment every 6 months - *new risk assessment/prioritisation procedures (2010)*

## **FMD RISK Matrix (Provisional):**

### **risk to European neighbourhood (EuFMD countries)**

Priority setting matrix, where HIGH MEDIUM and LOW are used in similar way to past WRL recommendations

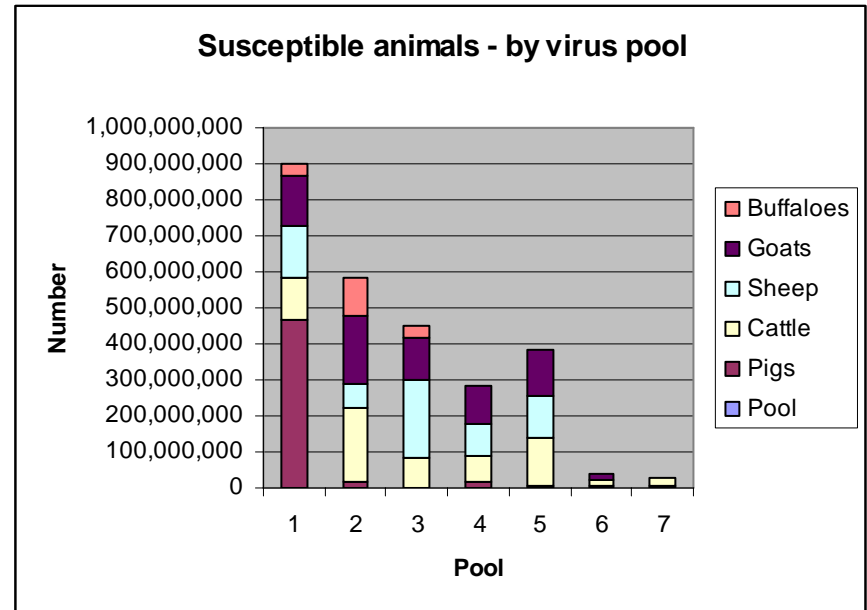
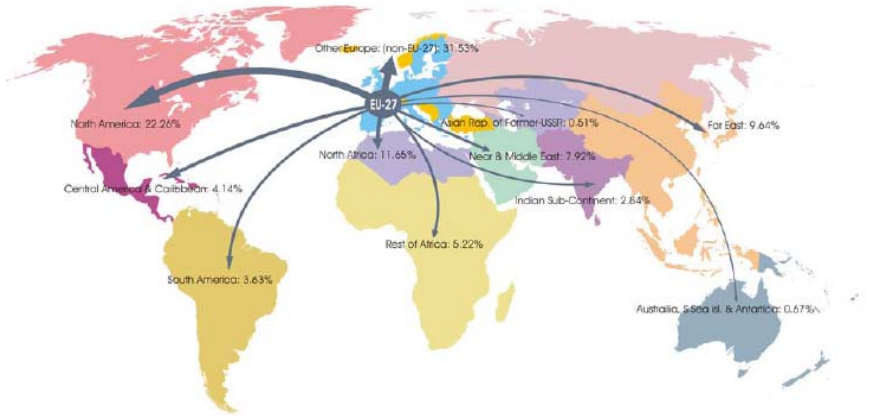
Pool	Name	RRI*	Rank	Predominant FMDV antigenic types circulating in 2009	Minor antigenic types known/suspected to be circulating
3	West Eur-Asia	100	1	→HIGH priority	HIGH
1	East Asia	18.8	2	MEDIUM	LOW
4	West Africa	13.7	3	MEDIUM	LOW
5	East Africa	9.9	4	MEDIUM	LOW
2	South Asia	3.6	5	LOW	LOW
7	South America	0.2	6	LOW?	LOW
6	Southern Africa	0.1	7	LOW?	LOW





## Risk assessment based on FMD threats from current strains in circulation together with likelihood of entry from the 7 virus pools : 1<sup>st</sup> assessment for EuFMD Executive March 2010

- R2 : relative numbers of arriving passengers at EU airports (from [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Air\\_passenger\\_transport#World\\_travel](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Air_passenger_transport#World_travel))



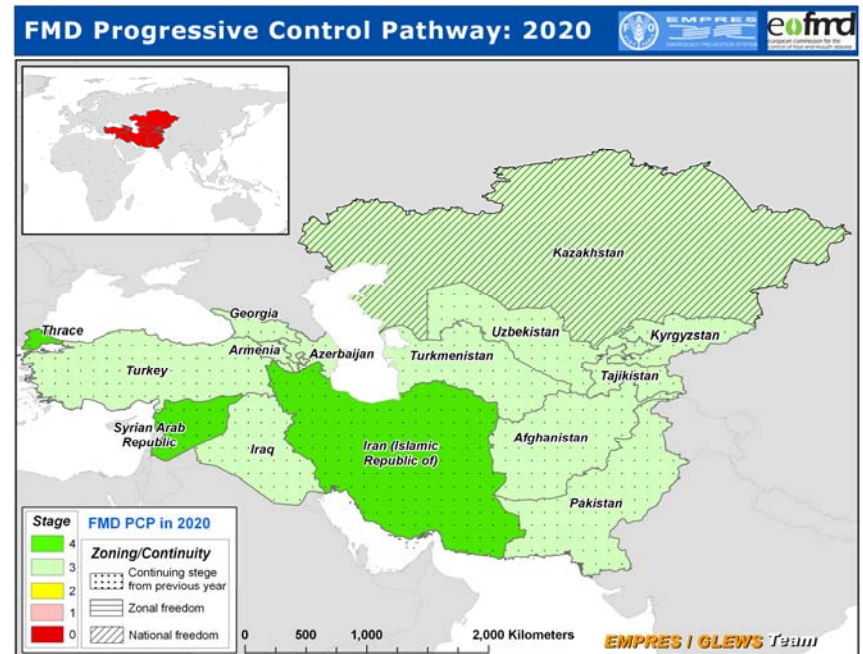


# West EurAsia Roadmap for FMD Control: Vision : *freedom from clinical disease by 2020*

*Regional cooperation among  
Eurasian countries .....*

*for the progressive control of  
FMD through public and  
private partnerships*

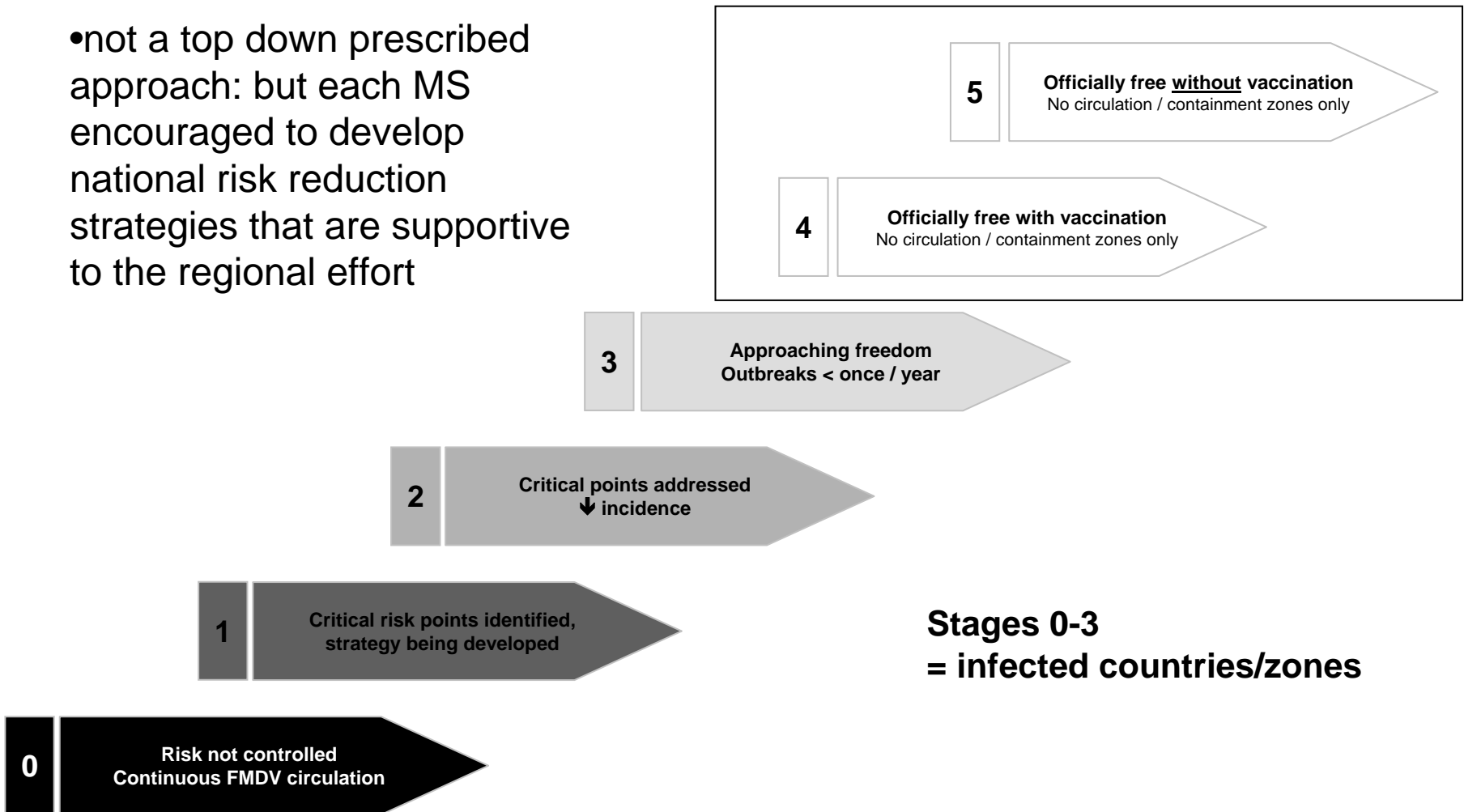
*leading towards freedom of  
clinical disease by 2020 for  
regional economic  
development, food security,  
and poverty alleviation.*





## FAO Progressive control pathway - risk reduction approach

- not a top down prescribed approach: but each MS encouraged to develop national risk reduction strategies that are supportive to the regional effort





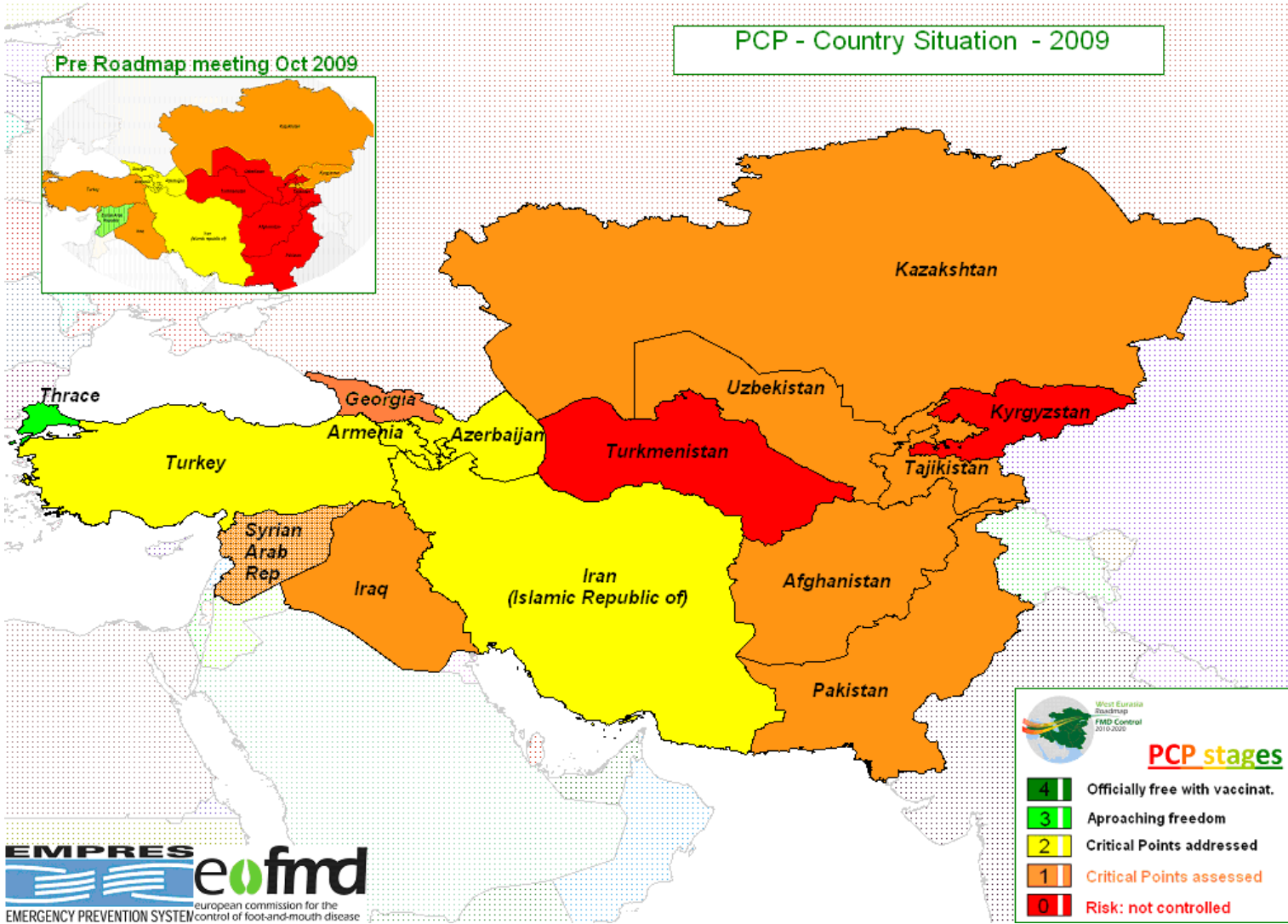
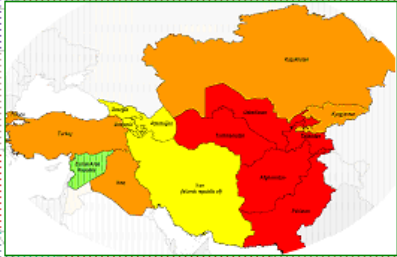
## Assessment of PCP Stages

- 2008: self-assessment by countries with peer review (FAO)
- 2009 (Istanbul):
  - upon submission of evidence of actions required at each stage
  - presentation/review at Regional Meeting
  - 2 month period post-Meeting to supply information , if required
- 2009: Roadmap progress *on track*



## PCP - Country Situation - 2009

Pre Roadmap meeting Oct 2009



West Eurasia Roadmap - FMD Control 2010-2020

### PCP stages

- 4** Officially free with vaccinat.
- 3** Approaching freedom
- 2** Critical Points addressed
- 1** Critical Points assessed
- 0** Risk: not controlled



## *Supporting long term FMD control in “West EurAsia”*

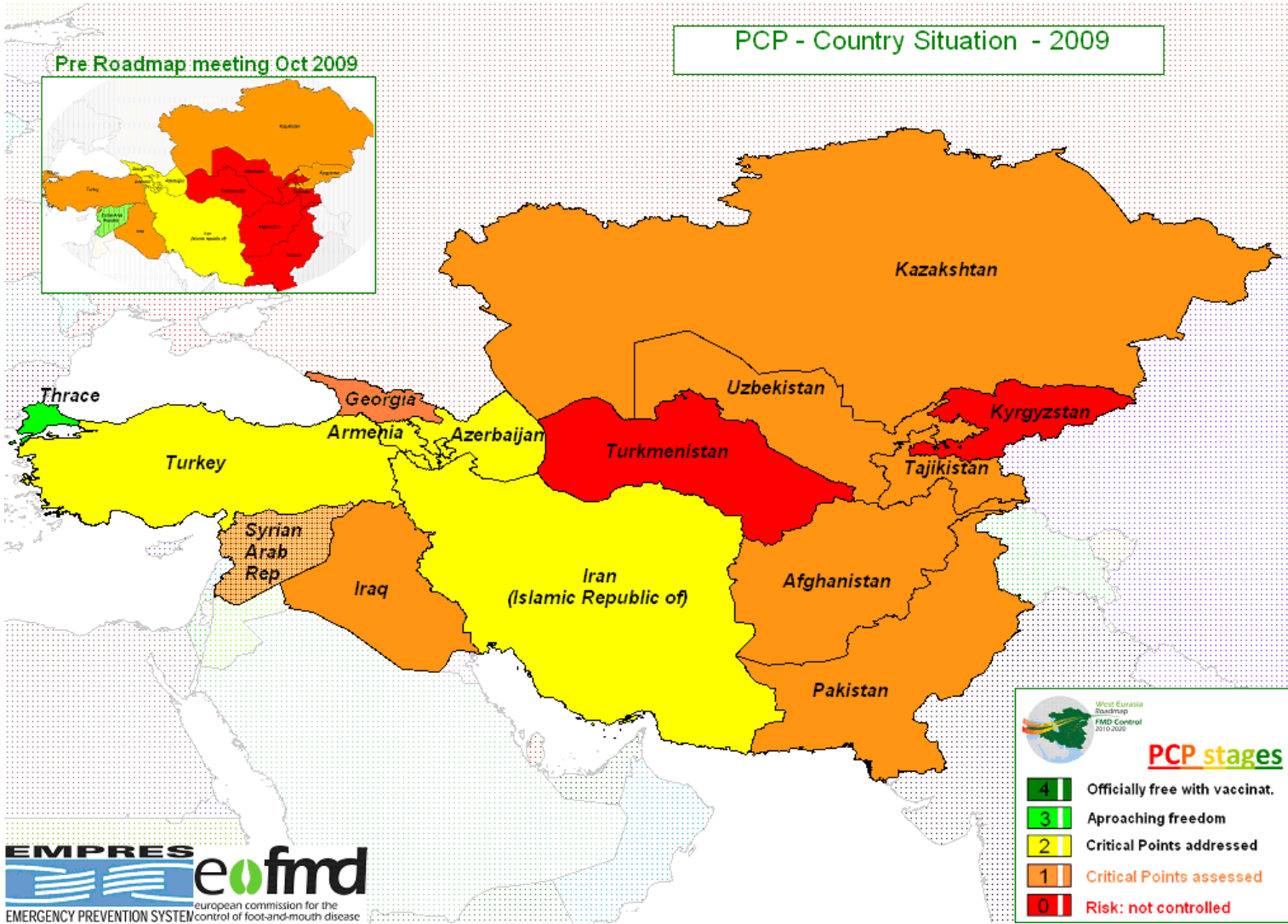
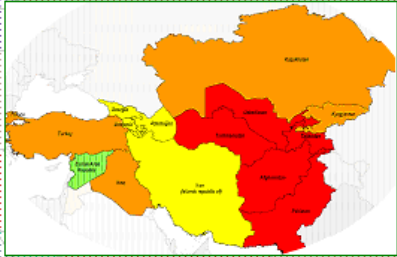
### The EUFMD, 38<sup>th</sup> Session :

- **supports the vision for the West Eurasian region**
  - to become free of clinical FMD by 2020;
- **commits itself, beginning with the EuFMD Strategic Plan 2009-13, to a long to term role in promoting and supporting the implementation of the Regional Roadmap**
  - with the aim of improving FMD control through progressive application of risk based control measures;
- **promotes and where required supports routine FMD surveillance**
  - to monitor progress at national and regional level in FMD control across the West EurAsia region, working with the RAHCs of FAO/OIE;
- **commits to organize annual progress monitoring meetings**
  - in co-ordination with other international agencies and donors, an annual meeting to review progress along the West EurAsia Roadmap;



## PCP - Country Situation - 2009

Pre Roadmap meeting Oct 2009



West Eurasia Roadmap - FMD Control 2010-2020

### PCP stages

- 4** Officially free with vaccinat.
- 3** Approaching freedom
- 2** Critical Points addressed
- 1** Critical Points assessed
- 0** Risk: not controlled



## West EurAsia Roadmap- country Stage position following the Progress Review of 2009, and expected progression to 2020

**FINAL assessment of country Stage position for 2009, together with the expected progression to 2020. (Chart2)**

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Comment
West EurAsia	Kazakh														
	Kyrgyz		new												FMD seromonitoring system therefore assumed 2, 3 and 5 years to move
	Tajik		new												progress to stage 1
	Turkmen														
	Uzbek		new												progress to stage 1
	AFG		new												progress to stage 1
	IRN														
	PAK		new												2009: progress to stage 1. Progress
	TURK		new												progress to stage 2
	Thrace (TR)			new											dossier to OIE in 2010
	added zones (TR)														
	Syria		new												Syria considered to be in Stage 1 in reporting of seromonitoring expected
	Iraq														
	Armenia														
	Azerbaijan														
	Georgia	pending	new												2009 : re-assessed as Stage 1, expected Stage 2 in 2011





## Advisory Group -West Eurasia Roadmap

- to advise on issues preventing progress of the Roadmap
- to assist resolving problems
- to improve ownership and enable direction by countries of the region
- structure coherent with GfTADS agreement



# Proposed Advisory group structure

7 members

- 4 members from international organisations (1 member each):
  - FAO, OIE, EC, EuFMD
- 3 from the region:
  - President, elected at the annual meeting
    - represents the Roadmap at international meetings, EuFMD Executive, etc
  - two technical representatives
    - laboratory network
    - monitoring and surveillance network
- Observer: ECO



# Procedures adopted at Istanbul 2009 Roadmap Meeting

- PCP assessment
- Advisory group (7):
  - 4 members from international organisations (1 member each):
    - FAO, OIE, EC, EuFMD
    - election of the Roadmap President (Dr Askaroglu, Turkey)
    - election of 2 technical representatives
      - (Dr Bulut, Lab Network, and Dr Otarod, Epidemiology Network)
- duration of office - 1 year
- proposed members had at least one supporter from the countries present



## Regional FMD risk profile

	Source for FMD in Turkey (2006-9)	Source for other neighbours	Regional significance
Turkey		→?TCC (Geo/Arm)	→Balkans/Europe
Iran	Most likely source A Iran -05 (2005-) O Panasia II	→TCC (Arm, Azb) →Gulf (A Iran 05) →Iraq	Type A & O amplification and onward to Turkey and mid-east
TransCaucasus Co. (TCC)	No evidence	Probable intra-TCC	
Syria	? O PanAsia II (Oct 2006)	→?? other ME in 2009?	???
Iraq	Too little past surveillance to prove	→?? other ME in 2009 A Iran 05 (BAR-08) Syria/Lebanon/Israel/..	Conduit to ME/Israel
Pakistan	Via Iran	→ Iran (O Panasia II 2005; ? 2009) Type A divergence? → Central Asia	Reservoir : Asia-1 Probably main source for type A emergence



	Interest/Request for FMD support	Objectives of requested support	PCP objective
<b>Iran</b>	High/yes	<p>Create FMD control zone along western border</p> <p>Technical guidance on I&amp;R and movement control systems</p> <p>Create functional early warning system - includes rapid typing at regionalized labs, twinning NRL with European lab</p> <p>Twinning epi-unit with European centre</p>	Achieve Progress in Stage 2
<b>Iraq</b>	High/yes	<p>Create “ “FMD free zone in northern Iraq”</p> <p>- Strengthened system to monitor FMD, increase impact of vaccination programs</p>	In northern zones, achieve Phase 1, progress Stage 2
<b>Syria</b>	Moderate-high/no formal request	Informal contacts request lab support	Syria is probably in Stage 1 although Claims Stage 3. Following sero-survey in 2009 follow-on program can be proposed.
<b>Trans-Caucasus</b>	<p>Low- Georgia</p> <p>High- Armenia</p> <p>Low-Moderate -AZB</p>	<p>TCC request for continuation presented at 38<sup>th</sup> Session.</p> <p>Mainly continuation of current bufer zone support with technical guidance/support</p>	Progress Stage 2 (reduce circulation) towards Stage 3.



## West Eurasia Budget implications - MTF/INT/003/EC

*circa 50% of total budget for FMD actions*

(Note total agreement 2009-12, of 8m€ =circa 11.7 m US\$)

	<b>Recent</b>	<b>Outline 2 year \$</b>	<b>Outline 3 year \$</b>
	<b>2005-9</b>	<b>2010-11</b>	<b>2010-12</b>
<b>Turkey</b>	<b>200,000</b>		
TCC	2,700,000	1,700,000	2,300,000.00
Iran	761,000	900,000	1,200,000.00
Iraq		200,000	270,000.00
Syria	90,000	200,000	270,000.00
Lebanon		100,000	140,000.00
Egypt		250,000	350,000.00
Regional- lab		400,000	600,000.00
Regional- epi		250,000	375,000.00
<b>Total</b>	<b>3,551,000</b>	<b>4,000,000</b>	<b>5,505,000</b>



## Specific actions to be discussed at 79<sup>th</sup> Executive: Stockholm, 16-17<sup>th</sup> March

- Trans-Caucasus: Georgia, Armenia, Azerbaijan
  - reduction in support for buffer zone, emphasis on impact of national actions (PCP Stage 2)
- Iran
  - greater emphasis on FMD control in western borders (with Turkey)
  - and early detection of FMD threats (*currently O Ind 2001 incursion*)
  - progress in Stage 2 (impact/reduced incidence)
- West Eurasia Lab network:
  - linking European NRLs and NRLs in region for threat detection/service upgrading
- African proximity threat monitoring: supporting risk assessment from Eastern/Western Africa (involves RAHC Nairobi and Bamako)



## Conclusions

- the West Eurasia common border areas (with Turkey) are extremely important for maintaining FMD
- the West Eurasia Roadmap has already had significant impact in harmonising FMD monitoring and control actions
- movement control weak - need for animal ID systems
- regular sero-surveillance to monitor progress
- support from EuFMD/EC highly influential - for monitoring programs and co-ordination





## Acknowledgements

- DG-SANCO/European Commission
- Member states of EUFMD
- Peter de Leeuw, past-President of the EuFMD Executive Committee, Ulrich Herzog, current President
- Aldo Dekker: EuFMD Research group
- Carsten Poetzsch (EuFMD), Giancarlo Ferrari (FAO)
- FAO World Reference Laboratory, Pirbright
- FMD Institute, Ankara
- OIE (Gideon Bruckner, Nikola Belev)



# Brief country profiles

Information/slides mainly from country presentations to the Shiraz meeting, 2008





## Outlook -FMD control in Turkey

- continued support from EU - another 4 years FMD vaccination
- high quality vaccines, coverage all large and small ruminants twice per year
- problems:
  - lack of effective quarantines around outbreaks
  - gaps in coverage - especially unvaccinated calves
  - lack of booster vaccination
  - expect FMD to continue in breeding areas (high risk eastern areas)

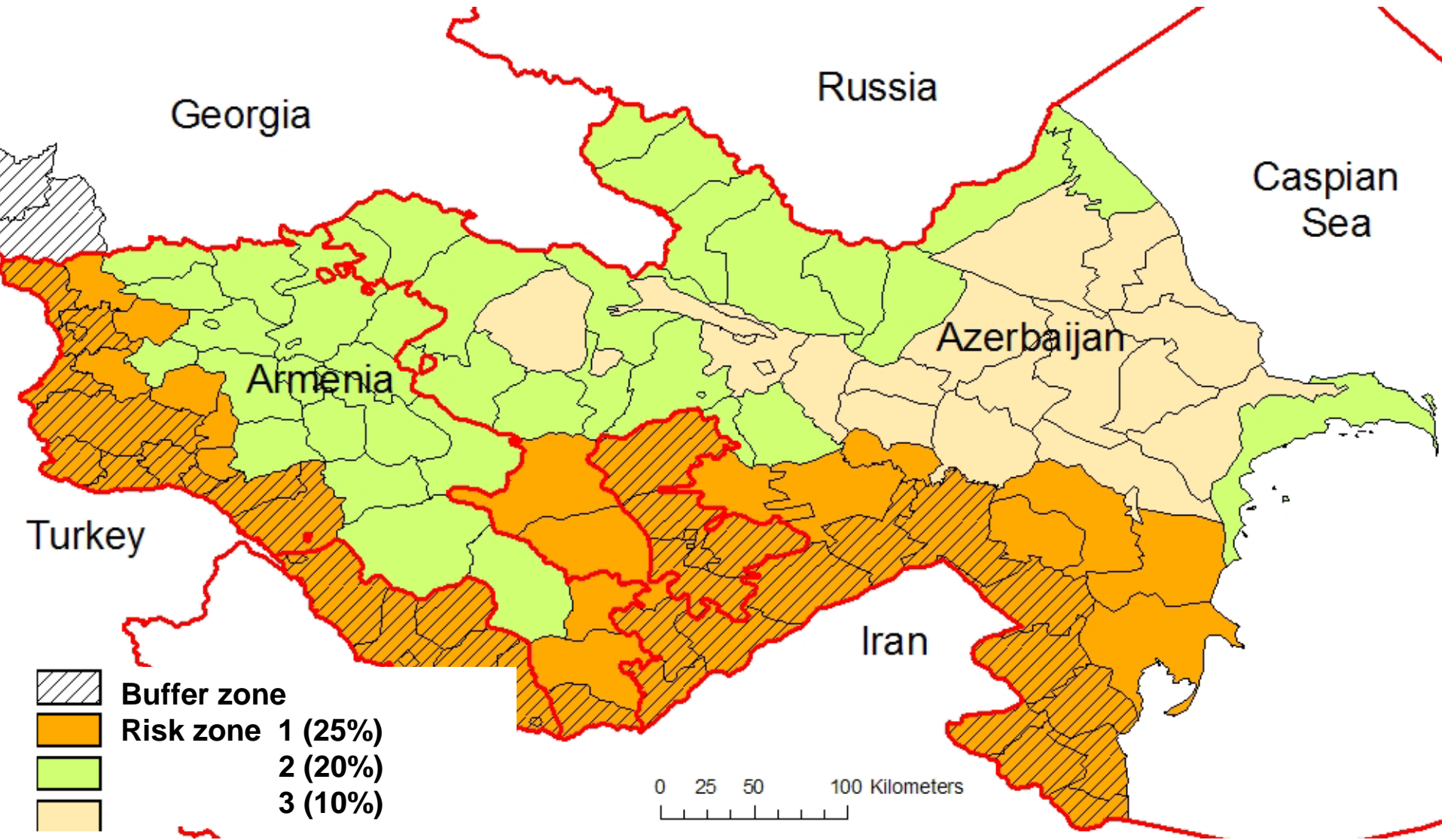


## TransCaucasus 2009: Georgia, Armenia, Azerbaijan



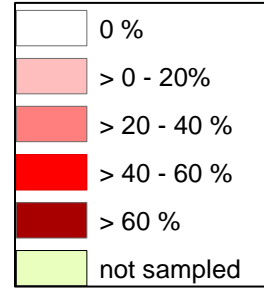


## Risk zones and vaccination buffer zone





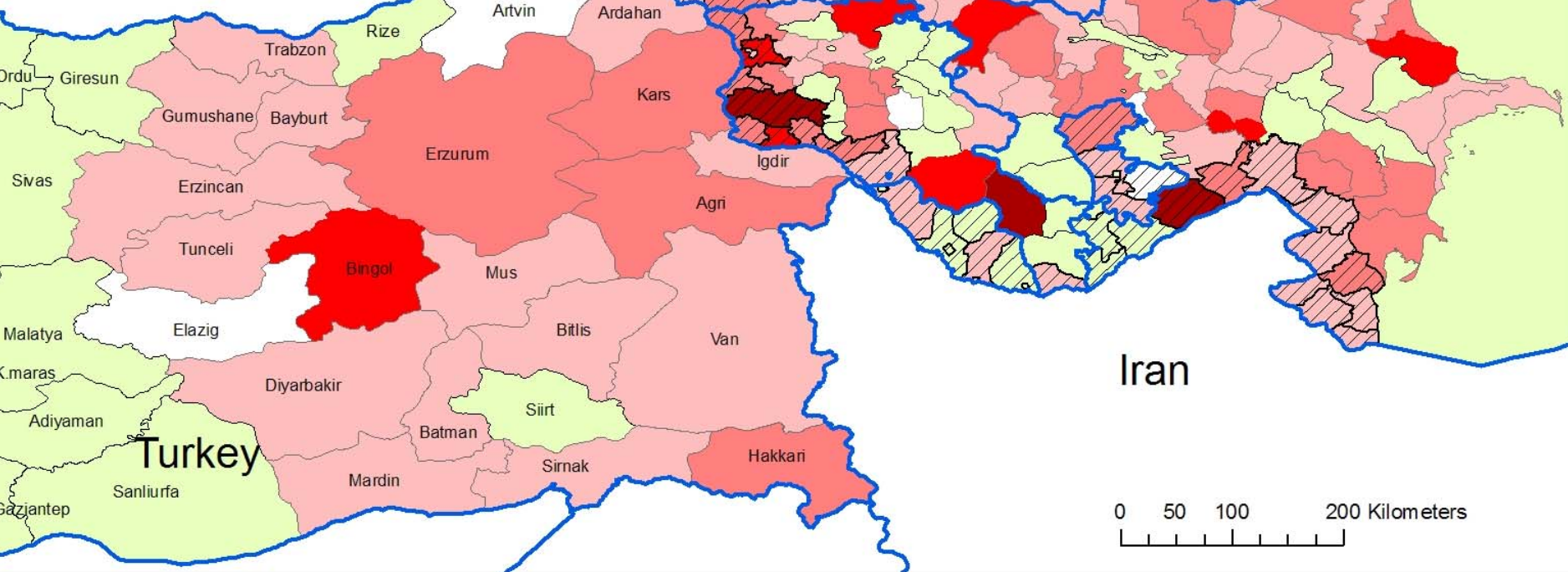
# NSP antibody results - regional -



Black Sea

Russia

Caspian Sea





## Outlook

- vaccination programmes in Armenia and Azerbaijan set to continue 2010-2011
- increased movements across borders (e.g. into Azerbaijan)
- buffer zone is NOT effective - infection passes through
- more effort to target /control high risk points
- to reduce risk , need to strengthen control in high risk areas of Turkey and Iran





# I.R.Iran

Mehdi Khalaj

Iran veterinary organization  
Khalaj.mehdi@gmail.com

*Regional meeting on Foot-and-Mouth Disease to develop a long term regional control strategy*

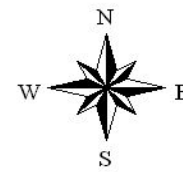
*(Regional Roadmap for West Eurasia)*

*Shiraz, Islamic Republic of Iran*

*9 - 13 November 2008*



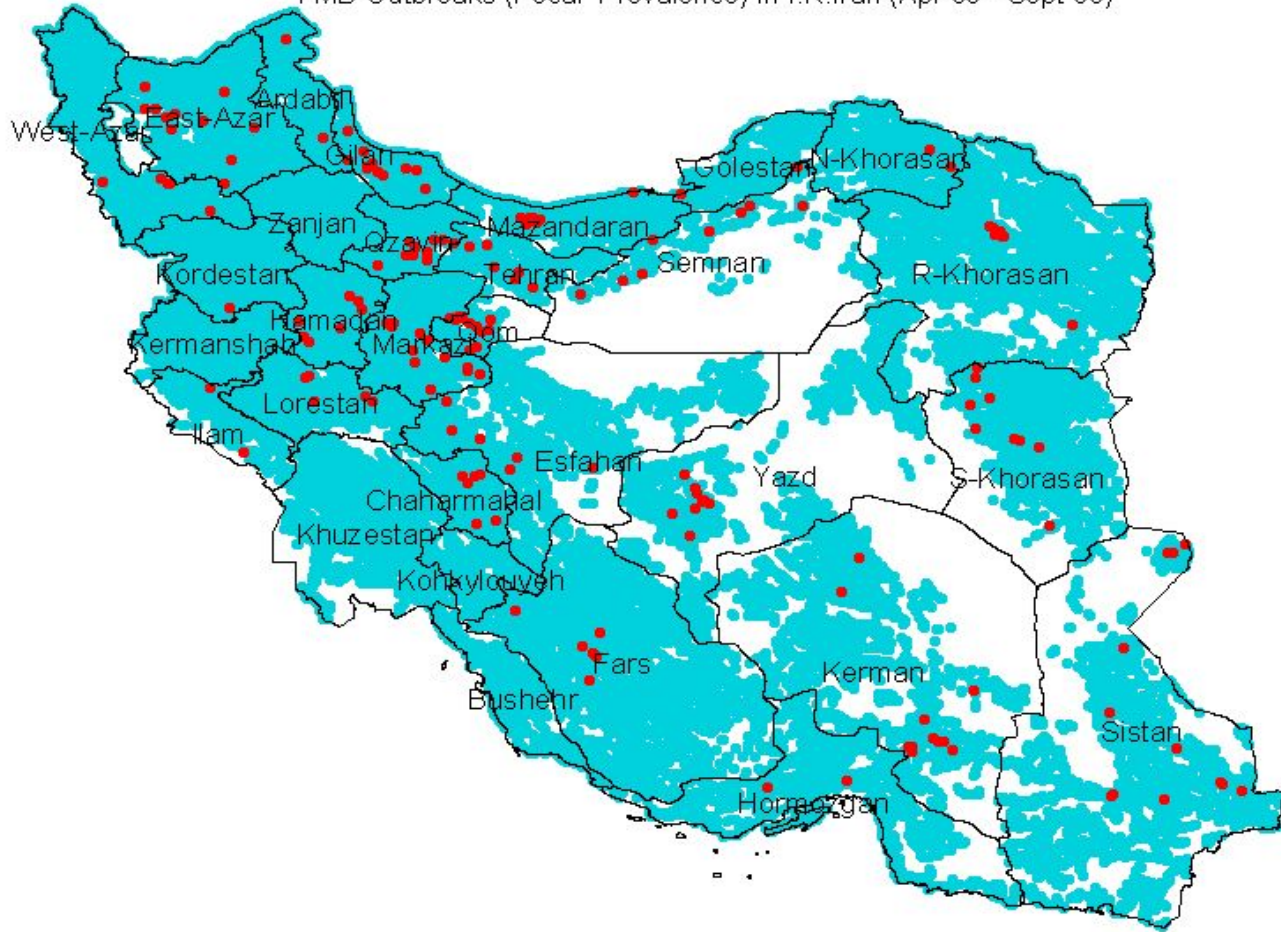
## Iran Map



- Iran is 1,648,000 square kilometers in surface
- Around 7,744 kilometers of ground and marine borders with Turkmenistan, Azerbaijan and Armenia in the north, Afghanistan and Pakistan in the east and Turkey and Iraq in the west
- Administratively Iran divided to 30 provinces.



FMD Outbreaks (Focal Prevalence) In I.R.Iran (Apr 08 - Sept 08)





## Pakistan - 60 million large ruminants + > 80 million small ruminants .....regional giant in livestock Population

*- very low use of FMD vaccine -  
-regional reservoir serotype Asia-1 -*

*(Million Heads)*

	<i>Cattle</i>	<i>Buffalo</i>	<i>Sheep</i>	<i>Goat</i>	<i>Camel</i>
Pakistan (2006)	29.5	27.3	26.5	53.8	0.9
Pakistan (2008)	31.8	29.0	27.1	56.7	1.0

### Per cent distribution

NWFP		20	7		13	18	7
Punjab	49	65		24	37		22
Sindh		23	27		15	23	30
Balochistan		8	1		48	22	41

Livestock Census (2006)

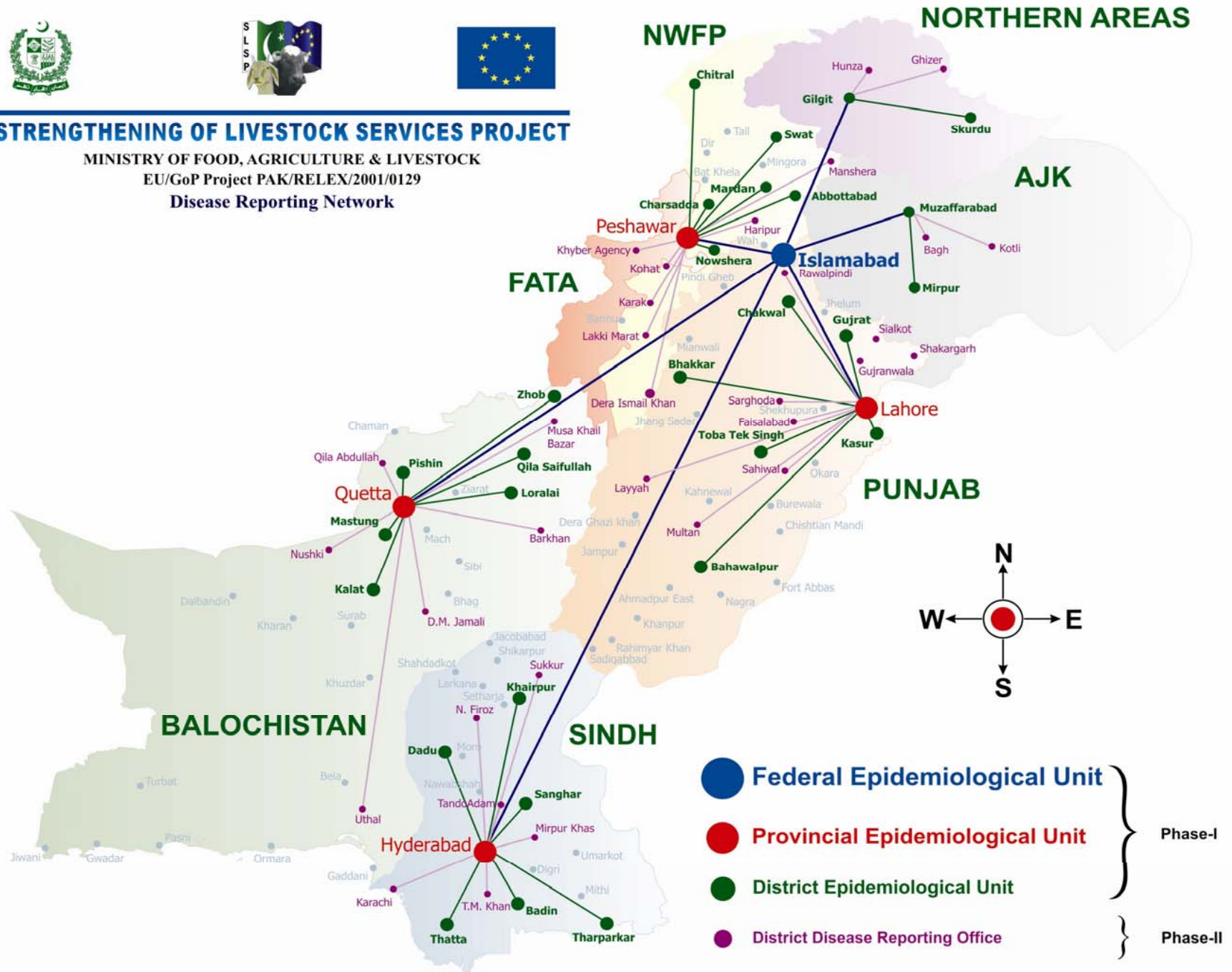


# STRENGTHENING OF LIVESTOCK SERVICES PROJECT

MINISTRY OF FOOD, AGRICULTURE & LIVESTOCK

EU/GoP Project PAK/RELEX/2001/0129

Disease Reporting Network





**LEGEND**



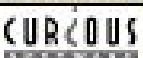
SATELLITE IMAGE AVAILABLE

★ Quarantine Station

← Movement in

→ Movement out

Iran





## Iraqi Veterinary Laboratories



- Central Lab
- Regional Lab





## Issues/outlook

- A Iran 05 (BAR-08) epidemic in early 2009 (source? Iran?)
- limited vaccination program in 2008-9: large gaps, led to major epidemics
- Baghdad - limited co-operation with autonomous regions in the north on disease control
- virus typing: difficulties to submit to WRL
- no samples submitted from northern region
- interest to develop "high control zone" " along borders with Turkey/Iran





# Syria

Dr. Ziad Namour  
Director of Animal Health  
[doah@mail.sy](mailto:doah@mail.sy)

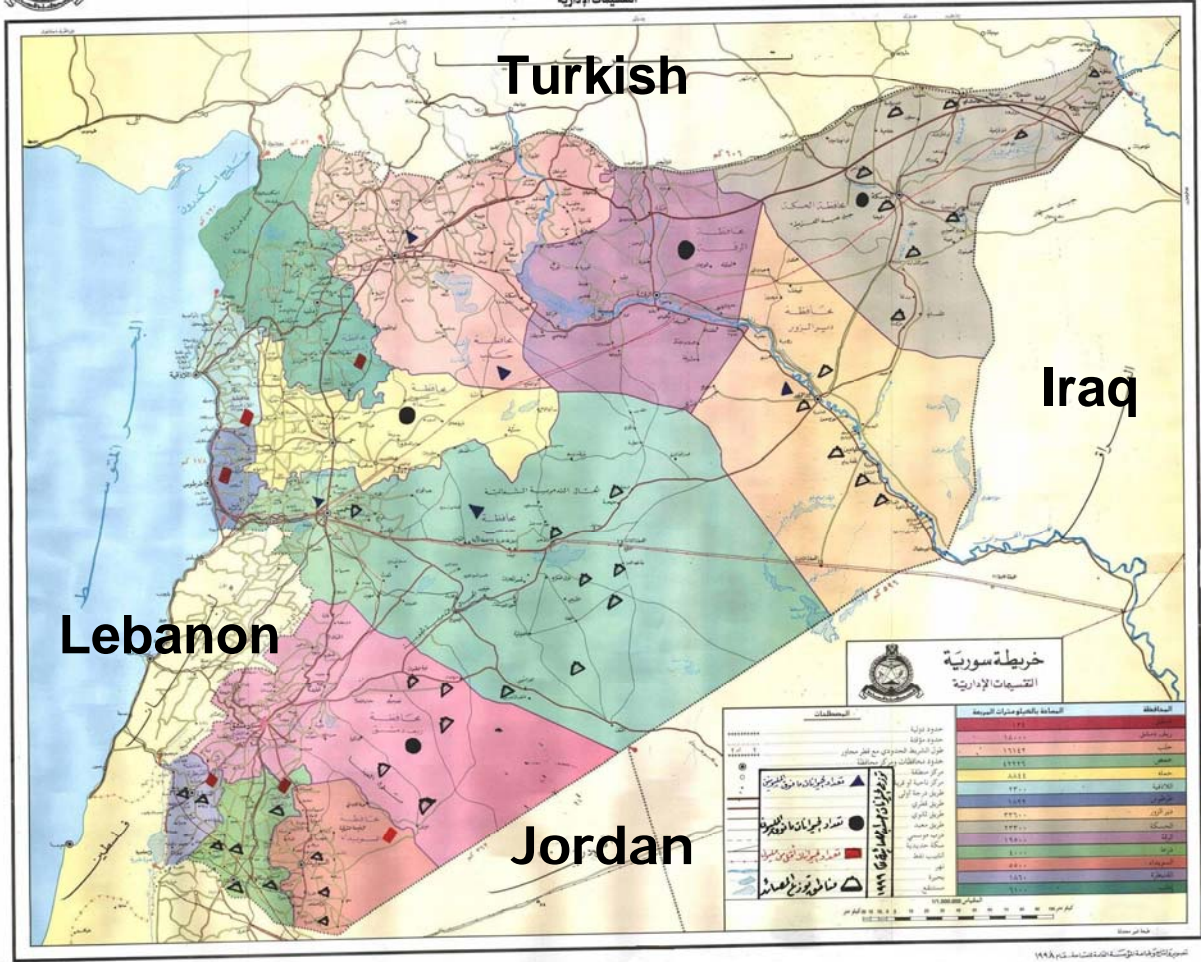
*Regional meeting on Foot-and-Mouth Disease to develop a long term regional control strategy  
(Regional Roadmap for West Eurasia)  
Shiraz, Islamic Republic of Iran  
9 - 13 November 2008*



# Syria



التقسيمات الإدارية



البيانات والخرائط والرسومات هي ملكية خاصة لوزارة الدفاع السورية ١٩٨٨



Turkey

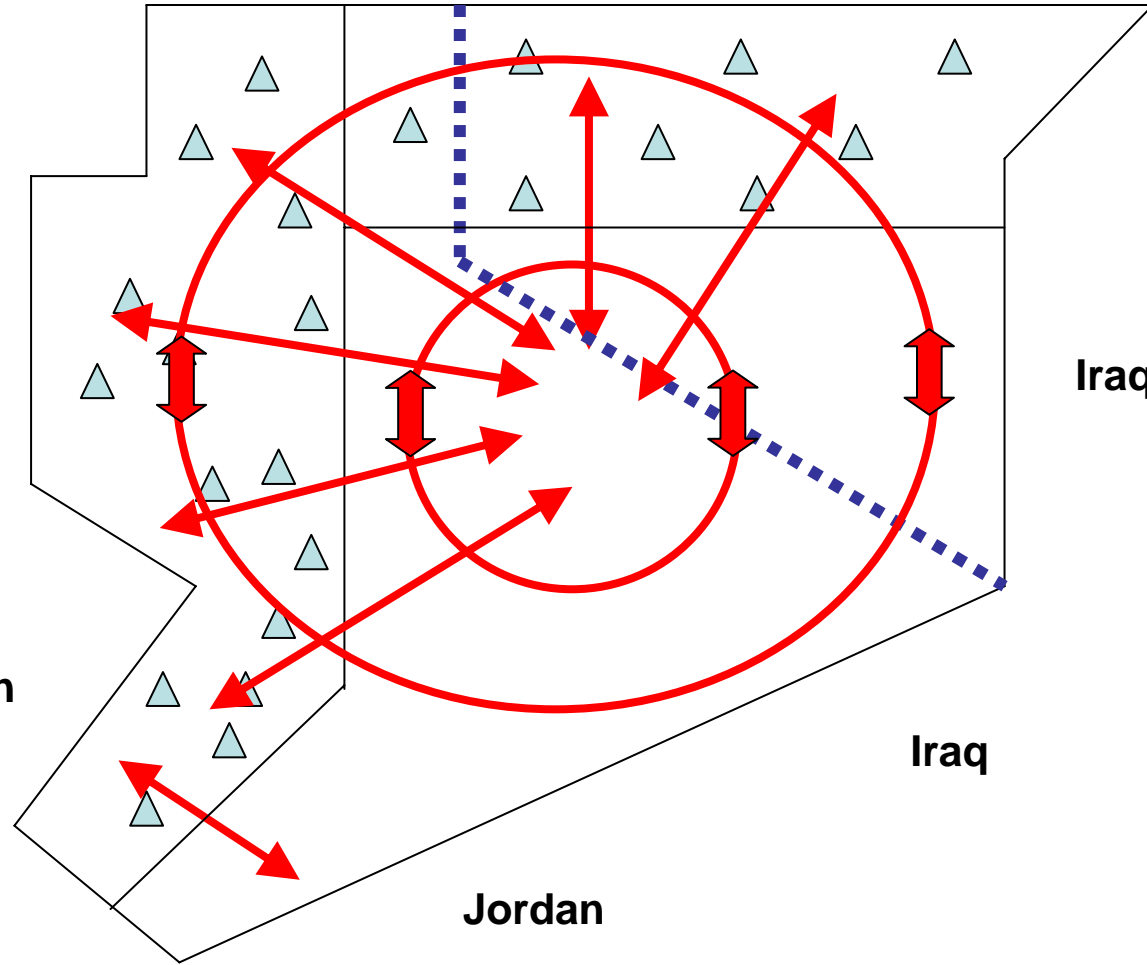
Mediterranean sea

Iraq

Lebanon

Iraq

Jordan



**MOVEMENT OF SHEEP**





## Conclusions

- the common border areas are extremely important for maintaining FMD
- not clear if FMD persists mainly independantly in each country - or continual transborder movement
- high vaccination rates, but important gaps remain
- FMD risk related to calf breeding cycle and lack of effective early vaccination?
- interest of each country to improve control in the border region
- movement control - need for animal ID systems
- regular sero-surveillance to monitor progress
- support from EuFMD/EC for monitoring programs and co-ordination