

Food and Veterinary Agency

Rep. of North Macedonia progress on the development of Veterinary Services - Contingency Plan + operational instruments (manuals/protocols/procedures)

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17th January, 2024

WOAH Platform Action Plans' bridging workshop on Disaster Management and Risk Reduction Lisbon (Portugal), 17-18 January 2024







Food and Veterinary Agency



Background – 5 Key Elements are important for progress of CP

- 1) FVA participated in 3 OIE (WOAH) regional workshops on the role of VSs on AW in natural disasters:
- The First was held in Teramo in Nov. 2018, → provided basic elements to develop country-specific (VS-CP) with regards to AW in case of flooding.
- A Second workshop took place in Sarajevo in Oct. 2019, and it aimed at presenting the progress made by the participating countries in developing their own VS-CP.
- The third regional virtual workshop on the role of VSs on AW in natural disasters for Balkan countries with a digital Table Top Exercise (TTX) organized by the IZSAM/OIE -November 2021.
- **2) Institutional cooperation** -FVA engaged in a cooperation agreement for the provision of emergency services during or immediately after a catastrophic event.
- 2018 with the Ministry of Defense
- 2020 with the Red Cross to collaborate
- 2021 FVA started negotiations with the Crisis Management Centre for joint of the FVA to the NICS (Next Generation Incident Command System). The NICS is a special software system allowing for simplified coordination of disaster response services.
- 2023 with the National Forest 2023
- 3) Cornerstone New decision on CP Doc. issued no. 10-2430/1 from 06.10.2021
- 4) Regionalization + Digital transformations of analog geography hunting grounds maps
- 5) Revision of Existing CPs and proposal for their improvement as well for General CP under EU project experts + development of manuals/protocols/procedures

Legal Basis for Contingency planning and emergency preparedness

Based on:

- 1) Article 20 of the **Law on Food Safety** (OG No. 157/2010, 53/2011, 1/2012, 164/2013, 187/2013, 43/2014, 72/2015, 129/2015, 213/2015 and 39/2016
- 2) Article 52, of the **Law on Veterinary Health LVH** (OG No. 113/07, 24/11, 136/11, 123/12, 154/15)).
- 3) \rightarrow Law on crisis management (OG No. 29/2005, 36/2011, 41/2014, 104/2015, 39/2016 and 215/2021).
- 4) → **Decision on contingency planning** (CP) Document issued no. 10-2430/1 from 06.10.2021 The General Plan
- identifies the type of situation and direct and indirect risks that can not be prevented, eliminated or reduced to acceptable levels or can not adequately be managed solely by the application of measures of official control
- lay down practical procedures that are necessary for CP, crisis management, including the principles of transparency to be applied and communication strategy.

New Legislation concern on CP

- 5) –New AHL currently is in final stage of adoption (process of transposition) alignment with European legislation \rightarrow REGULATION (EU) 2016/429
- 6) Remark: After adoption new AHL some provision from LVH will state in force.
- Article 43 Contingency plans

MS shall draw up, and keep up to date, contingency plans and, where necessary, detailed instruction manuals where necessary, detailed instruction manuals laying down the measures to be taken in the Member State concerned in the event of the occurrence of a listed disease referred to in point (a) of Article 9(1) or, as the case may be, of an emerging disease, in order to ensure a high level of disease awareness and preparedness and the ability to launch a rapid response.

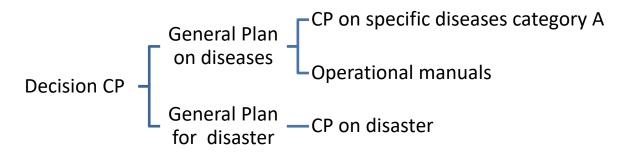
* COMMISSION IMPLEMENTING REGULATION (EU) 2018/1882 Article 1 'category A disease': means a listed disease that does not normally occur in the Union and for which immediate eradication measures must be taken as soon as it is detected, as referred to in Article 9(1)(a) of Regulation (EU) 2016/429;



- 1. Cornerstone for CP is Decision on (CP) Document issued no.13-216/1 from 23.01.2017
- → Mainly refers to CP on diseases → diseases which are the subject of CP
- → In accordance with this decision, 8 CPs were adopted →
- → The main remarks of the decision is that it did not provide a basis for adopting a natural disaster contingency planning
- 2. New decision on CP Document issued no. 10-2430/1 from 06.10.2021 \rightarrow has 3 key elements:
- → List a diseases according on the new EU AHL
- → Regionalization

Finally → The new decision is the basis and allows the adoption of a CP during the natural disaster (work in progress). This decision prescribes:

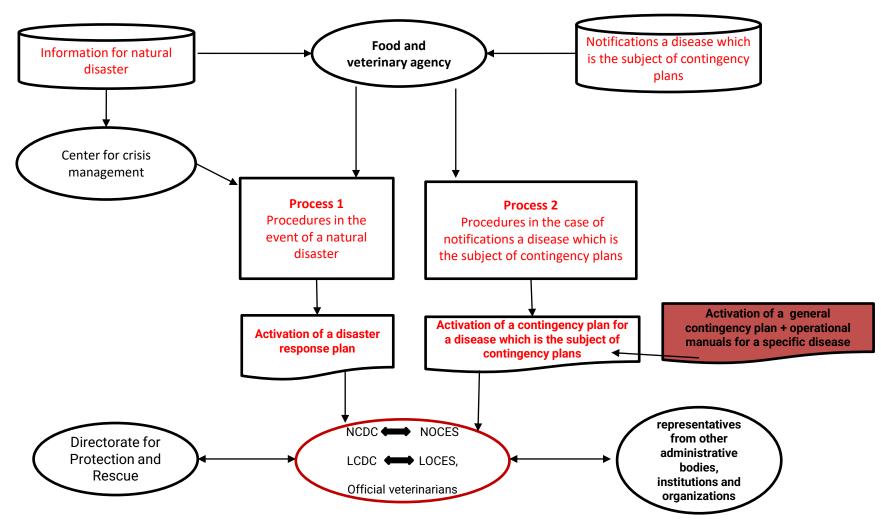
the organizational structure Determines:	method of management	the maintenance of a high level of preparedness and professionalism	
 - the operational organizational units, - the composition, - the competence, - tasks and responsibilities of the NCDC-LCDC (NOCES- LOCES) and EG 	The management method is implemented through a prescribed chain of commands and communication in order to respond (quickly and effectively)	The prescribed way of organizing simulation exercises, as well as organizing regular trainings in the service,	





Mechanisms for the official declaration of an emergency situation According to the new decision

Flowchart of the process of drafting adoption and implementation of contingency plans





Disaster Management Plan is divided into 2 stages (according WHO)				
I) Disaster Mitigation (active before disaster) (the lessening or limitation of averse impacts of hazards and related disasters	II) Disaster Response (active after disaster) Activation and implementations DMP at affected area and chain of commands			
Risk Assessment -Hazard -Vulnerability assessment	 Relief Search and rescue Security Feed and Water Animal Health care 			
 2. Preventions (actions to reduce risks or mitigating consequences of disaster for people, animal, the environment and property) Structural measures Non- Structural measures 	2. Recovery - restoration and improvement facilities, livelihoods and living conditions of disaster affected area and communities including efforts to reduce disaster risk factors Rehabilitation			
 3. Preparedness (a state of readiness and capability community and FVA to ensure rapid response) Contingency planning + stakeholders → implementations requires flexibility and adjustments according to the magnitude and circumstances of the disaster Awareness – Warnings Evacuations 	3. Reconstruction VSs protect AH, AW, Safeguard human and Protect environmental Restoring and improving the economic and social situation			



Disaster Management Plan focused on and protect PH, AH, AW during all stages of disaster

AW Critical Points in Disaster

The point at the moment of Disaster occurrence



Transport

- Loading
- Transport
- Unloading



Moving animals from disaster locations to safe place

Home

- -Rescue or Kill
- -First Aid
- -Animal handling
- -Restraint
- Clinical examinations
- Vet interventions

Shelter

- -Feed and Water
- -Environment
- -Animal' treatment
- Sufficient space
- -Normal behavior



Temporal settlement established for accommodating animals affected by disaster

Re-homing

- -AW standards
- -Mitigation
- -Preparedness
- -Response
- -transport
- Disinfection farm before re-homing



Returning animals to their farms or establishing new homes



Digital transformations of analog geography hunting grounds maps

- Material:
- 2 analog scale types of (AGHGMs) were used
- -1:250000 size format: B1 and
- -1:25000 size format: A1, A2 and A3

Method: First (AGHGMs) converted to digital raster format, and then to digital vector format. Digital maps (DMs) processing includes 5 stages.

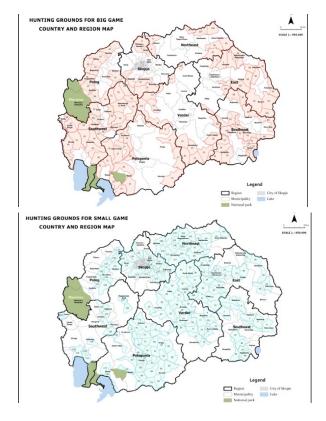
5 stages:

[1] Scanning the cartographic source.
[2] Preparing the raster form for digital processing.
[3] Digital recording of coordinates in a real coordinate system.
HGMs was drawn according to the borders and treated as closed areas (polygons).
[4] Vector data attribution (HGMs) and

[5] Data storage

GIS display as subject layers that can be presented one by one or together. GIS software - enable easy to prepare of zones – affected area. On digital maps could be presents attribute data (textual, numeric, tabular).

GIS displaying digital data with spatial sets. Spatial veterinary epidemiology (SVE) enables identifications of the spatial/location:1) of TADs to the susceptible populations (domestic and wildlife) as well as epidemiological risk factors 2) disaster affected area





Digital transformations of analog geography hunting grounds maps

The hunting grounds for big and small game were digitized based on two different maps with a scale of 1:250,000 obtained from the MAFWE. The source maps, initially in paper form, were scanned, converted into raster format, and then digitized in ArcMap after georeferencing. Due to the small scale of the source maps, the borders are generalized, and in some locations, there are overlap.



Applications are based on ESRI ArcGIS Server and ArcGIS Web app builder technologies



Regionalization- Responsibilities:



The main objective of the classification is to provide a unique and unified division of territorial units at regional and local level.



The Nomenclature of the territory units is based on the territorial organization of local self-government in the RN and it is harmonized with the classification of the EU - Nomenclature of Territorial Units for Statistics – NUTS, established by Regulation (EC) No 1059/2003. Present responsibilities of OV for particular HG and municipalities.

- There are 5 levels, NUTS levels 1 and 2 are whole territory of the country;
- ➤ The term "region" is the territory of the Republic of North Macedonia having an area of at least 2000 km2. NUTS-3 are eight statistical units (regions), namely:
- •MK001 Vardar,
- •MK002 East,
- •MK003 Southwestern,
- MK004 South-eastern.
- •MK005 Pelagonia,
- •MK006 Polog,
- •MK007 South-eastern
- •MK008 Skopje.
- NUTS 4 are 80 statistical units (municipalities) and NUTS 5 are 1783 statistical units (settlements) 34 cities and 1749 villages.

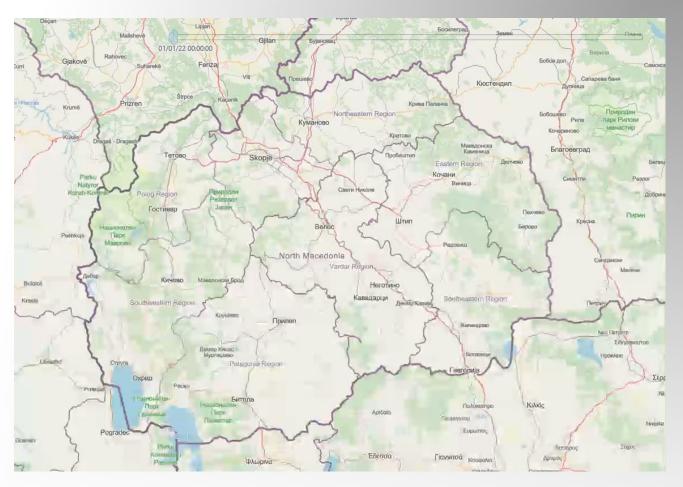




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Timeline video— Present Sequence of events — and could be used for evaluations VS performance for response in ASF outbreaks — Natural disaster (fires, flood, earthquake)



Established restriction zone 3 km -infected zone and 10kmprotection zone. Established infected **HGs** and neighboring HGs When all measures implemented withdrawal restriction. Determination of the affected area by a disaster. Remark: System of data collections and clasifications.

Crisis Management Center in 2021 introduced Next-Generation Incident Command System (NICS)





The software system will enable all emergency agencies in the country to be digitally unified, allowing for simplified coordination of disaster response services.

<u>NICS is a web-based command and control environment</u> for small to large/extreme-scale incidents that facilitate collaboration across National, Regional and Local/Municipal levels of preparedness, planning,

response and recovery for all-risk/all-hazard events

NICS facilitates situational awareness for widely dispersed responders.

NICS as a platform for:

- Commanding;
- Coordination;
- •Spatial display of the condition and resources of digital maps;
- Exchange of data and information in real time
- Generate Situation Reports supported by maps
- Tracking operational activities and resources in real time
- Inclusion of social media of importance

for crisis management with analyzes using artificial intelligence

- •Institutional (commanding forces within the institutions)
- National and Local Coordination Forums
- •International cooperation (coordination with the forces and resources in foreign countries and back)

In 2022, FVA staff participated in NICS training workshops. Planning training for the rest of the staff in 2023 were postponed and expected to realized in next period.



NICS was developed by Lincoln Laboratory and the Department of Homeland Security Science and Technology Directorate nearly a decade ago to assist emergency agencies in California with wildfire response. It has since been adopted by countries around the world.

Past experiences

(Data from senior colleagues and personal experiences)

- During the 2001 military conflict:
- 80 cattle and 17 horses disposal in the village Aracinovo.
- VSs include in organizing Water supplies,
- Dislocation of 150 cattle from Tetovo to Sveti Nikole
- > 2010, disposal of 54 sheep that died from thunderstrikes
- ➤ 2015, Interruption of the electricity supply on a poultry farm (the alarm system malfunctioned)
 - consequences \rightarrow 7500 died out of 10000 laying hens

Description of natural disasters in 2016

Based on an official statement from the Hydrometeorological Institute Skopje:

A phenomenon contributed to the disaster.

At a wind speed of 70 km / h, the volatile unstable atmospheric mass stopped, literally stopped in place and began to pour (spilled on) huge amounts,

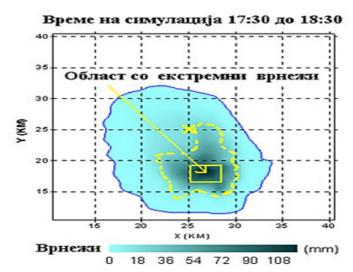
Disaster described and compared; Really as a water bomb on that territory.

The freak weather included winds blowing at more than 70 km per hour and resulted in flash floods and landslides, with cars swept away by the violent torrents.

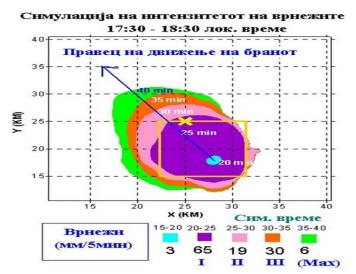
The average rainfall for the whole of August, fell on Skopje in period of just two hours.

Numerical simulation of the accumulated amount of rainfall on 06.08.2016

Simulation of time rainfall



Rainfall intensity simulation



Apocalyptic images of the Skopje Ring Road after the floods

collapsing streets, inundated and inverted vehicles, drowning trapped motorists and homeowners, most of them caught "out of the blue"

















Information's from Media after Flood 2016







How to organize these people. What is the best approach to them, when you see and know that they have lost a lot, lost property, vehicles but have lost a close family member and lost relatives?

These were the reasons why after 3 days or more, help was required to rescue the animals or to notice drowned animals.



Total number of disposal dead animals after Flood 2016

Species	Number of	
	dead	
	carcasses	
Cattle	23	
Sheep and goats	232	

Significant floods in Macedonia (with major damages: flooded buildings and agricultural areas)

			·	
	City/	Year	Number of dead	Number of
	village		animals	dead
				people
	Bitola	1961	/	/
	Skopje	1962	/ unknown? no	4
			data	
i	Bitola	2013	/	/











Experience in Animal Health Issues During Flood 2016 Mud and silt in a poultry farm – Disposal of dead poultry







Experience in Animal Health Issues During Flood 2016 Losses on poultry farms – premises for preparing and storing chicken feed unsafe feed





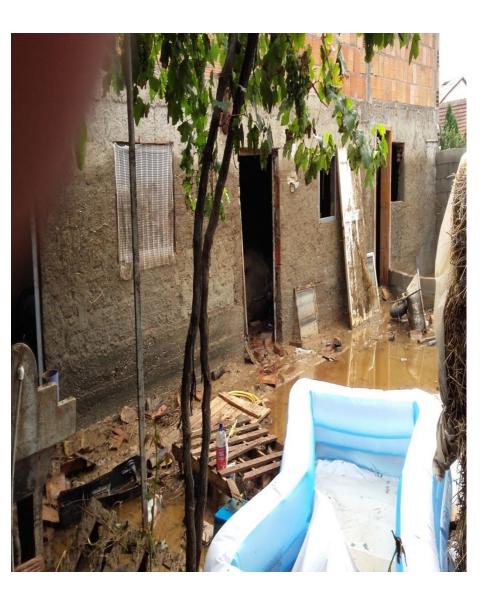
Dead animals with and without identification tags were found







Hardly accessible small cattle farms





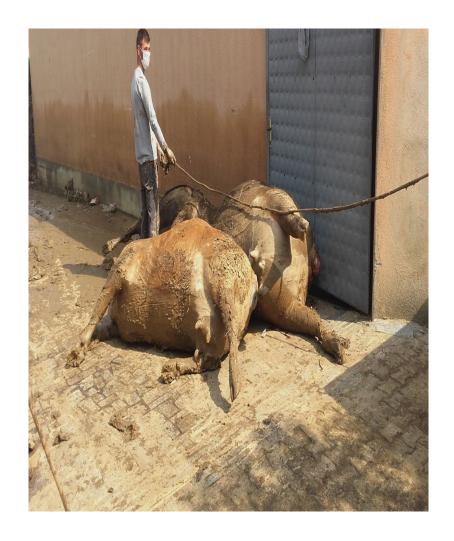
Losses on cattle farm



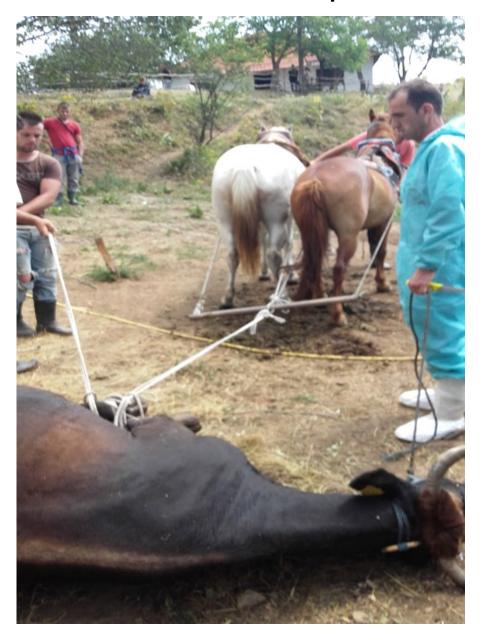


Difficult access to cattle farms





Horses used for disposal



Extraction and transport of dead carcasses from hard-to-reach farms







Extraction and transport of cattle carcasses from pasture fields



Safe Disposal



Disposal











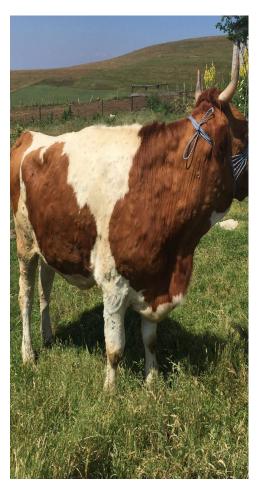
Lumpy Skin Disease vs Flood



When at the same time you have floods on one side and disease on the other. It is difficult to prioritize.

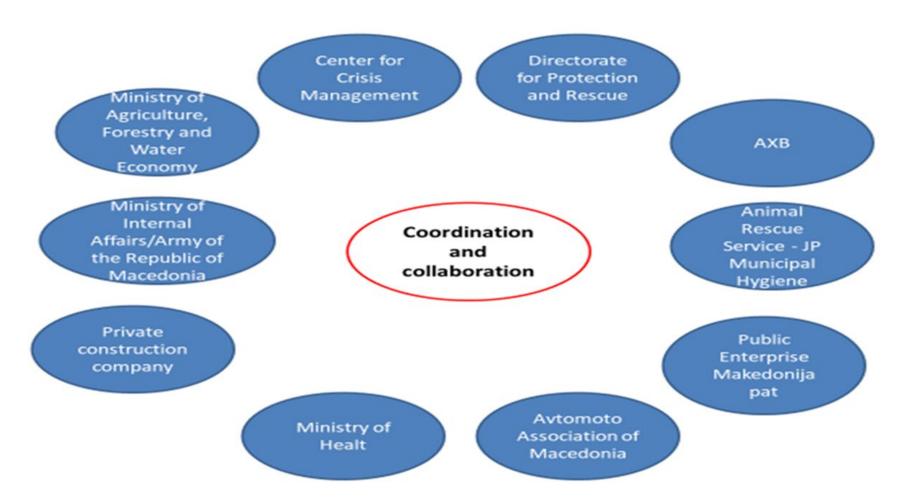
Some farmers are disappointed and frightened by the disease. Others are trying to count and identify drowned animals. They demand to quickly remove dead animals - after hearing the news and recommendations on TV.







Integration and coordination with other agencies, organizations and stakeholders



Cooperation with NGOs and Animal Shelter on issues and activities related to natural disasters should to be improved as well as with Meteorological and Hydrological institutions

International Aid after the flood 2016 in Skopje region







Activation of the EU Civil Protection Mechanism.

The North Macedonia is part of this Mechanism, so the Directorate for Protection and Rescue (from 2012) is institution which facilitates the coordination of all assistance received from the EU in the event of natural disasters and other disasters.

Bulgarian team of firefighters and RESCUERS arrived in Skopje to help the survivors, Austria - 500,000 euros donated from Disaster Fund Abroad to Macedonian Red Cross

Serbia- 20 police officers from the fire and rescue units:

- 1) specially combined "Voma" vehicle with complete sewage, pumping and drainage technology
- 2) faecal cistern with high absorption capacity
- 3) 2 pumps with an average capacity of2,000 liters per minute

Retrospective Analysis

Lessons learned or NOT?!

- Illegal logging-Deforestation + Illegal urbanization → Global problem with significant negative economic, environmental and social impact.



Spatial Data Analysis of surveillance programme for LSD – Incorrect coordinate values



Cattle farms – not correct coordinates entered in the database, some farms are not outside the country territory and are not located in the lake.

Role of the Veterinary Information System and the importance of quality and accurate data on geocoordinates of farms



If it is hypothetically assumed that the ASF outbreak is an act of agro-terrorism- should be activated module for specific investigation

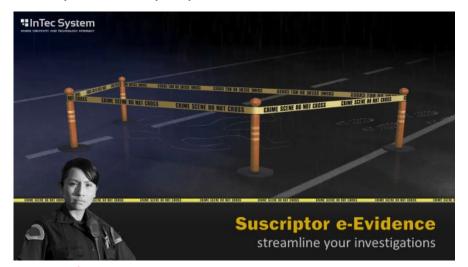
ANIMAL AGROCRIME and AGROTERRORISM TARGETING LIVESTOCK

Policing animal-related crimes to prevent future disease outbreaks. Interpol Working definitions

- ➤ Animal Agrocrime is an unlawful act or omission concerning animals or animal products that violates legislation, and has negative consequences on animal health, animal welfare, public health, food safety, food authenticity or national security.
- Agroterrorism is a subset of agrocrime. It can be understood as terrorist attacks directed against crops and livestock, to disrupt a population's economy and food supply.

Could be described as the intentional introduction of an animal disease agent against livestock to cause economic damage, disrupt the socioeconomic stability of a country, and create panic and distress.

Complementary expertise.





Only few institutions already use web application Suscriptor e-Evidence, which is a powerful tool designed specifically for investigators, prosecutors, defence attorneys and judges to optimize the investigative and prosecutorial process in providing the necessary evidence at trial. FVA will consider possibility to use this web application.

AGROTERRORISM TARGETING LIVESTOCK – Integration with GIS Mapping of evidence for location intelligence and more statistics

For Differentiating Between Natural and Intentional Outbreaks should be implemented:

- Early Detection Systems
- First Line of Defense: Customs and Law Enforcement
- Surveillance Systems
- The key prerequisite for any effective surveillance system is knowledge of the baseline disease prevalence and mortality. Without this information, it is impossible to tell whether disease occurrences are below or above the threshold for special action. The

Benefits from digitalization

- Realtime Dashboard with actual statistic
- Investigation Success Prediction Scoring
- Data Warehouse and

Business Intelligence based Reporting

- Prevention of crime based on future crime prediction by location
- Future deployment of internal AI tools based on IBM WatsonX for investigation guidelines and prediction
- Reduction of investigation and prosecution costs
- Suppression of corruption



The success of a criminal case depends on the nature and quality of the investigation phase. The filtration of relevant facts from the non-relevant, in turn, constitutes the fundamental basis of the investigation. The software is designed as an extension for an ECMS and includes a methodology that aligns with the current legislation (Crime Code), of the country where it will be utilized



2019 Flood Modeling Study in Skopje



In 2019 The City of Skopje conducted a study on the modeling of possible floods in the Skopje Region, in accordance with the Flood Directive and national legislation. The key objectives of the study are:

- → Identifying and mapping existing and potential future flood hazards and risks in the Skopje region, with an emphasis on urban areas along the Vardar River.
- → Build a strategic database of information needed to make informed decisions about flood risk management in the area.
- → Identify sustainable structural and non-structural flood risk management measures and options in localized high-risk areas throughout the City of Skopje.

Three Scenarios of possible flood waves are further visualized using the StoryMaps tool.

Flood Modeling Study in Skopje - 3 different scenario



Simulation of extreme flood from Upper Vardar and demolition of Kozjak Dam



Simulation of extreme flood from Upper Vardar and Lepenec



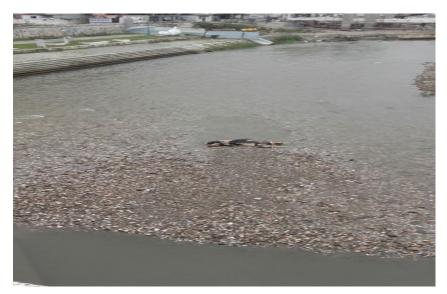
Flood simulation of torrential watercourses from Vodno Mountain

Flood Modeling Study in Skopje was developed by PROPOINT Consulting.

The analyzes were visualized using the StoryMaps tool with support from the City of Skopje - Skopje Innovation CenterLab.

<u>Prepared with the technical and financial support of UNDP</u> within the framework of the project "ICT for Urban Resistance".

Case: Drowned cow in the Vardar River in the center of Skopje Applied experience gained (communication, coordination with other institutions, extraction and disposal) 2017









Simulation Exercise – Animal Health – CP + Other peacetime activity 3 SIMEX in period 2022-2023 for PPR, FMD and ASF

- PPR Multi-country Simulation Exercise (drill) Serbia North Macedonia in Skopje Peste des petits ruminants (PPR) VARDAR 01, Veles, North Macedonia, 15 16 March, 2022 in cooperation FVMS, FVA-North Maedonia and Veterinary Directorate- Serbia, and project ADWEB I Capacity building of veterinary and plant services in the Western Balkans Lot 1 Animal Health (ADEWB I) An EU funded project implemented by Agriconsulting Europe S.A. (AESA) and IZSAM G. Caporale Teramo
- **FMD Multi-country Simulation Exercise (drill) Montenegro North Macedonia in Skopje, North Macedonia** FMD Drill (DR): **26-27 April 2023** in cooperation EUFMD, FVMS, FVA and UBH.
- In period 20-21 Decembre 2023 in Skopje, North Macedonia." **Table-top Simulation exercise on management of ASF outbreak in domestic pigs and wild boars in North Macedonia**" FVA organized with technical and operational support of the "Improved animal disease control and implementation of the food safety system" An EU funded project implemented by CEPA led Consortium. 19 players were participated from central and local level of FVA- OV and PVPs.
- TAIEX Workshop on Emergency Control and Management of Food in Crisis Areas, with Emphasis on Flooded Areas organized in cooperation with FVA in 2017.
- During this event, it was presented our Experience in Animal Health Issues During Flood
 - → FVA participated on event organized by Directorate or protection and rescue: Civil protection between citizens and institutions 29.09.2022 demonstration exercises for assistance and support activities by voluntary firefighting associations, companies and the Red Cross.









Humanitarian response -Simulation exercise 18.10.2023 in Skopje

<u>A simulation exercise for first aid in an emergency situation - an earthquake organized by the Red Cross of North Macedonia</u>. The exercise was based on urban search and rescue operations, disaster response, incidents and fake news campaigns that will affect the civilian population and critical infrastructure. The SIMEX were attended by official veterinarians, PVPs, representatives from dog shelters and registered animal transporters to rescue pets as well and provision of veterinary health protection of pets affected by an earthquake.









Humanitarian response -Simulation exercise 18.10.2023 in Skopje

500 participants

In his address, President Stevo Pendarovski emphasized that this exercise showed all the positive aspects of the partnership between state institutions and civil society organizations, as well the intersectoral connection and inter institutional cooperation.

- It is events like today's that open up space for the improvement of coordination and communication as key aspects in the crisis management system, Pendarovski pointed out.



the	crisis	situ	ıation	_

Fire Territorial Unit

Chamber of Psychologists

Food and Veterinary Agency,

Red Cross of the city of Skopje

Municipal organizations of the Red Cross

Teams of National Societies from the region (Croatia, Serbia, Bulgaria, Albania,

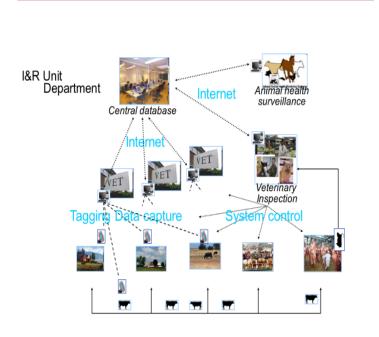
Montenegro and Germany),

Representatives from universities (UKIM, UGD, UKLO),

independent experts from the area and various bodies from the Crisis Management System (CMS), at the local and regional level

Next steps and challenges: Improvement Internal and external communication → Communication tools, technologies, procedures and templates

The current Oracle DB has been installed in 2011 and never been updated ever since. The hardware is of the same age, and both are near the end of their lifespans.





- → Taking in consideration that there is no short term plans of funding development of II systems by EU delegation, FVA asked FAO for technical assistance and support.
- → The FAO Project is expected to start this year and it is planned to provide advanced VIS, including PVH modules for food/feed safety.
- → Integration web applications presented in this presentation in one Vet Information System

Next challenge steps Plan for improvement Communication

Communication within FVA:

Central level <->Regional level Documentation (drafts of the orders) Responsibilities

Communication between institutions:

CVO level: CMC, DPR, MIA- police, Army, , (incl. Environment protection, Internal Affairs) Expert level (Ministry of Agriculture, State Forest Service, State Environmental Service, FVMS, Faculty of Forestry)

Communication with industry (Stake holders) - contacts, meetings at different levels

Communication with Society – Public awareness

Awareness in peace time: Leaflets, Video clips, Posters, Information on website: https://fva.gov.mk//
Information through media, newspapers etc.

Regional seminars/ meetings for veterinary practitioners and associations (industry)

Awareness during disaster: Press & Media (including press conferences, briefings), Website, Leaflets (mainly in the affected zone), Local municipalities, Hotline

Communication with:

Other countries: CVO level (phone, e-mail, mail) /Expert level (phone, e-mail)

International institutions and organizations:

EC: ADIS, Official letters, e-mail/ WOAH: WAHIS

FVA - Next steps and challenges

- → Model Consultation mechanism with the main stakeholders
- → Contract with PVPs for Veterinary first aid, protection and rescue (provision of budget funds)
- → Contract with Hunting clubs, National parks, National forest for Protection, rescue and evacuations wild animals
- → Communications
- → Training and Educations in collaborations with Center for animal welfare, FVMS organizing training and SIMEX on following topics:
- Animal Handling, Restraint and Clinical Examination in Disaster
- Sedation and Anesthesia
- Emergency Animal Euthanasia in Disaster
- → Started cooperation with Institute of Earthquake Engineering and Engineering Seismology (IZIIS) Skopje on
- Diagnosis, repair, strengthening, reconstruction of existing animal farms or in case of earthquake-damaged structures and systems
- Evaluation and zoning of risks related to occurrence of geotechnical hazards
- Prevention of earthquake disasters, planning measures for mitigation and preparedness
- → Application of new concepts
- from operational response focused to a focus on the entire disaster cycle;
- from natural hazards to all-hazards
- from Whole of Government to Whole of Community; and from government-centric to community-centered.
- adopt a Whole Community Approach to Disaster Management.

OV activity during disaster + comparation AH Issues before and during outbreak and AW Issues before and during natural disaster

Our activity- official veterinarians
Establishing a Local Center - Crisis Headquarters — Informing Breeders: How to Protect from Infectious Diseases Transmitted through Food and Drinking Water, and How to Protect Animals.
Removal of dead animals - Identification - Compensation MAFWE - AFSRD
Designated place for disposal
Dislocation of animals from flooded areas. Organizing the transport and acceptance of animals to other farms
Prohibition of use: animal feed declared unsafe, products of animal origin which have been declared unsafe
Ordering the competent private veterinarians to: - Extraordinary clinical examinations and veterinary treatments, - implement DDD measures - implement identification and registration measures and an emergency census
Extraordinary reports to FVA /reports of a lack of safe animal feed
Activities based on priorities, and in particularly complex situations.

AH issues before and during outbreak	AW issues before and during disaster
Monitoring Surveillance Risk categorization(on implementation biosecurity measures)	Evaluation of premises on natural hazards
Notifications disease →OV→LCDC→NCDC	Notification disaster- E122→OV→LOCIC→NOCIS
Response	Response
Establish restricted zone -infected (protection zone) -surveillance zone -buffer zone	Establish affected zone Rescue affected animals and - First Aid -Animal handling -Restraint - Clinical examinations - Vet interventions
Killing Slathering Depopulations Vaccinations Restrictions in movement of animals and products	Evacuations Transport Accommodation in shelters
Repopulation+ monitoring	Recovery - restoration Reconstruction Rehoming

Comparison of National Contingency Plan <u>for Animal Health Emergencies</u> and Contingency Plan for the Protection, Rescue and AW in the event of Weather Disasters/<u>Disasters</u>

NATIONAL CONTINGENCY PLAN FOR ANIMAL HEALTH EMERGENCIES INDEX			
1: Legal framework for contingency. point 1			
2: Organization of contingency plan. point 1,2,3,4,5			
3: Economic resources for AH emergencies. v points 2,3			
4: Competent authorities involved in AH emergencies. Points 1.2,2,3,4			
5: Chain of command for animal health emergencies.			
6: Expert group for animal health emergencies. 🗹 points 2			
7: Human and material resources. 🔽 points 3,4,5			
8: Contingency and worst-case scenario.			
9: NRL.			
10: Training and simulation exercises. ✓ point 8			
11: Communication. point 7			
12: Animal welfare. 🗹 points 1-11			
13: Human resource safety.			
14: Farms and animal high-density areas.			
15: Killing and disposal capacity.			

Annex I: List of diseases subject to the provisions of this CP.

Annex II: Contact of authorities involved (National, regional, local).

Annex III: LDCC (key personnel address and contact / director and deputy).

Annex IV: NDCC (key personnel address and contact / director and deputy).

Annex V: Expert group (name/area of expertise/organization/contact)

Annex VI: List of providers of key material resources (EPIs, disinfectant, machinery,

clinical material, killing equipment, disposal equipment, etc.)

Annex VII: Links of interest

CONTINGENCY PLAN FOR THE PROTECTION, RESCUE AND AW IN THE EVENT OF WEATHER DISASTERS/DISASTERS

INTRODUCTION, SUBJECT, AREA OF APPLICATION TERMS AND DEFINITIONS, Abbreviations

- 1. LEGISLATION/ COMPETENT AUTHORITIES
- 1.1. Legal framework and reference documents
- 1.2. Authorities
- 2. Emergency support functions- expert teams
- 3. Budgeting and resources
- 4. National Center for Disease Control (NCDC)
- 5. Local Operations Center Center for Disease Control (LCCB)
- 6. Instructions Contingency plan activation, Evacuation of animals Relocation of animals, Animal identification and record keeping Search and rescue of animals, Veterinary TRIAGE (treatment/euthanasia/humane slaughter), Carcass disposal, Management of abandoned animals, Indemnity claims, Distributions of donations
- 7. Internal and external communication
- 8. Training and education + simulation exercises.
- 9. Information technology and knowledge management
- 10. Integration and coordination with other agencies, organizations and stakeholders
- 11. Evaluation, monitoring and lessons learned

The FVA is currently in the process of drafting a contingency plan for the protection, rescue and animal welfare in case of weather/catastrophes according to the general structure of the WOAH guidelines

FVA - Next steps and challenges → Training and educations

FVA drafting procedures for simulation exercices according to OIE GUIDELINES FOR SIMULATION EXERCISES: Tabletop (Discussion-based), Drill (Operations-based), Functional (Operations-based) and Full-scale (Operations-based)

- → FVA may cooperate with the Macedonian Veterinary Chamber and, where appropriate, with other administrative bodies, organizations and institutions of the Community or other international organizations and institutions.
- → The process will run in 4 steps

Identify

- Stakeholders
- Breakpoints and gaps
- Capabilities
- Resources
- Components of a plan

$2 \rightarrow$

Test

Plans and procedures

Training

- Equipment
- Multi-sectoral

cooperation

Resource mobilisation

$3 \rightarrow$

Practise

Plans and procedures

Communication

- Response roles and responsibilities
- Decision-making skills
- Awareness of emergencies

4

Improve

- Decision-making skills
- Awareness of emergencies
- Multi-sectoral cooperation
- Communication
- Overall emergency response

The IKT Center Prilep for Data Protection and Disaster Recovery,

The center is a "back-up", that is, a backup base for the important vital information systems in the country, which guarantees that they will function,

if for any reason, the operation of the primary information system is threatened.







The center will preserve data in case of natural or man-made disasters and will enable compatible exchange of information with other institutions.

IKT provide long-term protection of data, cyber security and abuses in the Internet sphere that can seriously threaten national, regional and international security.

GAP analysis

- Low capacity of email OV, PVPs some OV not received important email messages and lab positive results
- Interruption of the electricity supply (stolen cables from the electrical substation) collapse ISFVA (information's system of FVA) during ASF epidemic period
- The websites of state and public institutions should have the basic security certificate.
- Many web services run on outdated applications and platforms.

The biggest challenge is the use AI for CP

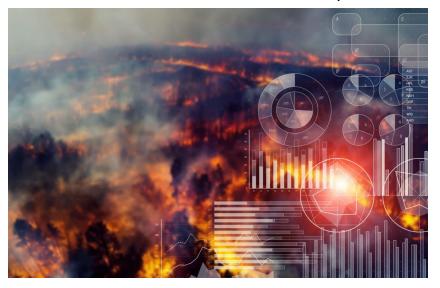
EU AI Act: first regulation on artificial intelligence (AI)

The use of artificial intelligence in the EU will be regulated by the AI Act, the world's

first comprehensive AI law.



As part of its digital strategy, the EU wants to regulate artificial intelligence (AI) to ensure better conditions for the development and use of this innovative technology.



(AI), with a focus on machine learning (ML), is increasingly assuming a vital role in disaster risk reduction (DRR).

It encompasses various aspects such as predicting extreme events, developing hazard maps, real-time event detection, providing situational awareness, facilitating decision support, and more.



Food and Veterinary Agency





Thank you for your attention!

