



Food and Agriculture Organization
of the United Nations



FAO: Using the EIOS system to monitor and track animal and zoonotic diseases

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*FAO AGAH/GLEWS Team, Animal Health Service, Food and Agriculture Organization of the United Nations
Headquarters*

Working for  **#ZeroHunger**

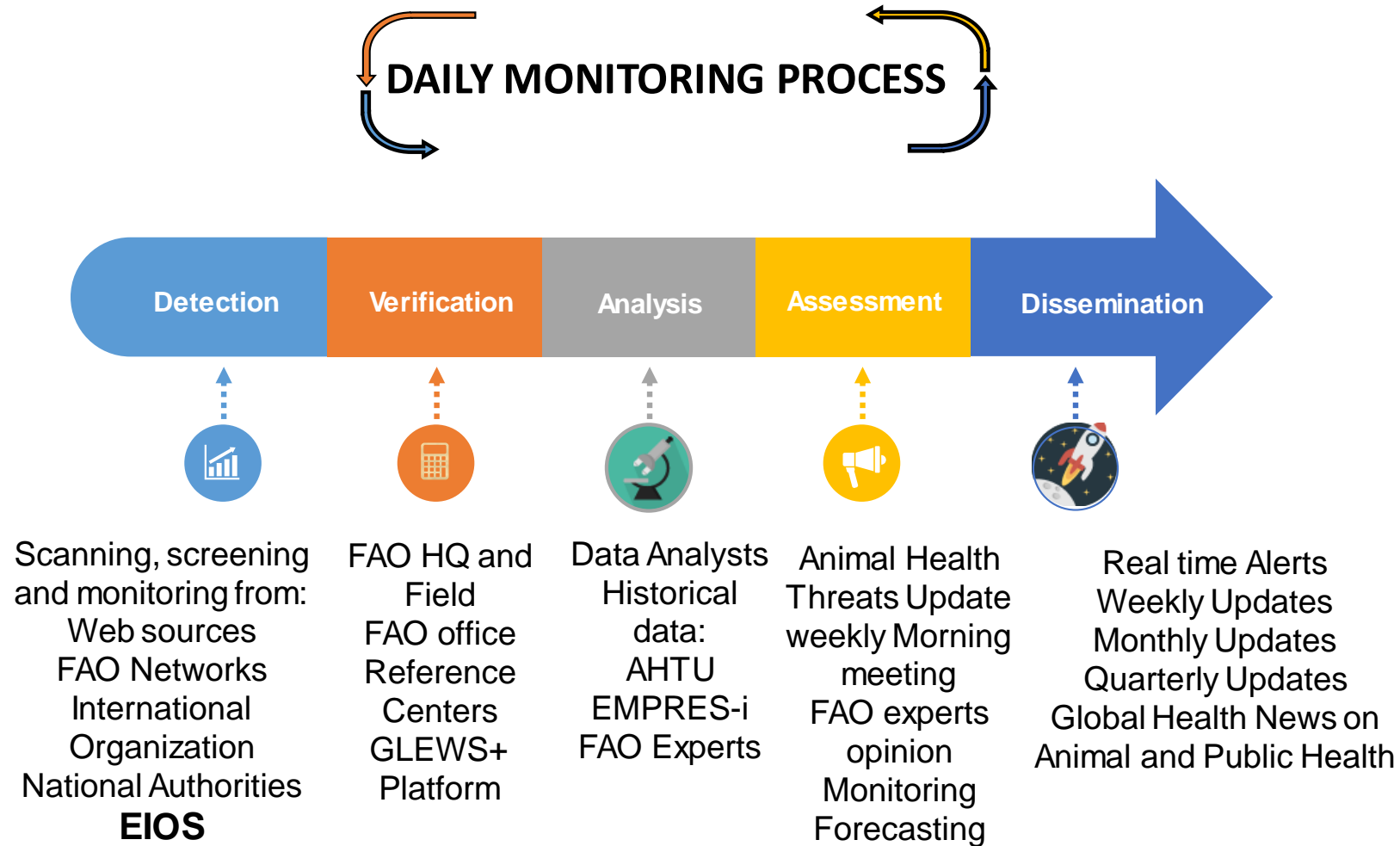
FAO Animal Health Service (AGAH) mandate:

FAO works with countries to develop capacity to **prevent, detect, respond** and recover from high-impact animal diseases, zoonoses, and other threats of animal origin.

Protecting livestock against diseases and preventing their spread is one of the keys to fighting hunger, malnutrition and poverty



Disease Intelligence Workflow



Global Animal Disease Information System – EMPRES-i

Empres-i Global Disease Information System

Food and Agriculture Organization of the United Nations
for a world without hunger

EMPRES-i
Global Animal Disease Information System

Version 1.3.0

MAIN DISEASE EVENT SURVEILLANCE GENETIC MODULE DOCUMENTS DIRECTORY LABORATORIES CONFIGURATION

OUTBREAK SEARCH AND ANALYSIS 05/06/2013 - Larfaoui, Fairouz - (empresi)

Outbreaks Data Periodical Data

Criteria

Find Clear

General

ID / IDs

ID Upload

Entry Off.

Last Mod.

Validated ☒ All ☐ Yes ☐ No

Validator

Workspace ☒ All ☐ Yes ☐ No

Deleted ☐ All ☐ Yes ☒ No

Draft ☐ All ☐ Yes ☒ No

Disease Status and Diagnosis

Status <- click to select Basis <- click to select

Source <- click to select

Unverifiable ☐ All ☐ Yes ☒ No

Tracking ☒ All ☐ Yes ☐ No

Confidential ☐ All ☐ Yes ☒ No

Mobile ☒ All ☐ Yes ☐ No

Time

Observation date from To

☒ Consider Report date if unspecified

Reporting date from To

Creation date from To

Modify date from To

Disease

Clear

☐ Acarapisosis of honey bees

☒ African horse sickness

☐ African swine fever

☐ Akabane Disease

☐ American foulbrood of honey bees

☐ Anthrax

☐ Arena virus

☐ Aujeszky's disease

☐ Avian infectious bronchitis

Geographical Location

Clear

☒ Africa

☐ Americas

☐ Asia

☐ Europe

☐ Not Available

☐ Oceania

Locality

Species Affected

Clear

☒ Domestic

☐ Wild

☐ Captive

Humans Affected ☒ All ☐ Yes ☐ No

Results

Global Animal Disease Information System – EMPRES-i

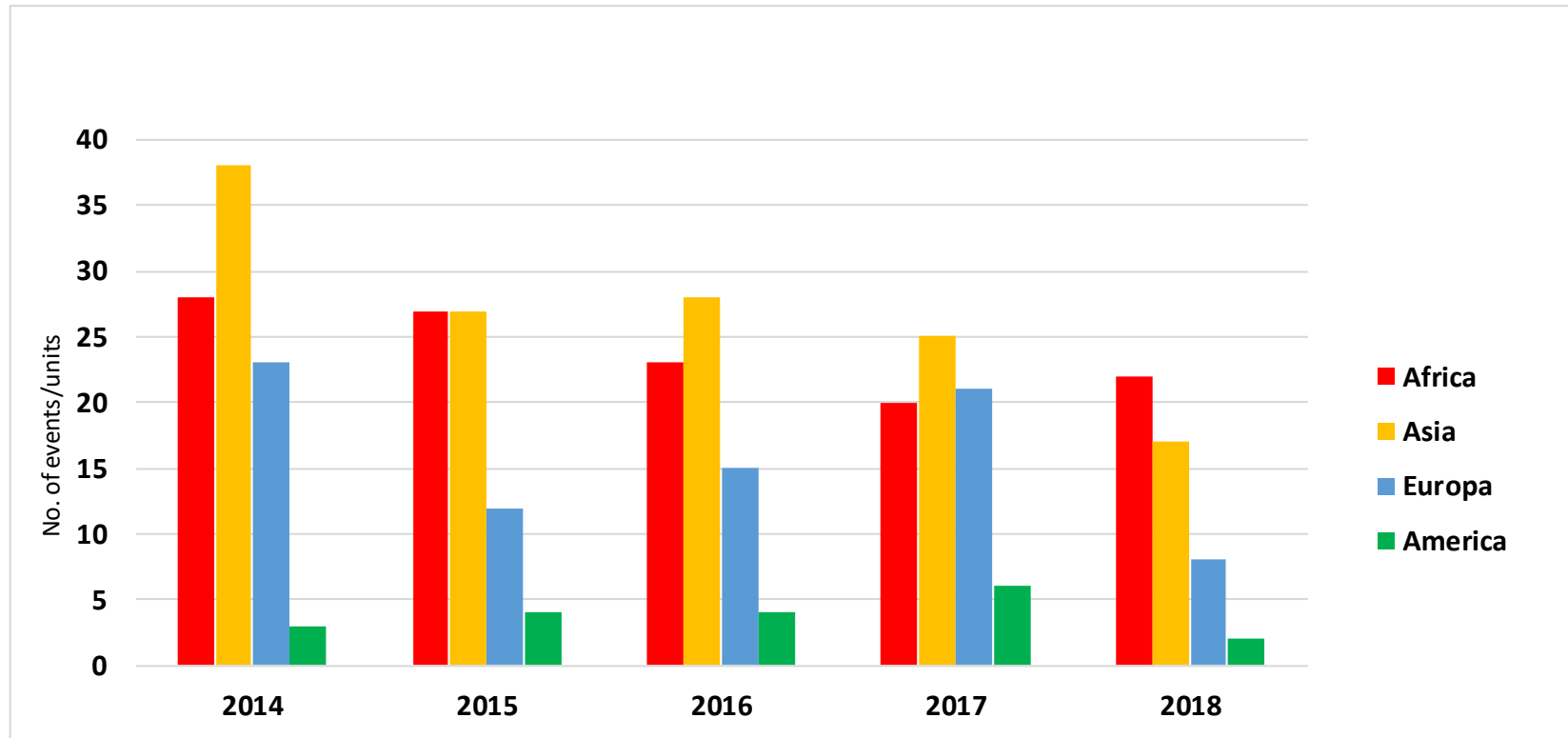
Number of events recorded in EMPRES i

100 000 records (AI, RVF, ASF, FMD and more);

✓ 100 Diseases

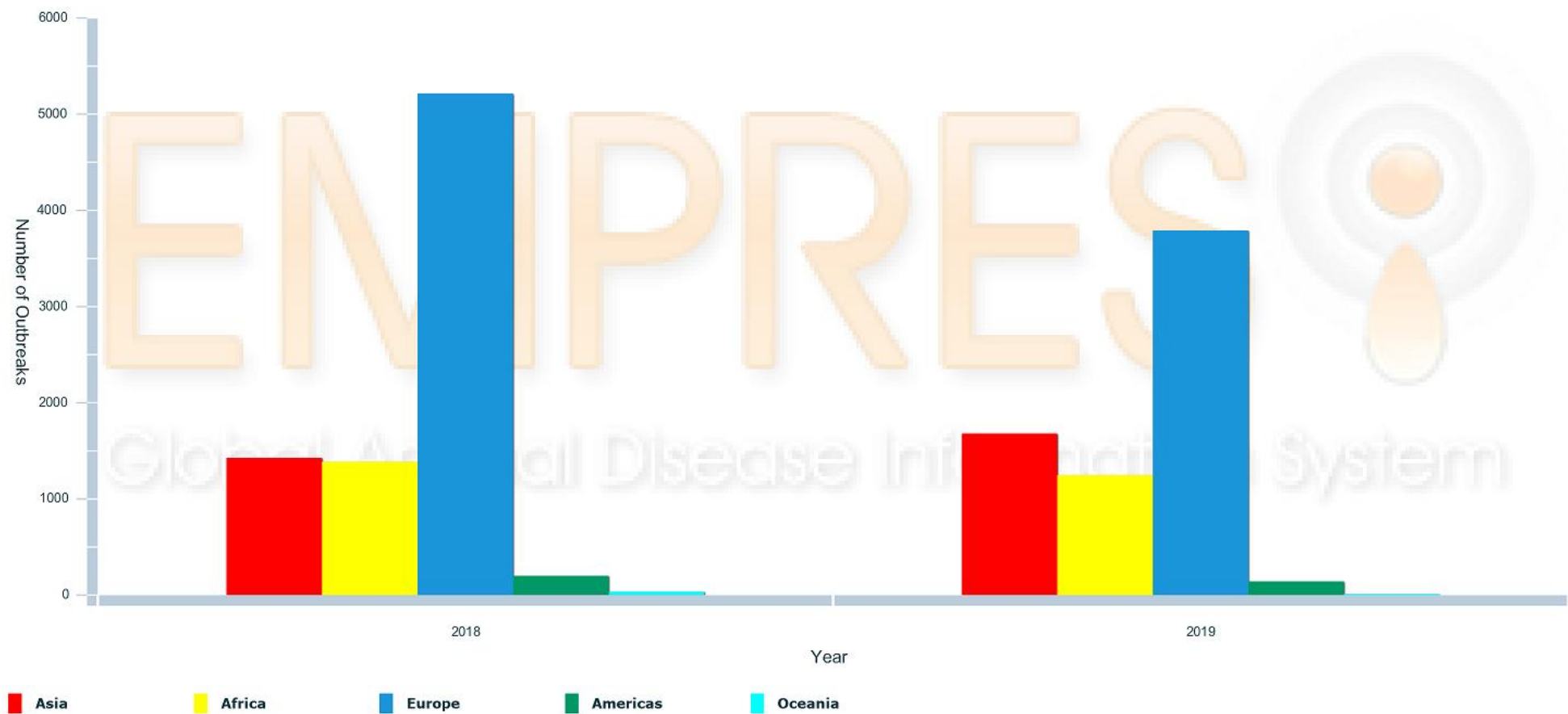
✓ 189 countries

Disease status of events monitored (2010-2018)



Global Animal Disease Information System – EMPRES-i

Number of events recorded in EMPRES i



Priority diseases that are monitored and tracked

Rift Valley Fever

Unknown disease

African Swine Fever

Lumpy Skin Disease

Peste des Petits Ruminants

Foot-and-Mouth Disease

Avian influenza

Middle East Respiratory Syndrome Coronavirus Virus

any new emerging disease event (e.g. Ebola in a new affected country)

Information Sharing - Global

• Global – Disease Updates

- ✓ Animal Health Threats Update
- ✓ Global Health News on Animal and Public Health
- ✓ Real-time alerts (Rift Valley Fever, African Swine Fever, Highly Pathogenic Avian Influenza, Foot-and-Mouth disease)
- ✓ Food Chain Crisis Early Warning Bulletin
- ✓ Early Warning Early Action Bulletin

• Global- Collaboration to FAO AGAH reports/updates

- ✓ Middle East Respiratory Syndrome Coronavirus situation Update
- ✓ Global and Regional AI Updates (Sub-Saharan Africa HPAI; H5N8 HPAI; H7N9)
- ✓ Risk Assessment (RVF)
- ✓ Focus On
- ✓ EMPRES Watch



RIFT VALLEY FEVER IN NIGER

Just received

14/11/2019

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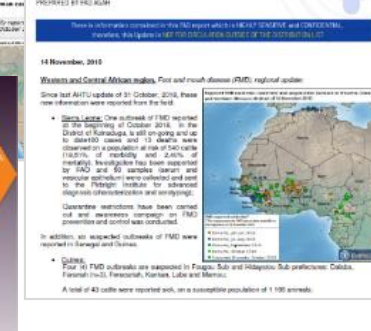
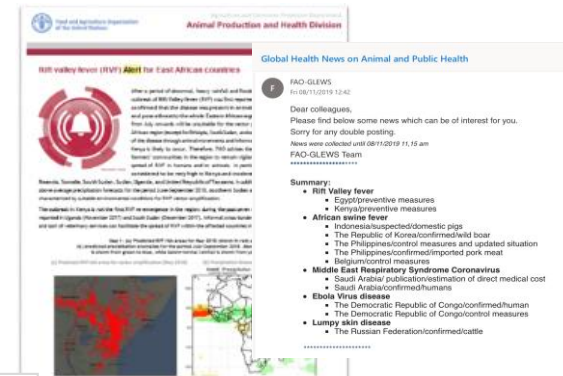
14/11/2019

14/11/2019

14/11/2019

14/11/2019

14/11/2019



FAO community in EIOS



FAO community - 17 users

The diagram consists of two concentric ellipses. The outer ellipse is orange and contains the text 'FAO community - 17 users'. The inner ellipse is blue and contains the text 'FAO GLEWS Team 7 users'. The blue ellipse is positioned in the lower-left quadrant of the orange ellipse, indicating that the team 7 users are a subset of the larger community.

FAO GLEWS Team 7
users

GLEWS + community- Tripartite

GLEWS + community (15 users)



Food and Agriculture
Organization of the
United Nations

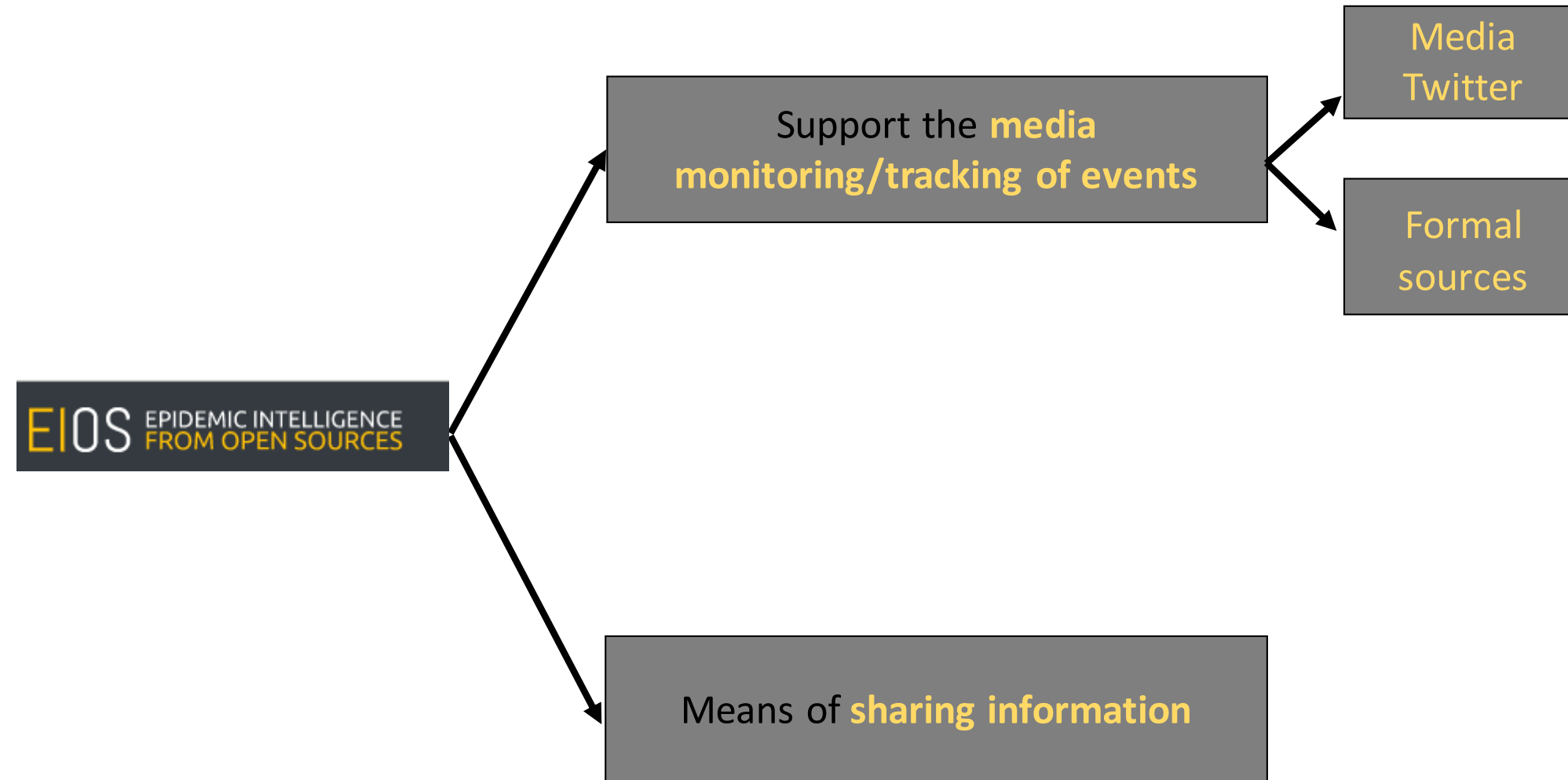


World
Organisation
for Animal
Health



World Health
Organization

Epidemic Intelligence from Open Sources (EIOS)

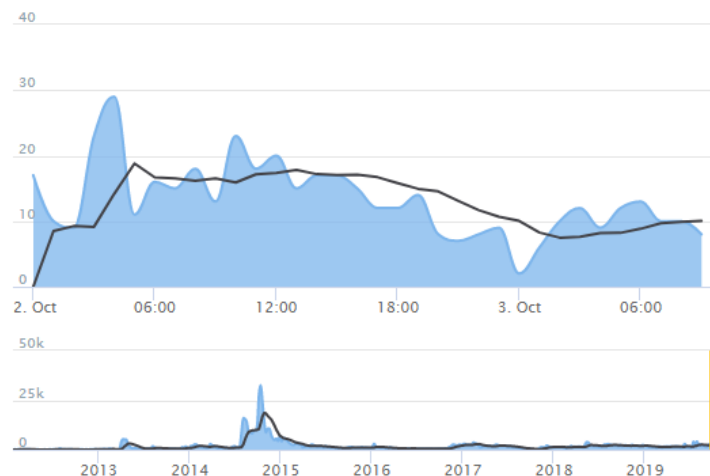


Search text within articles...



TIME PERIOD

Period: (Import Date) Last 1 Days

Last Days until From: To:

Clear Filter ✕

Display stats and filter by Click/drag on the chart to zoom to a period or 

CATEGORIES

African Swine Fever, Avian influenza, Ebola, Foot and Mouth disease, Glanders, Lumpy skin disease, MERSCoV, Peste Des Petits Ruminants, Rabies, Rift Valley Fever Animals, Sheep Pox and Goat Pox, Unknown Disease Animals, Foot and Mouth disease, Rabies



Board: Global Health News on Animal and Public Health



Categories: African Swine Fever, Avian influenza, Ebola, Foot and Mouth disease, Glanders ... +9.

525
TOTAL ARTICLES

of 11

☒ Any article
 Import Date

healthm... 09:34	African swine fever: Boar with virus found in demilitarised zone - BBC News	African Swine Fever, Swine Fever	China, Laos, Mongolia, North Korea ... +3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
nst 09:31	Passengers from ASF-hit countries to undergo strict airport checks	African Swine Fever, Swine Fever	Belgium, Cambodia, China, East Timor ... +10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
santaka 09:22	Agriculture	African Swine Fever	Lithuania	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
myanm... 09:17	Here's how area members of Congress voted Sep. 23-27	Ebola	China, Democratic Republic of the Congo, Japan, Mexico ... +5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
abs-cbn... 09:14	The culling continues	African Swine Fever, Swine Fever	Philippines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
GPHIN 09:09	Ministry of Agriculture and Water to revise health management standards to prevent wild boar from spreading swine fever	African Swine Fever, Swine Fever	Japan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
GPHIN 09:09	Ministry of Agriculture and Water to revise health management standards to prevent wild boar from spreading swine fever	African Swine Fever, Swine Fever	Japan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
bbc 09:07	African swine fever: Boar with virus found in demilitarised zone	African Swine Fever, Swine Fever	China, Laos, Mongolia, North Korea ... +3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
today-ng 08:59	Juventus defender ruled out of Brazil vs Nigeria friendly with injury	Ebola	Bangladesh, Brazil, Nigeria, Senegal ... +5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
GPHIN 08:49	South Korea confirms two new African swine fever cases, now 13 in all as disease spreads	African Swine Fever, Swine Fever	North Korea, South Korea	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
taz 08:26	Fight against Ebola in the Republic of the Congo: with the motorcycle to the front	Ebola	Democratic Republic of the Congo, Republic of the Congo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
yenisa... 08:21	S Korea faces typhoon amid African swine fever outbreak	African Swine Fever, Swine Fever	China, North Korea, South Korea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
who-afro 08:20	United against rabies in the Kingdom of Eswatini	Rabies	Eswatini	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

portal.who.int/eios/#/explore/(FAO/570//sidebar:show)

EIOS

EPIDEMIC INTELLIGENCE
FROM OPEN SOURCES

MonitoringBig Screen MapDocumentsUser Manual

Rojo, Cristina Logout

ActivitiesCommunications

Select board

+

 Exit current board

Current board: Global Health News on Animal and Public Health

Board infoEdit info

BOARD COMMUNICATIONS AND COMMENTS

Communications

1 article(s) selected

Create Message

No discussions available at the moment.

Comments

No comments available.

Add comment...

Post Comment

You are commenting as member of the **FAO community**.
The comment will be visible only to users belonging to the **FAO community**.

Search text within articles...

TIME PERIOD

Period: (Import Date) Last 1 Days

40

30

20

529

TOTAL ART

health 09:34

nst 09:31

santa 09:22

myan 09:17

abs-c 09:14

GPHI 09:09

GPHI 09:09

bbc 09:07

today 08:59

GPHI 08:49

taz 08:26

yenisa 08:21

who-afro 08:20

Create Communication

Related Board

Global Health News on Animal and Public Health

From Team

FAO Members

To Team(s)*

Additional Email(s)

Enter comma seperated email(s).

Subject*

Enter subject

Message*

1 article(s) selected

SubmitClose

Filter definition

Any article

Import Date

African Swine Fever, Swine Fever

China, Laos, Mongolia, North Korea ... +3.

African Swine Fever, Swine Fever

Belgium, Cambodia, China, East Timor ... +10.

Lithuania

China, Democratic Republic of the Congo, Japan, Mexico ... +5.

African Swine

Philin

African Swine fever, Swine Fever

African Swine Fever, Sw

African Swine Fever

Ebola

13 in all

African Swine Fever

Ebola

African Swine Fever, Swine Fever

Rabies

Eswatini

1

1

2

Daily activities with EIOS

- Monitor daily 10 boards capturing information about priority diseases and also unknown diseases
- New boards are created when a new signal is detected in a particular country (e.g. African swine fever Thailand)
- Flagging relevant articles and pinning to boards to follow up
- Sending communications to members of the GLEWS team with attached articles
- Production of reports with articles to inform weekly Animal Health Threat Update Meeting and Global News on Animal and Public Health
- Verification of signals and/or sharing information with other experts at FAO and regional and country offices and partners

Workflow and timeline of FAO GLEWS

Monday

Tuesday

Wednesday

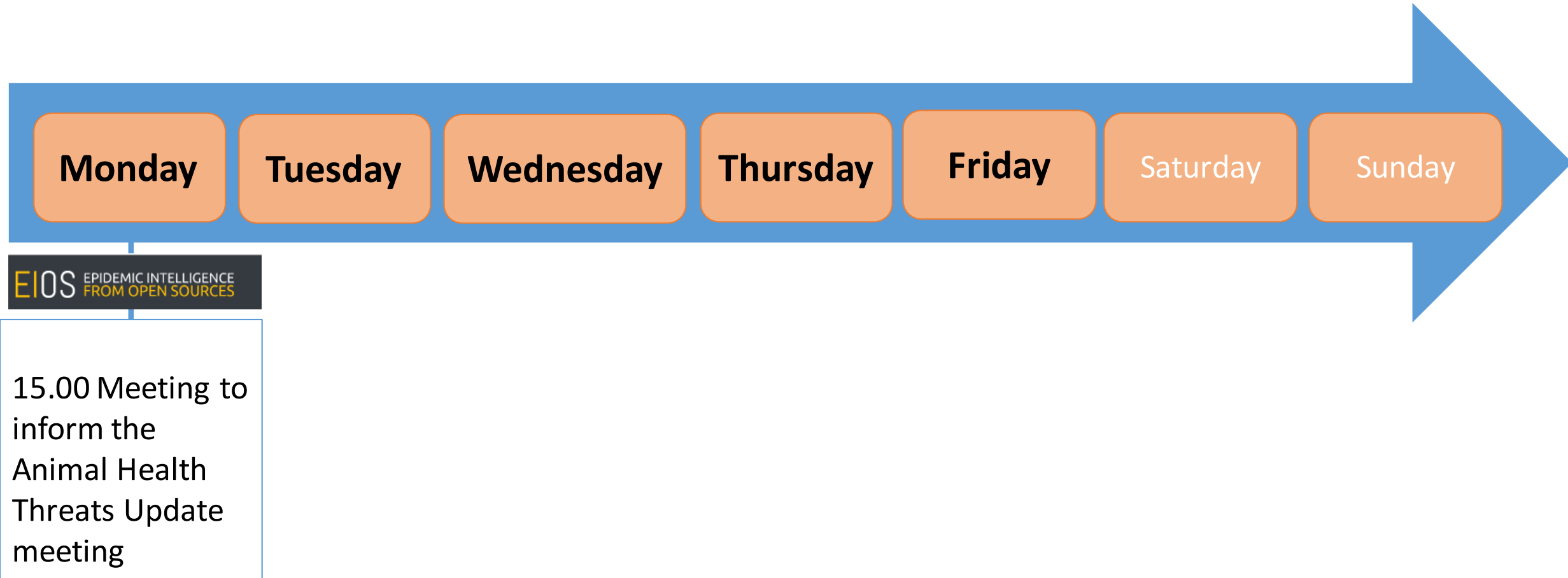
Thursday

Friday

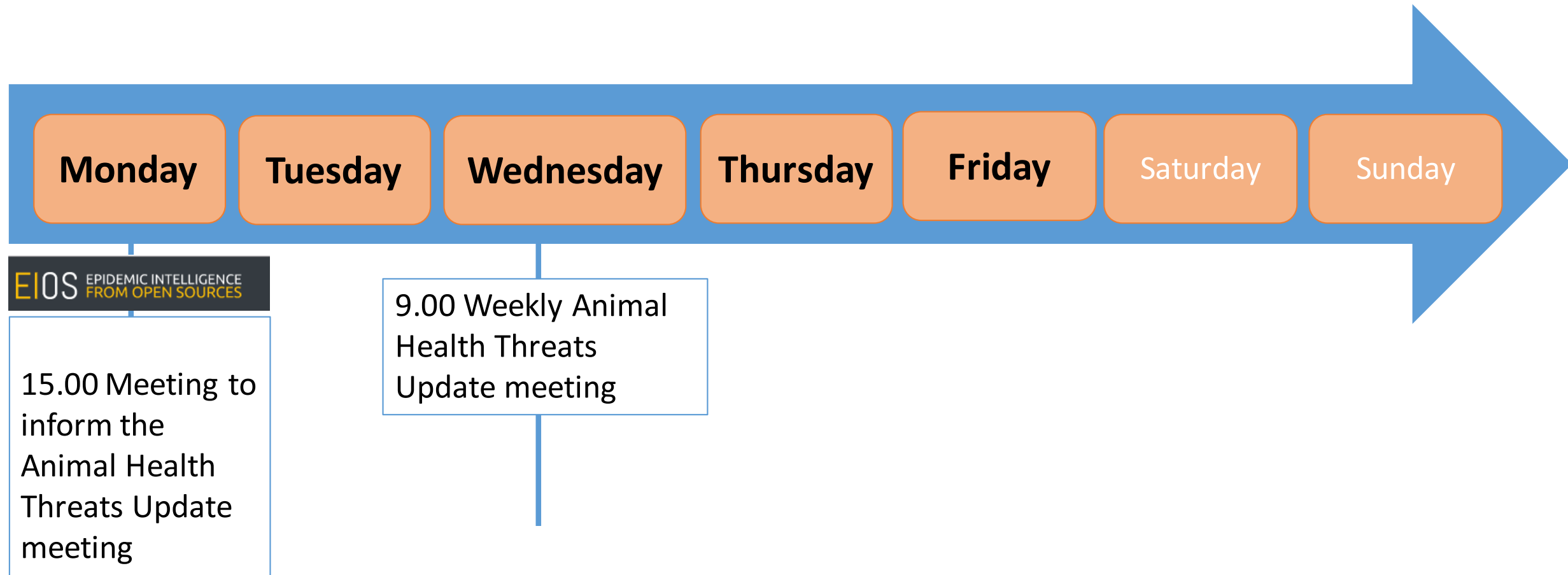
Saturday

Sunday

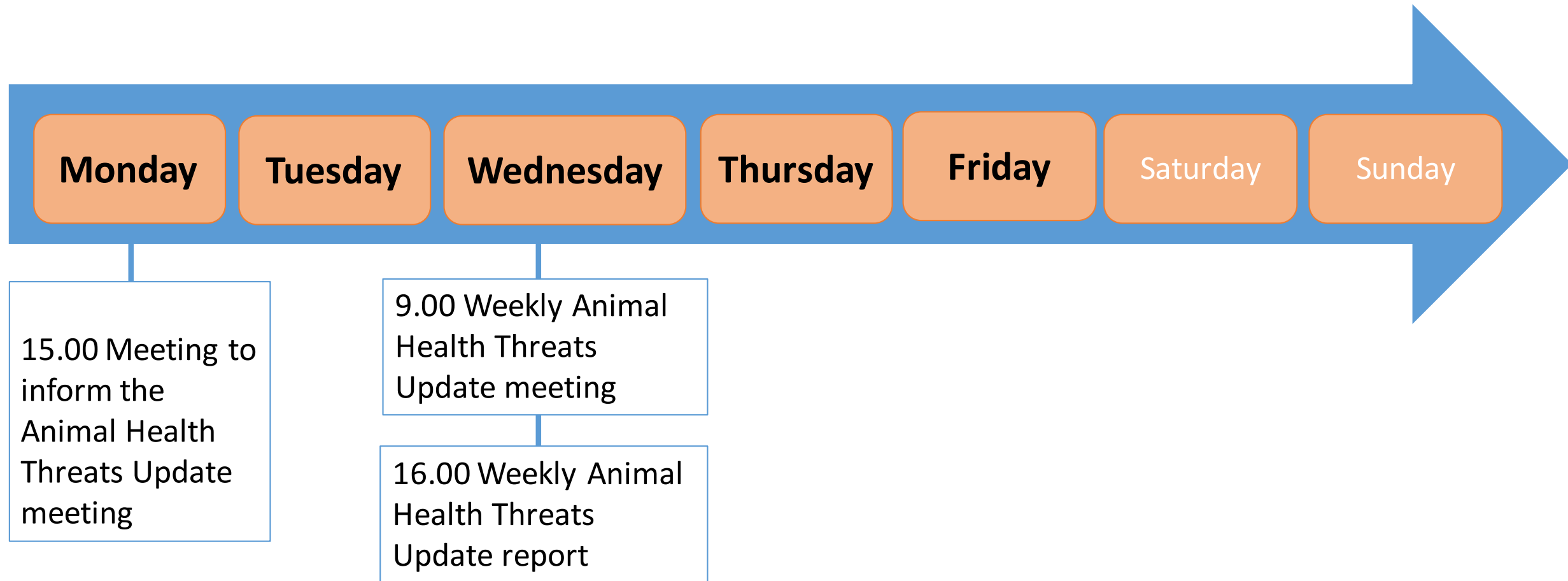
Workflow and timeline of FAO GLEWS



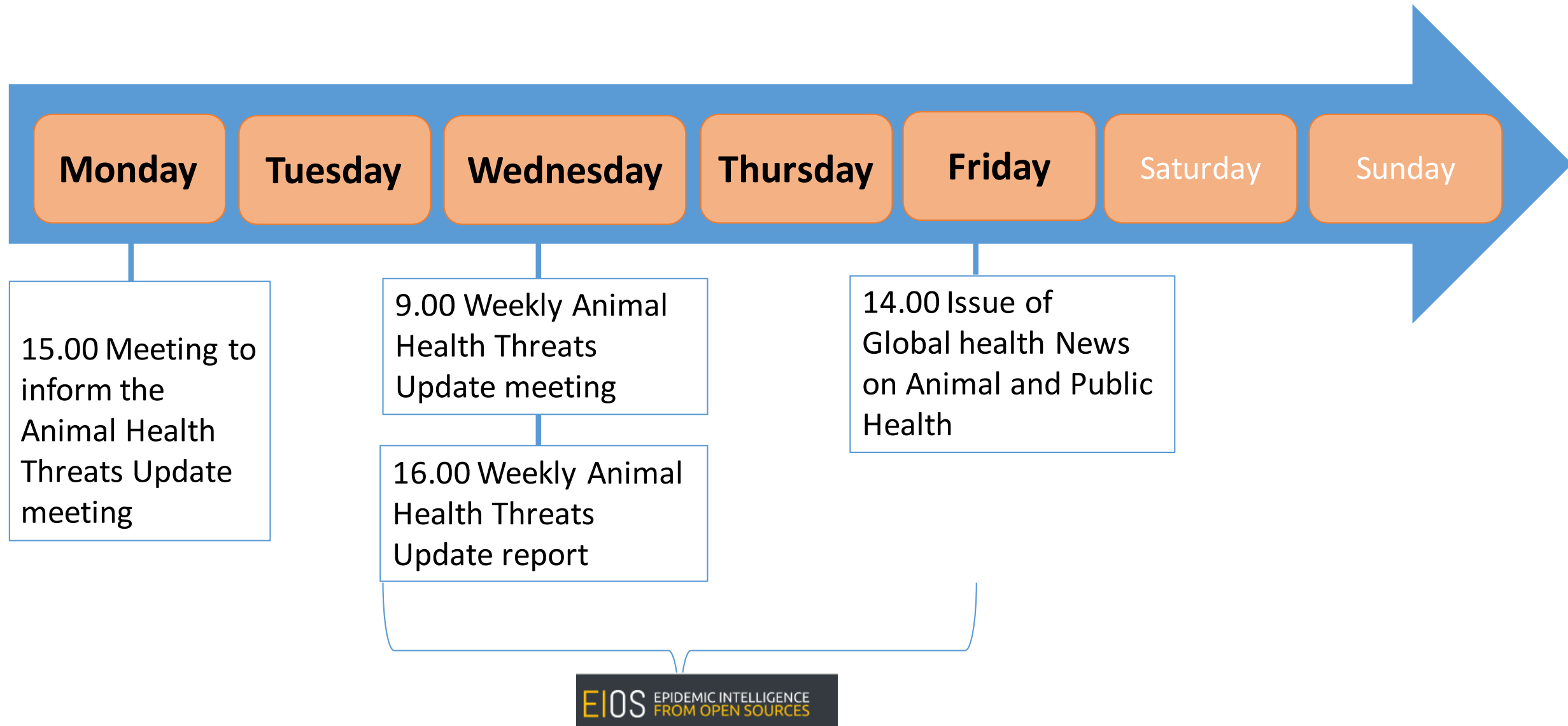
Workflow and timeline of FAO GLEWS



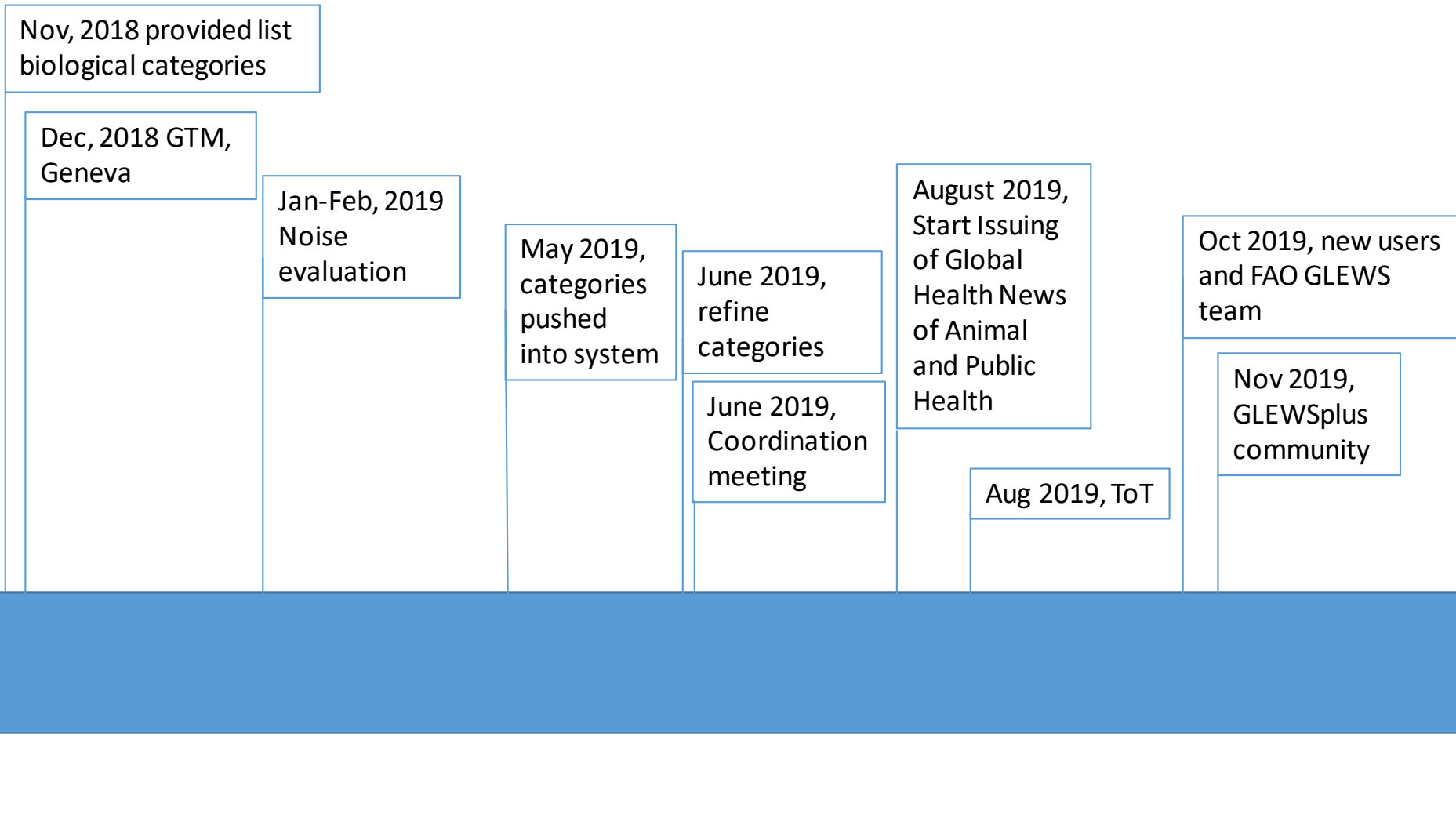
Workflow and timeline of FAO GLEWS



Workflow and timeline of FAO GLEWS



Milestones of the experience with EIOS



Acknowledgements

- Thanks to Elisa Palamara, Mirko Bruni,
- Thanks to the EIOS core team for the support to participate in the 2019 EIOS Global Technical Meeting

Thank you



Protecting people, animals, and the environment everyday

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