BeMVO
Belgian Medicines Verification Organisation

Webinar

ONLINE WEBINAR

Falsified Medicines Directive: Time for an update

FULL EU FMD Webinar October 2023

MEET THE BEMVO TEAM

Philippe

Anne

Evelyne

Yasmine

Kelly

AGENDA

Fundamentals

- EU FMD regulations
- Verification system set-up
- BeMVO
- EMVO
- Transactions in the verification system
- Alerts

Alert Management 2023

Alert Management 2024 & switch to FULL FMD

Question & answer session

Falsified Medicines Directive

Directive 2011/62/EU

TARGET:

preventing counterfeit medicines from entering the legal supply chain

stopping "substandard medicines" = withdrawn or recalled medicines, expired medicines, stolen medicines and medicines that have left the legal supply chain

Falsified Medicines Delegated Regulation

The EU Commission also published operational specifications:

- Delegated Regulation (EU) 2016/161,
- Delegated Regulation (EU) 2021/47
- Delegated Regulation (EU) 2022/315

Falsified Medicines Directive

Regular Q&A updates (further specifying interpretation of Directive)

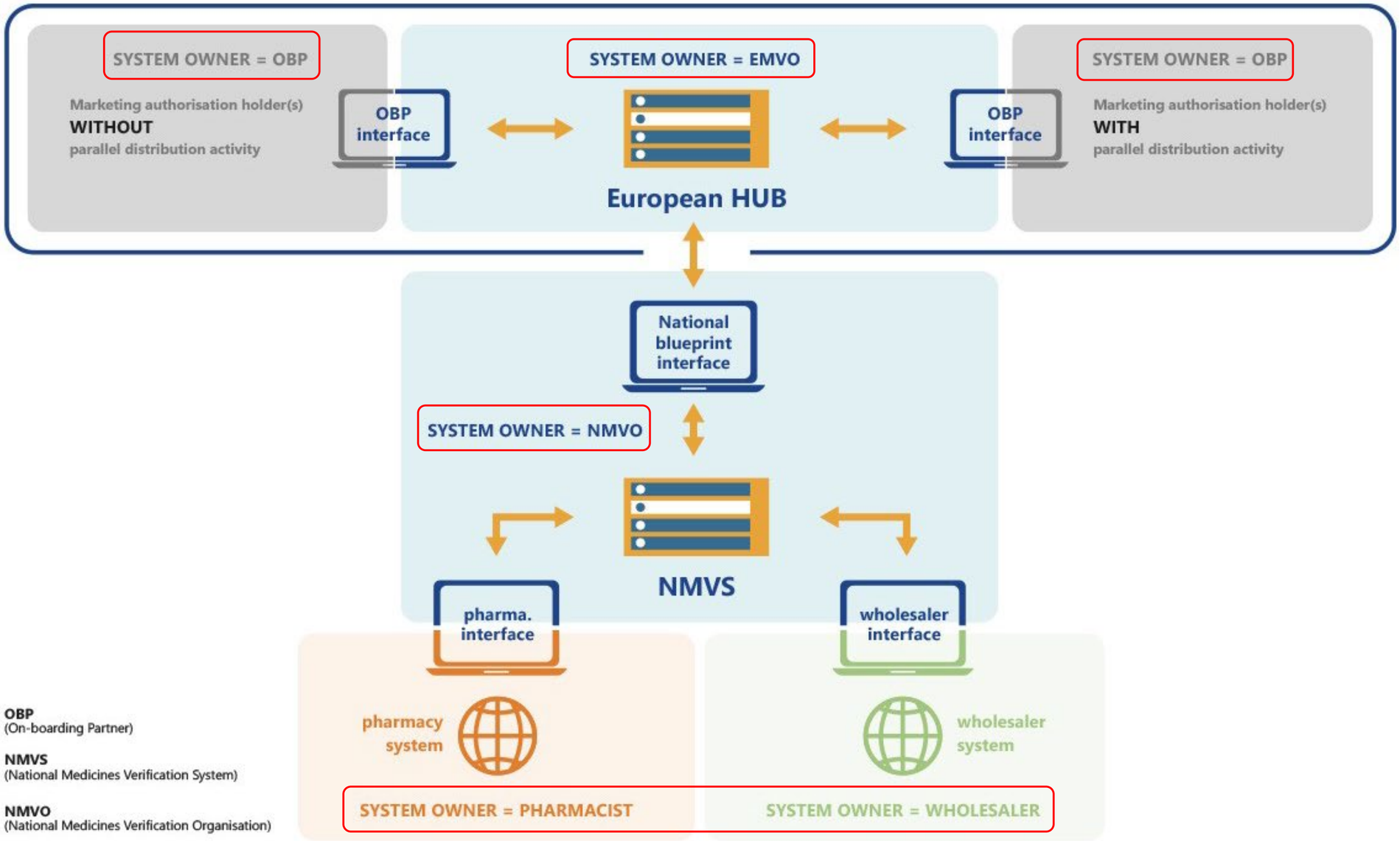
National application:

Circular 637 FAGG/ AFMPS in 2018 due to the deadline of 9 February 2019 for following EU directive for all stakeholders (software vendors, pharmacists, hospitals, wholesalers & MAHs)

Circulars 644 and 647 FAMHP in 2019 due to start & end of transition period

FMD System set up

BeMVO
Belgian Medicines Verification Organisation



OBP
(On-boarding Partner)

NMVS
(National Medicines Verification System)

NMVO
(National Medicines Verification Organisation)

Belgian Medicines Verification Organisation

BeMVO's obligations under the European Directive :

Non-profit organisation responsible for implementation & management Belgian Medicines Verification system

Implementation & management of security procedures (monitoring that only users whose identity, role and legitimacy have been verified can access the database)

Permanent monitoring of verification system for events & alerts that could indicate possible forgeries

Belgian Medicines Verification Organisation

Immediately investigate possible counterfeits and notify FAGG /AFMPS (National Competent Authority)

Conduct regular audits of the verification system

To provide immediately "audit trails" to FAGG / AFMPS when counterfeits are suspected

Make reports available to NCA & RIZIV (for supervision, investigation into falsifications, reimbursement, pharmaco-vigilance and pharmaco-epidemiology)

FAGG /AFMPS supervises BeMVO and the verification system

Belgian Medicines Verification Organisation

The board

Ann Adriaensen
Pharma.be

Antoon Daneels
Medaxes

Marc Gryseels
Bachi

Tanguy Schmitz
Bapie

Michael Storme
APB

Paul Perdieus
OPHACO

Marc De Schepper
BVZA

Céline Driessen
NVGV

European Medicines Verification Organisation

Non-profit organisation responsible for implementation & management of European Hub

Founding members:

EFPIA, Medicines For Europe, **Affordable Medicines Europe**, **PGEU**, **GIRP**

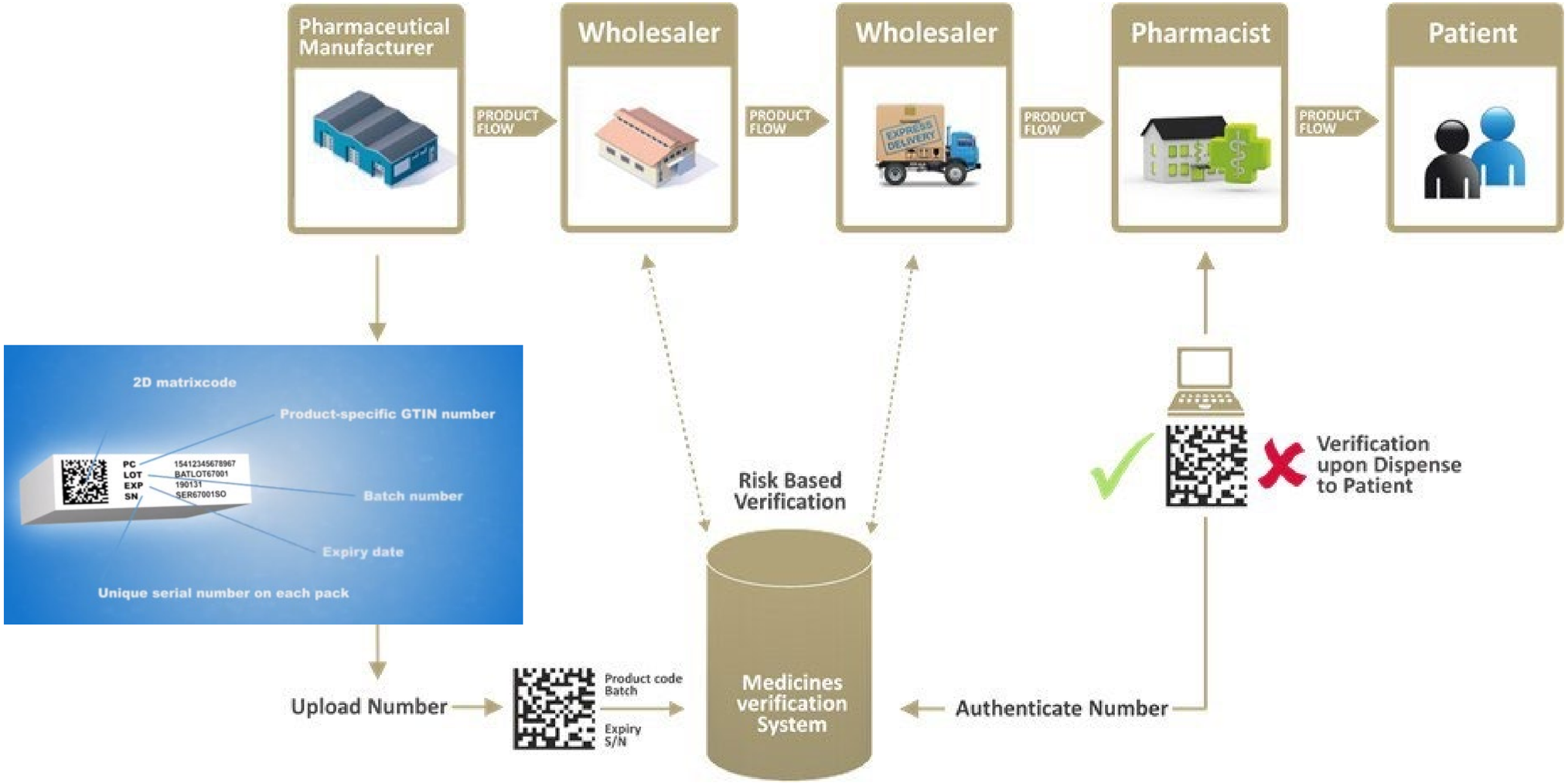
Affiliate stakeholders :

European Association of Hospital Pharmacists, HOPE (European Hospital and Healthcare Federation)

Relationship between EMVO and NMVOs is governed by a cooperation agreement:

- Mutual obligations and possibility of audit
- Principles for funding EMVO by NMVOs

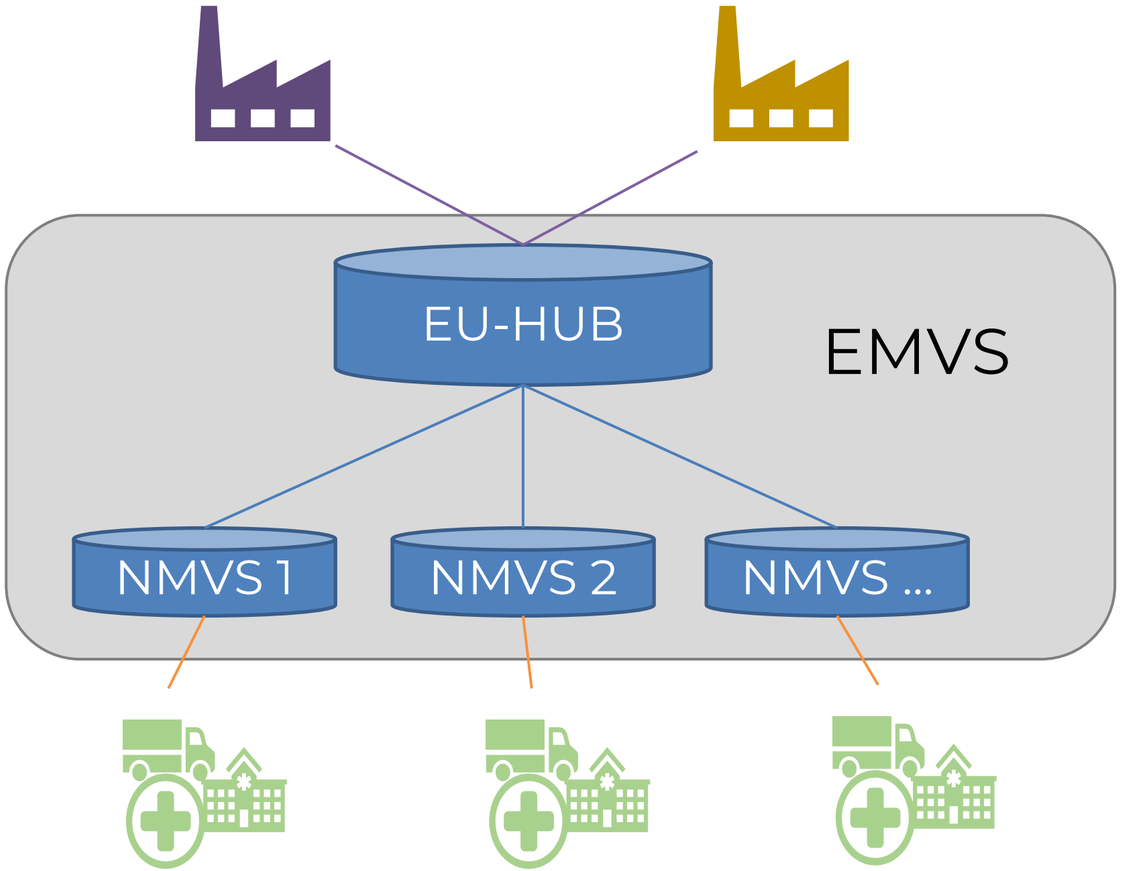
FMD Principles & System



FMD - EMVS

European Medicines Verification System

- EU-HUB + all National Systems
- Distribution of data uploaded by OBPs
- Connects the different national systems
  - Intermarket transactions – IMT
  - Synchronisation for Multimarket packaging
- OBP connection allows verifications & transactions on national systems
- NCAs (Belgium: FAGG/AFMPS) determines who should connect to NMVS
- Alerts caused in NMVS are forwarded to the OBP concerned via the EU-HUB



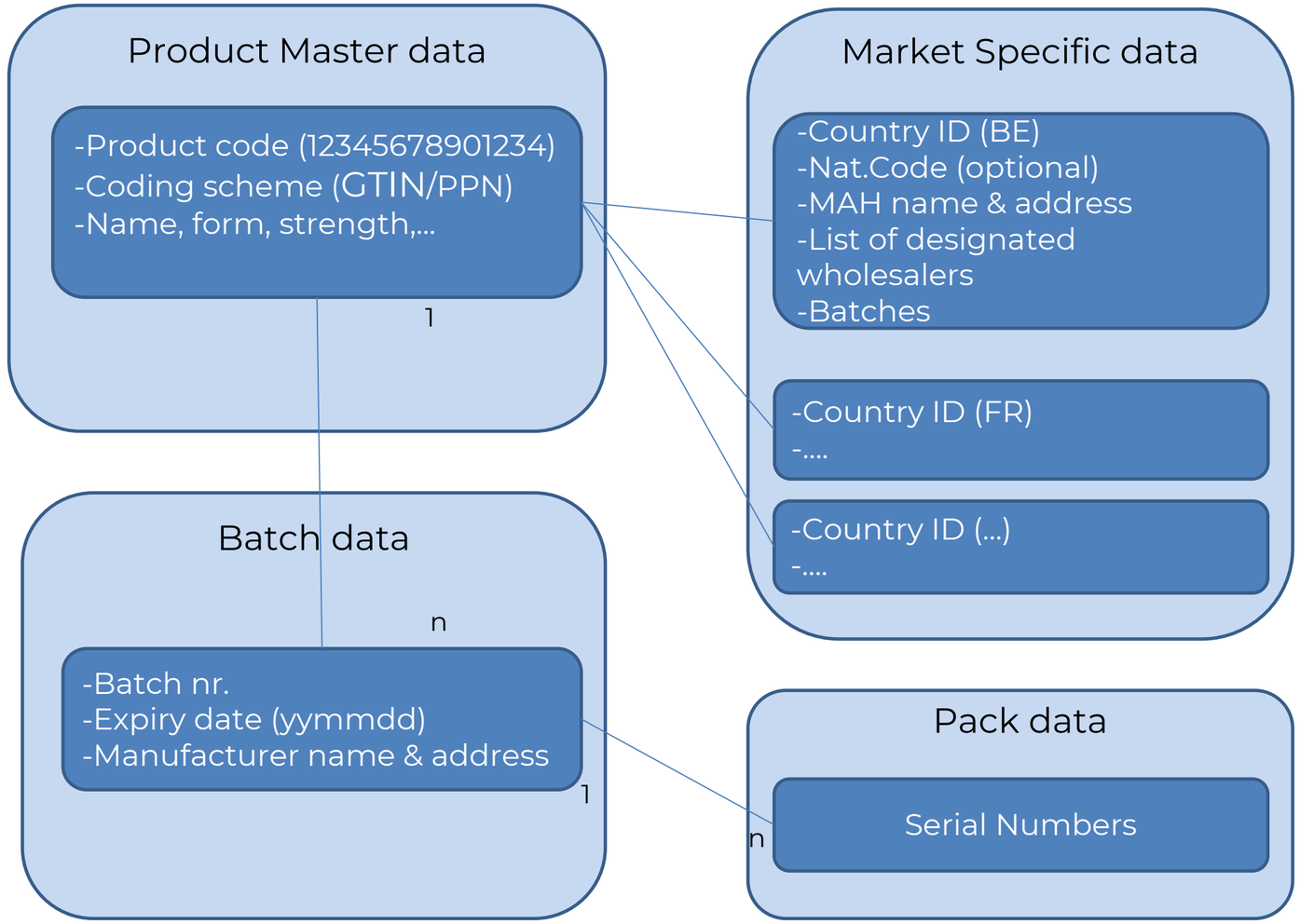
Challenge:

The various NMVOs use either Arvato or Solidsoft Reply as system providers, this requires close cooperation to keep the systems compatible with each other.

FMD Data organisation

Data is uploaded by the OBP

- Stored in the EU-HUB and in the NMVS
  - Product master data
    - General information about the product
  - Market specific data
    - Information per target market with data only relevant to the market concerned
- Only stored in NMVS
  - Batch information
  - Packaging data: list of all serial numbers of each batch



(Simplified representation)

Transactions: what is expected from the wholesaler?

- Verification of each package:
  - Upon receipt of products that were not directly supplied by the MAH/manufacturer or a designated wholesaler (doing contractual distribution for an MAH)
  - Which is returned by a pharmacist
  - Except when packages are moved between warehouses of the same wholesaler/distributor

Transactions: what is expected from the wholesaler?

- Checking out (decommissioning) of packaging :
  - For export outside the European Union
  - Which have been returned and cannot be included in the saleable stock
  - Which are destroyed
  - Requested as samples by the NCA
  - Which are sold to organisations which cannot check out themselves (defence, shipping companies, vaccination centres)

Transactions: what is expected from the pharmacist?

- Verification and check out at the time of delivery of the packaging to the public
- A verification and checking out is also required when:
  - The packaging cannot be returned to the wholesaler/manufacturer
  - The packaging has been requested by the NCA as a sample
- Always check the ATD

Transactions: what is expected from the pharmacist?

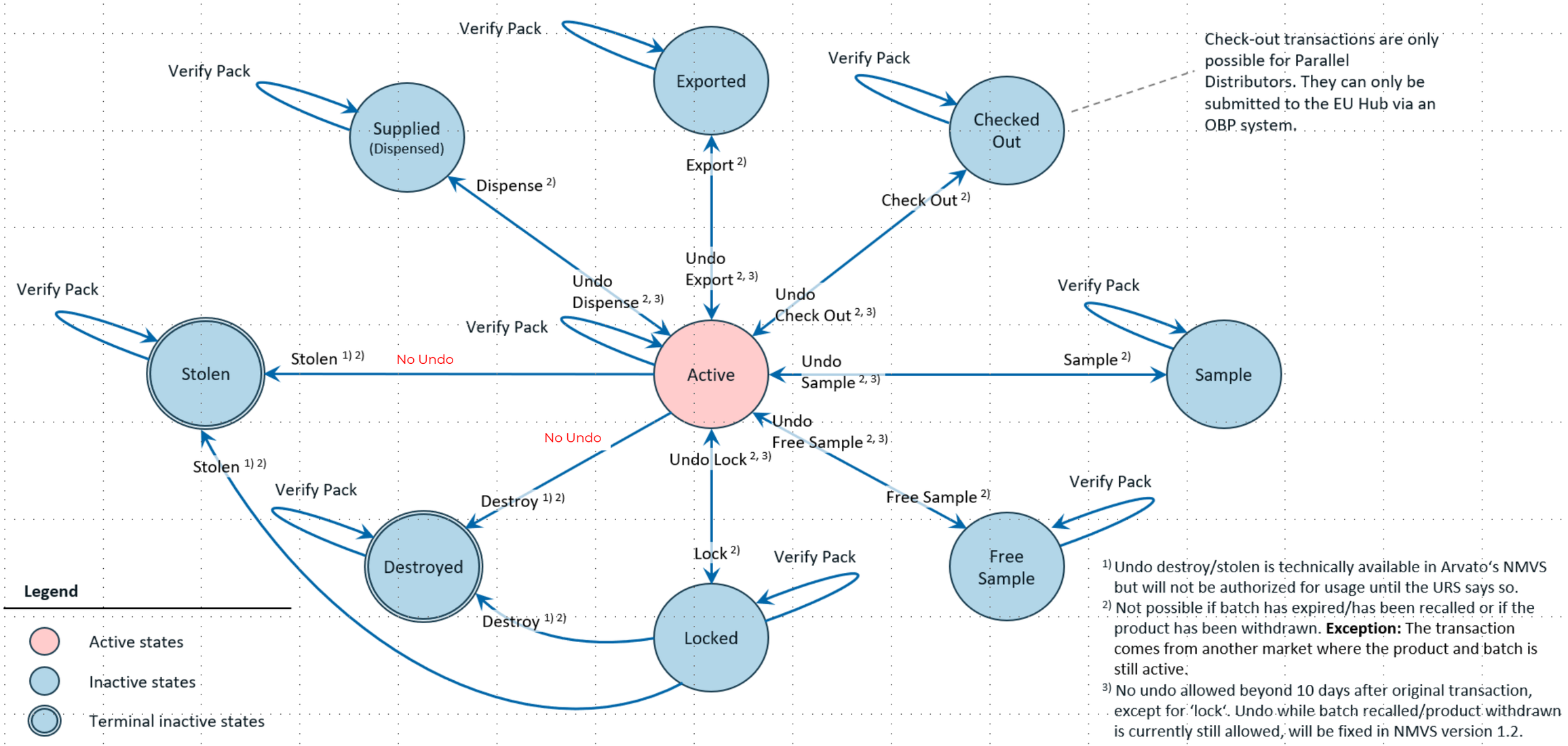
- When only part of the package is delivered, check out package at time of opening
- Verification system not accessible: store & submit verifications & cancellations as soon as system is available again
- No check out of free samples: they must be checked out by the marketing authorisation holder (or designated wholesaler) before distribution

End user transactions

- 5 categories of end users (CLIENT)
  - WHS-BE Wholesaler - Distributors
  - OTH-BE Other companies with a wholesale licence and companies with an IMP licence
  - PHA-BE Public pharmacies
  - HOSP-BE Hospital pharmacies
  - NCA-BE Users of FAGG/AFMPS & RIZIV/INAMI
- Different transaction options per end user category
- User ID
  - Pharmacists P123456 (123456=APB nr)
  - Hospitals H123456 (123456=APB nr)
  - Wholesaler-distributors W00xxxx (XXXX=WDA ID + letter)
  - Other WHS L00xxxx (XXXX=WDA ID+ letter)

Use Case	OBP	OBP-Par.Imp	Wholesaler	Pharmacy	NCA	NMVO
Upload product master data	X	X				
Upload pack data	X	X				
Withdraw product	X	X				
Recall batch	X	X				
Check-out pack		X				
Verify pack status	X	X	X	X	X	X
Dispense pack	X	X	X	X		
Export pack from EU	X	X	X			
Mark pack as Stolen	X	X	X			
Mark pack as Destroyed	X	X	X	X		
Mark pack as Free Sample	X	X	X			
Mark pack as Sample	X	X	X	X		
Mark pack as Locked	X	X	X			

End user transactions



[1] Undo destroy/stolen is technically available in Arvato's NMVS but will not be authorized for usage until the URS says so.

[2] Not possible if batch has expired/has been recalled or if the product has been withdrawn. **Exception:** The transaction comes from another market where the product and batch is still active.

[3] No undo allowed beyond 10 days after original transaction, except for 'lock'. Undo while batch recalled/product withdrawn is currently still allowed, will be fixed in NMVS version 1.2.

End user – Alert codes/messages

“Technical” alerts

- Alerts possibly caused by a technical /IT problem;
- Scanning problem, software problem, …
- Typing error if manual input;
- Problem 2D matrix code;
- Procedural error of MAH: data not uploaded or upload of wrong data.

PC_02:
Unknown serial number
Productcode and batchcode found, but the serial number is unknown.

LOT_03:
Batch ID not found.
The batch ID is not found, although the product code exists.

LOT_13: The batch id does not match with the serial number in NMVS.
The serial number was found with a different batch ID for this production code

LOT_12:
Expiry date does not match with date in NMVS.

End user – Alert codes/messages

“Process” alerts

Alerts where the likely cause is a procedural error:

- by the user himself: scanned the same package several times, …
- by another user: the package was checked out by another user, scan of a free sample, …

In these cases, the transmitted data exists

PCK_19:
Property is already set on the pack.
This pack has already been set to this property by another user and therefore immediately issues an alert; OR the pack was already set to this property by the same user and that user tried multiple times to reset the property - in this case, the user first receives the NMVS_NC_PCK_23 messages.

PCK_27: Packaging is already "inactive" (IMT) Same as PCK_22 but for foreign packaging.

PCK_22: Packaging is already "inactive“

The package is already deactivated and is in a state other than the target state, set by the user himself or by another user.

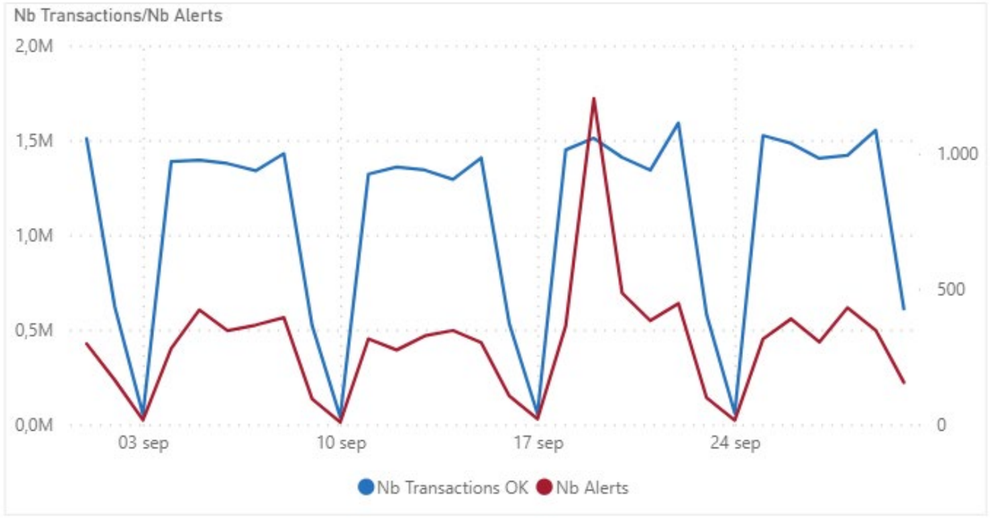
PCK_06: Pack status does not match undo status
The current pack status does not match undo transaction (current pack status & undo transaction must be equivalent).

Alert Management 2023

FULL EU FMD Webinar October 2023

Belgian Alert rates

ClientId	Nb Transactions	Nb Alerts	Alerts Rate
OTH-BE	1708366	1.952	0,11 %
HOSP-BE	1052680	1.198	0,11 %
WHS-BE	420158	340	0,08 %
PHA-BE	29732590	5.534	0,02 %
Totaal	**32913794**	**9.024**	**0,03 %**



All alerts generated by BE users		Week				
		2023-31	2023-32	2023-33	2023-34	2023-35
NMVS_FE_LOT_03	Failed to find a batch for the given data.	139	36238	118	900	92
NMVS_FE_LOT_12	Expiry date does not match the date held in the	8	4	0	8	4
NMVS_FE_LOT_13	The batch ID does not match the serial number i	235	285	161	223	256
NMVS_NC_PC_02	Unknown serial number.	234	286	187	265	255
NMVS_NC_PCK_06	Actual pack status doesn't match the undo transaction (set an		19	5		9
NMVS_NC_PCK_19	Property is already set on pack.	918	924	1188	1067	962
NMVS_NC_PCK_22	Pack is already inactive.	179	147	293	94	105
NMVS_NC_PCK_27	Pack is already inactive - IMT	96	1971	22		
Totaal alerts		**1809**	**39874**	**1974**	**2557**	**1683**
		0,03%	0,60%	0,04%	0,04%	0,03%
Totaal aantal transacties		**6.535.959**	**6.640.402**	**5.458.011**	**6.948.177**	**6.716.557**

12 September 2023

Alerts from LU users		Week				
Return Code	**Return Code Description**	**2023-31**	**2023-32**	**2023-33**	**2023-34**	**2023-35**
NMVS_FE_LOT_03	Failed to find a batch for the given data.	67	15	1	6	9
NMVS_FE_LOT_12	Expiry date does not match the date held in the NMVS.					
NMVS_FE_LOT_13	The batch ID does not match the serial number in the NMVS.	69	11	14	11	8
NMVS_NC_PC_02	Unknown serial number.	48	26	13	14	22
NMVS_NC_PCK_06	Actual pack status doesnt match the undo transaction.			1		
NMVS_NC_PCK_19	Property is already set on pack.	101	61	70	79	65
NMVS_NC_PCK_22	Pack is already inactive.		1	2	1	1
NMVS_NC_PCK_27	Pack is already inactive. (IMT)					
	Total	**285**	**114**	**101**	**111**	**105**
	% Alerts	0,06%	0,04%	0,04%	0,04%	0,04%
	Total Transactions	**451087**	**282071**	**227365**	**262814**	**267167**

Alert distribution by return code August 2023

ReturnCode	Nb Alerts	ReturnCodeDescription
NMVS_NC_PCK_19	2.402	Property is already set on pack.
NMVS_NC_PC_02	790	Unknown serial number.
NMVS_FE_LOT_13	740	The batch ID does not match the serial number in the NMVS.
NMVS_FE_LOT_03	87	Failed to find a batch for the given data.
NMVS_NC_PCK_22	30	Pack is already inactive.
NMVS_FE_LOT_12	13	Expiry date does not match the date held in the NMVS.
NMVS_NC_PCK_06	2	Actual pack status doesn't match the undo transaction (set and undo status must be equivalent).

Double check out

Currently, a double check out causes an alert on the 4th scan OR after 3 months → when the scan is done by the same user

Double scan by different user ALWAYS triggers an alert

Alert Management Procedure - 2023

Current situation

- No products in quarantaine
- Check a postiori

Richtlijn Vervalste geneesmiddelen: einde van de overgangsperiode en begin van controleacties

Datum: 30/08/2019

De overgangsperiode voor de implementatie van de Richtlijn Vervalste geneesmiddelen (FMD, Falsified Medicines Directive) eindigt op 1 september 2019. Vanaf dan worden alerts centraal geëvalueerd en start het FAGG met controleacties waarbij overtredingen of non-conformiteiten zullen worden opgevolgd.

Centrale evaluatie van alerts

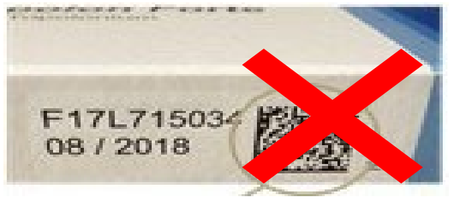
Valse alerts kunnen nog altijd voorkomen bij het scannen van de verpakking door de apotheek, groothandelaar of fabrikant. Het gaat daarom niet altijd om een vervalst geneesmiddel. Ook dubbele scans of gekende problemen met de codering van de vervaldatum kunnen alerts geven. Na overleg tussen het FAGG en BeMVO is besloten dat BeMVO alerts in eerste lijn zal filteren en evalueren. In afwachting van die evaluatie kan een verpakking die een alert geeft toch worden afgeleverd door de apotheker of verdeeld door een groothandelaar-verdeler. Wanneer de alert niet kan worden verklaard door een gekende oorzaak zal het FAGG dit verder onderzoeken.

Het blijft dus van groot belang dat apothekers alle afgeleverde verpakkingen scannen en zo een correcte traceerbaarheid garanderen. Het gaat hierbij ook om geneesmiddelen die niet op voorschrift werden afgeleverd en toch een tweedimensionele matrixcode moeten dragen (bijvoorbeeld voor mogelijke terugbetaling). Op die manier kan de apotheker, bij het vaststellen van een probleem door BeMVO en FAGG, zijn verantwoordelijkheid nemen en wanneer nodig de patiënten die het geneesmiddel hebben ontvangen zo snel mogelijk contacteren om dit terug te roepen. De apotheker blijft dus verantwoordelijk voor de afgeleverde geneesmiddelen.

Alert Management

Pre 9/2/2019	Forecast was that alerts would be exceptional, reality was different
FEB-AUG 2019	Official transition period in Belgium to make all necessary efforts to minimise the number of false alerts: MAHs had to solve their data upload problems; end users their technical/scanner problems…
SEPT 2019	Still high number of 'false alerts'30/08/2019: FAGG/AFMPS guideline publication (see previous slide): - A postiori examination of alerts by BeMVO - End user does not have to quarantine packaging - However, end-user remains responsible when packaging is delivered with an alert - Further focus on structural problems to further reduce the number of alerts - 0.05% alerts is set as a target to move to a Full EU FMD implementation and a quarantine requirement for products with an unresolved alert
2021	BeMVO starts “Kennisgeving/Notification project” Goal: Inform end-user about possible cause of each alert and actions to take to avoid them. Under this approach too, the end user is expected to take responsibility when no technical or procedural error could be identified on his part.
2024	**FULL ALERT MANAGEMENT as stipulated by the Delegated Regulation and confirmed by AFMPS**

Alert management procedure - 2024

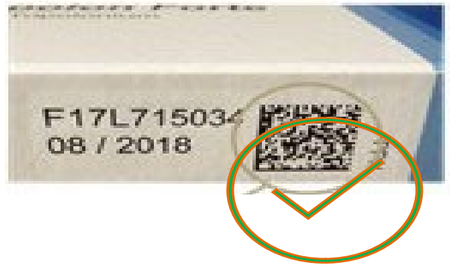


Alert

Pack in QUARANTAINE

Technical-or procedural error of MAH or end user ?

YES



NO

Escalation to NCA possible falsification

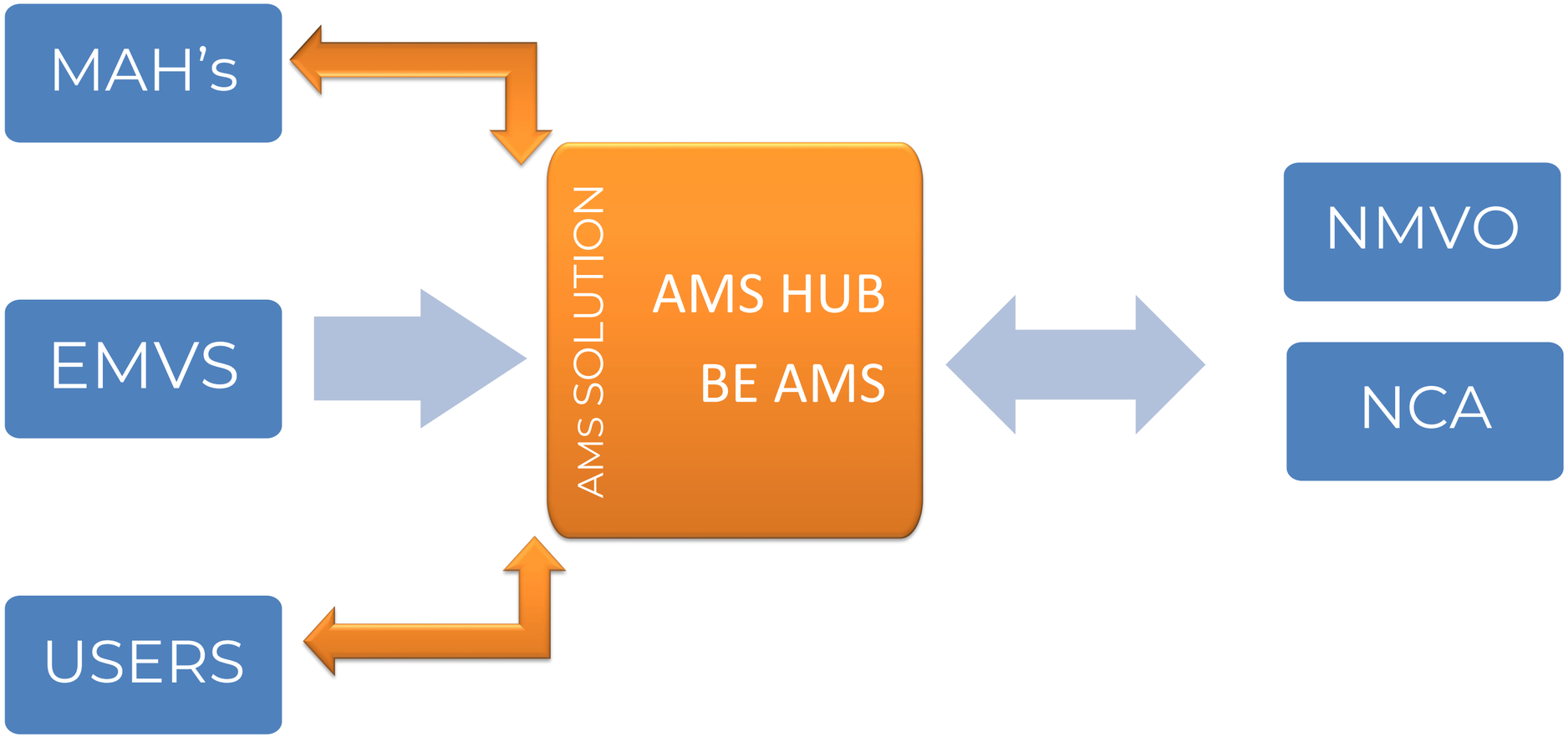
On alert :

1. Packaging is kept apart
2. Immediate investigation by end-user and MAH, verify whether the alert was caused by :

- a 'Technical error' (scanner/SW problem, failed data upload, ...); or
- a 'Procedural error' (scan the same package multiple times, scan free samples, data upload not done, ...) error

3. Possible information exchange between end-user and licence holder to 'solve' the alert (e.g. end-user provides a picture of the package to MAH, ...)
4. If no progress is made within 2 working days or if no cause for the alert is found, BeMVO contacts end user and MAH to speed up the investigation
5. If no solution is found after 5 working days or no technical or procedural error is found by end-user/MAH is automatically escalated to FAGG /AFMPS

An alert management system is installed to facilitate the handling of alerts.



When should packaging be quarantined?

SN and/or lot number unknown or do not match (until the MAH has correctly uploaded the data in the EU-HUB and the package can be successfully decommissioned)

The expiry date is different from the data stored in the NMVS (until the MAH has correctly uploaded the data in the EU HUB and the package can be decommissioned)

Packaging already decommissioned (same condition or different condition)

Exception for pharmacist when he knows the reason (cause on his side) and confirms that the product is genuine

When will an alert be escalated to the FAGG / AFMPS?

MAH and end user claim that they are not the cause of the alert, the end user should in this case immediately escalate to the NCA

End users or MAH's often cause the same alerts

MAH applies for derogation (e.g. cannot correct incorrect upload)

Alert was not closed within 5 working days

When can end user deliver packaging after alert was caused?

- End-user declares "**Cause on my side**" and enters in the comments section how the problem was solved:
  - The package was correctly decommissioned after the alert was triggered
  - Decommissioning after a successful undone decommissioning
  - Successful re-scan after technical problem
  - Successful manual entry of GTIN, SN, batch number and expiry date after technical problem
  - The pharmacist (no other end-users) acknowledges making a procedural error (double scanning within his pharmacy) and undoing the decommissioning was not possible (10 days have passed). The pharmacist testifies that the product is genuine.
  - The pharmacist (no other end users) received the product from another pharmacist and knows which pharmacist he received the product from (double scan in 2 different pharmacies). The pharmacist testifies that the product is genuine.
- **Successful re-scan after the batch is correctly downloaded by the MAH, if the MAH has not yet closed the alert, the NMVO will close the alert**
- **FAGG / AFMPS closes the alert and adds in the comments that the package can be delivered = derogation**

BeLux timelines switch to Full FMD

- In mid-2022, in consultation with the NCA, it was decided to move to full implementation of the EU FMD
- Contract with Alert Management System (AMS) service provider was signed in May 2023
- Link AMS - EAMS is made in June 2023
- End-user connection AMS was made possible in July 2023
- FAGG / AFMPS was linked to AMS in August 2023
- 6 end users (together with NCA) are currently testing the AMS system, feedback is positive
- In September and October, 18 webinars are organised by BeMVO to inform end-users and MAHs on full EU FMD implementation
- A second round of webinars will be organised before the end of the year (in collaboration with software vendors)
- The FAGG / AFMPS circular is expected to be published before the end of November

Options to connect local MAHs to the Belgian NAMS

Connecting MAHs in Belgium to NAMS

(Option 1)

nmvsalerts

Onboarding to NAMS by BeMVO

- Login to Belgian NAMS via Credentials
- All Belgian alerts of MAH available
- NMVO sees update in real time
- Initial onboarding of MAH by BeMVO
- Limitation to one user per MAH
  (cost free!)
- No bulk functionality available

Connecting MAHs in Belgium to NAMS

(Option 2)

nmvsalerts

Using NVMS Alerts as AMS

- No separate login to Belgian NAMS necessary
- All FMD Alerts of all countries in one system
- Full powerful functional scope
  (Alert resolution on Batch Level, bulk handling, reporting, etc.)
- No administration on BeMVO necessary
  Cost: see TCK NMVS Alerts website

https://www.nmvs-alerts.com/prices-mah

Connecting MAHs in Belgium to NAMS

(Option 3)

Using EMVO EAMS solution

- All MAH relevant FMD Alerts available
- No administration on BeMVO necessary

Free of charge

Advantages for OBP's and MAH to connect to National AMS or EAMS

- Increase the chance that falsifications are stopped from being dispensed.
- Compliance with Belgian and Luxembourg requirements.
- Direct communication between all stakeholders on each alert.
- Most of the alerts can be closed by end-users without intervention of MAH or OBP.
- MAH's and OBP's get a comprehensive overview on all the alerts on their products
  - Incident management
  - Bulk alert management
- No need for e-mail management (reduce the number of hours spend on each alert)
- Easy documentation and picture request.
- OBP and MAH can focus on the alerts that cause quarantine issues so that products can be released from quarantine as soon as possible.
- OBP's and MAH's get a high degree of support by NMVO's to manage their alerts.

Recalls and Withdrawals

Which procedure should be followed to recall or withdraw a product from the Belgian and/or the Luxembourg market?

- The Medicines Control Service (DGO / SCM) from the Belgian Pharmacists organisation (APB) organises the withdrawal of the market (Belgium and the Grand Duchy of Luxembourg) of non-compliant products, of products with cessation of commercialisation or deletion/suspension of registration/authorisation.

- The marketing authoristion holder needs to provide all necessary information on the recall or withdrawal by e-mail to dgo_scm@apb.be by using one of the following standard forms.

- https://www.apb.be/SiteCollectionDocuments/SCM-DGO%20DOCUMENTS/BROCHURE-DOCUMENT-RETRAITS-INTREKKINGEN/Formulier-Interactief-Intrekkingen-DGO.pdf

- https://www.apb.be/SiteCollectionDocuments/SCM-DGO%20DOCUMENTS/BROCHURE-DOCUMENT-RETRAITS-INTREKKINGEN/Formulaire-Interactif-Retraits-SCM.pdf

Points of attention when putting recalls and withdrawals in Belgium and Luxemburg on the EMVS

- This system does NOT replace the APB sytem
- Recalls and withdrawals should only be put on the EMVS system AFTER they have been published by APB
- This action cannot be undone!
- Only for the full market!
  - No split between Belgium and Luxemburg
  - No split between wholesalers, hospitals and pharmacies
- Only for Rx or reimbursable products

Questions?