



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

Product Lifecycle Management Value Stream Deep-Dive Webinar

30 November 2023, 14:00 – 16:00 (CET)





Please note that **this session is being recorded** and **will be made available** through **EMA Corporate Website and YouTube channel.**



At certain points throughout the session, participants will be able to ask questions or give their input via the audience interaction tool **Slido**.

Interaction via Slido is voluntary, and you may opt to remain anonymous. If you chose to use Slido, **you consent to the processing of your personal data** as explained in the [EMA Data Privacy Statement for Slido](#).



1

Introduction to Product Lifecycle Management (PLM) Value Stream

15 min



Karl Hamilton

Value Stream Owner

Hannes Kulovits, Melanie Loveday

Value Stream Managers

2

Q&A Session

10 min

Moderator:

Joris Wiemer,

EMA Change Management Lead

3

PLM VS Products overview

60 min

PLM Value Stream Product Owners

4

Q&A Session

25 min

Moderator:

Joris Wiemer,

EMA Change Management Lead

5

Conclusions and final questions

10 min

Ivo Claassen, Alexis Nolte, Zaide Frias

EMA Business Owners

Moderator: Joris Wiemer,

EMA Change Management Lead



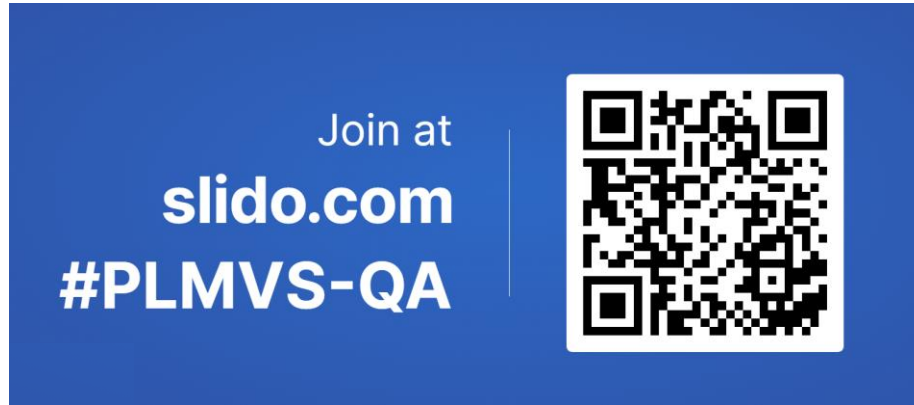
Our Focus:

Product Lifecycle Management value stream



Today's webinar aims at sharing:

- the goals of the Network Portfolio's PLM value stream
- how PLM delivers on the Network Strategy's goals
- what work is being done
- how the IT products in the value stream connect



1. Join via the QR code or link



2. Send or upvote the questions you want to hear answered



3. Questions will be shown on the screen and managed live in the Q&A session



Introduction to the Product Lifecycle Management (PLM) Value Stream

Karl Hamilton, *PLM Value Stream Owner, EMA*

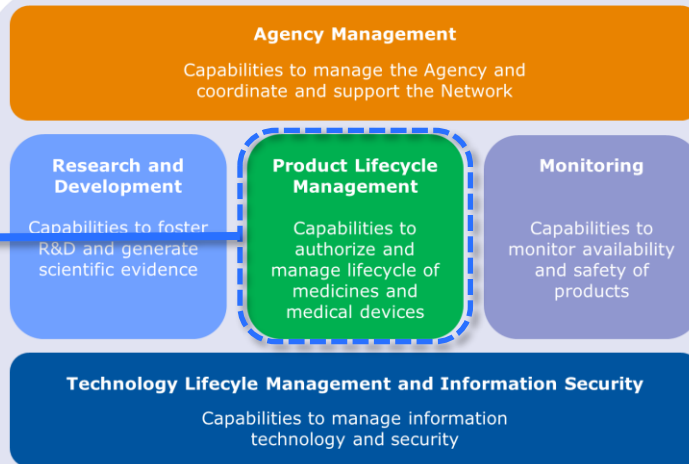
2021: start of EMA's **Agile Transformation process**

Main goal

Strengthen alignment between business and IT and continuously deliver value by making our delivery more flexible, transparent and adaptive to change.

Creation of 5 Agile Value Streams

*Our focus today:
Product Lifecycle Management
Value Stream and its digital
products*





Product Lifecycle of a centrally authorised medicinal product



Ultimate goal

benefitting public and animal health in the European Union



How does the PLM VS meet stakeholders' need?

Delivering end-to-end PLM procedures & data exchange, which are:



data-driven



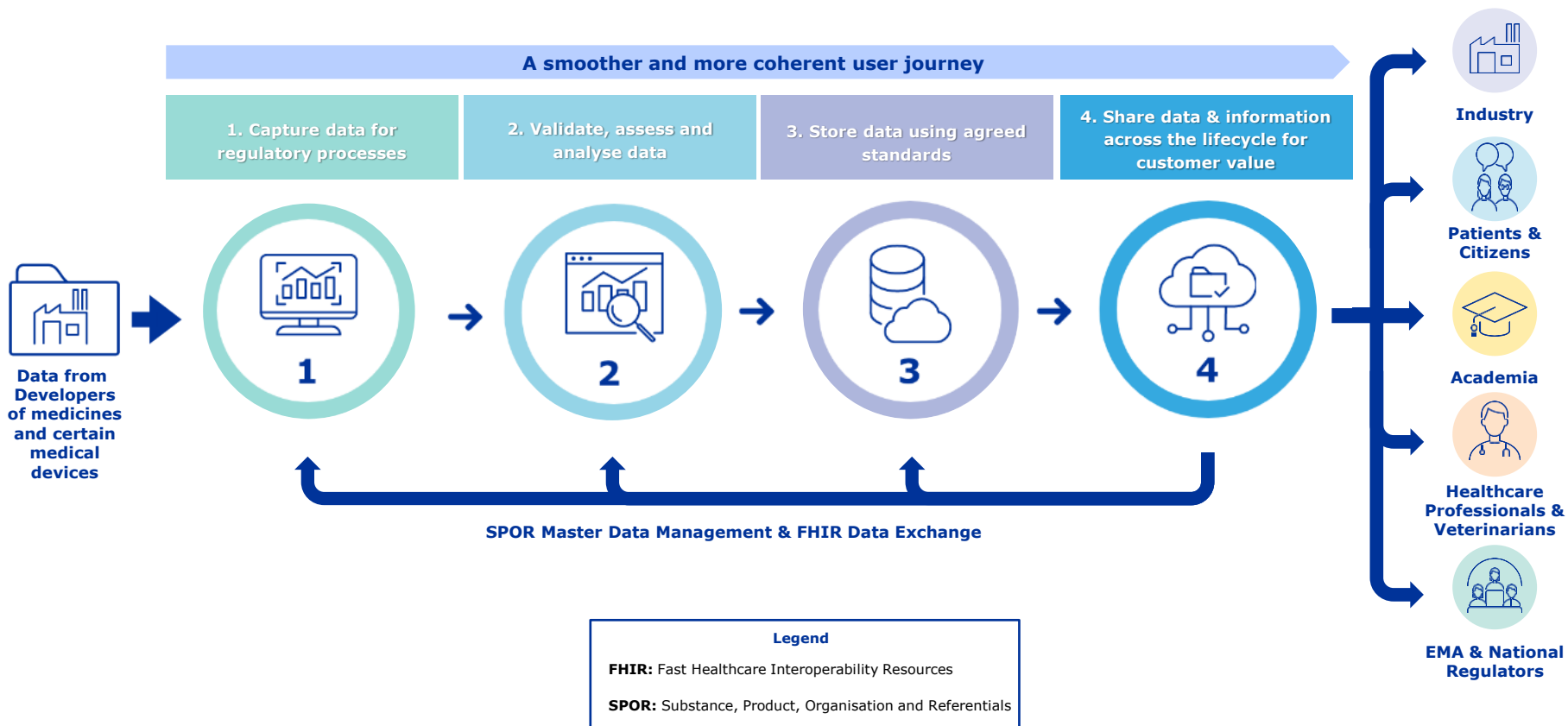
efficient



digitally connected



*To enable **data-driven, efficient and digitally connected end-to-end product lifecycle management procedures and data exchange** which offer valuable regulatory services and reliable information to citizens, healthcare providers, regulators and industry – benefitting public and animal health in the European Union*





Key strategic focus areas from EMA Network Strategy for 2025

1

Data analytics digital tools and digital transformation

2

Innovation

3

Sustainability of the Network with operational excellence



PLM value stream objectives



Make **applications** for regulatory procedures **easier to create and submit**



Provide useful **tools for review and real-time-collaboration** in the assessment process

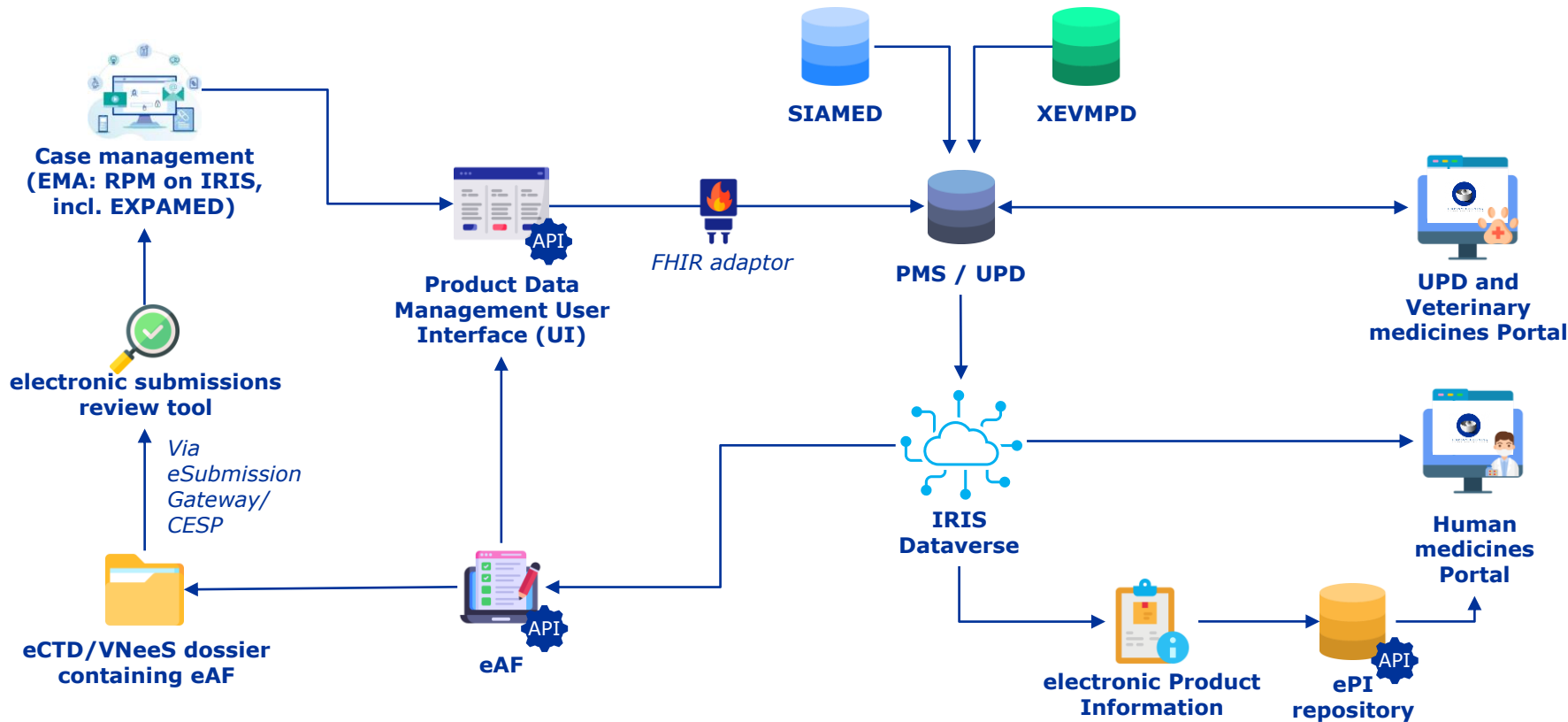


Ensure **data is captured in a structured way** and can be more easily reused and shared



Create systems that **share validated and accurate product data** and information with stakeholders

Overview of Product Lifecycle Management activities



PLM Portal



Web-based eAF



Product Data
Management
UI/API



ePI

eSubmission



electronic
submissions
review tool



Gateway

UPD



UPD data
(V Medicines)

SPOR



PMS data
(H Medicines)

IRIS



Regulatory
Procedure
Management



EXPAMED

V Medicines Web Portal

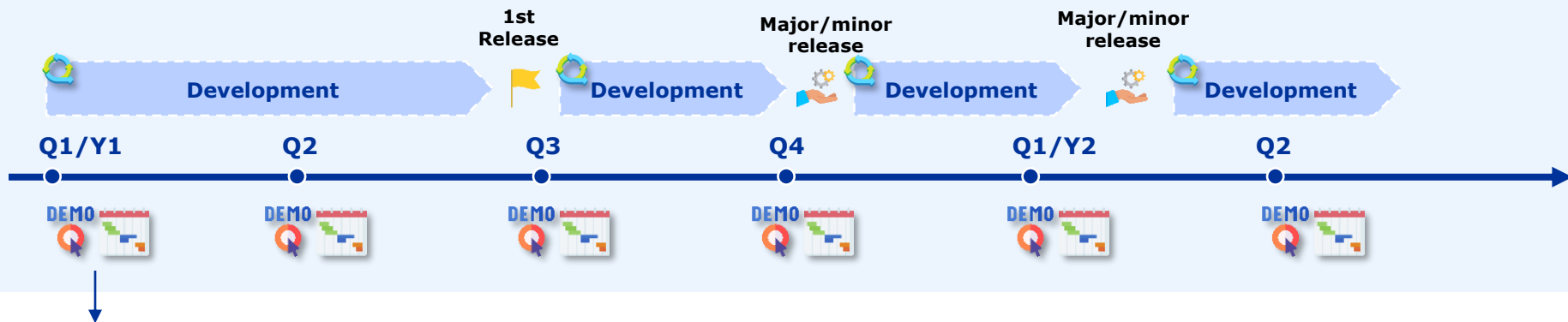


H Medicines Web Portal

(available in the future)



The work on each value stream product outlines as follows:



Agile ceremonies (quarterly):

- **Public system demo** to present the developments from the previous quarter
- **Prioritisation of features for development** to define the roadmap for the next quarter

Legend

-  1st release
-  Public System Demo
-  Prioritisation of features for development
-  New functionalities, bug fixes, improvements

PLM Portfolio roadmap (available on EMA Website)



Working together for PLM VS success



Valdemar Blazevic
Domain Architect



Karl Hamilton
PLM VS Owner



Hannes Kulovits
PLM VS Manager



Melanie Loveday
PLM VS Manager



Alexis Nolte
Head of H Division
(BO)



Ivo Classen
Head of V Division
(BO)



Zaide Frias
Head of Digital Business
Transformation TF (BO)



Kristiina Puusaari
eAF & eCTD v4.0 PO



Noel Diamant
eAF Network PO
(UNICOM)



**Marcos Fernandez
Gomez**
PMS & Product UI PO



**Veronica Lipucci
Di Paola**
PMS & Product UI PO



Dino Soumpasis
PMS Network PO



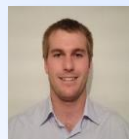
Melanie Carr
Head of S Division
(BO)



Hilmar Hamann
Head of I Division
(BO)



Elizabeth Scanlan
ePI PO



Evinn Drusys
ePI Network PO



Madalina Duta-Mare
RPM for PLM PO



Beyhan Mustafov
UPD PO



Michael Vogl
EXPAMED PO



Joris Wiemer
PLM VS Change
Manager



PLM VS CM Team



Network SMEs



Industry SMEs



Development teams



Focus on electronic Application Form

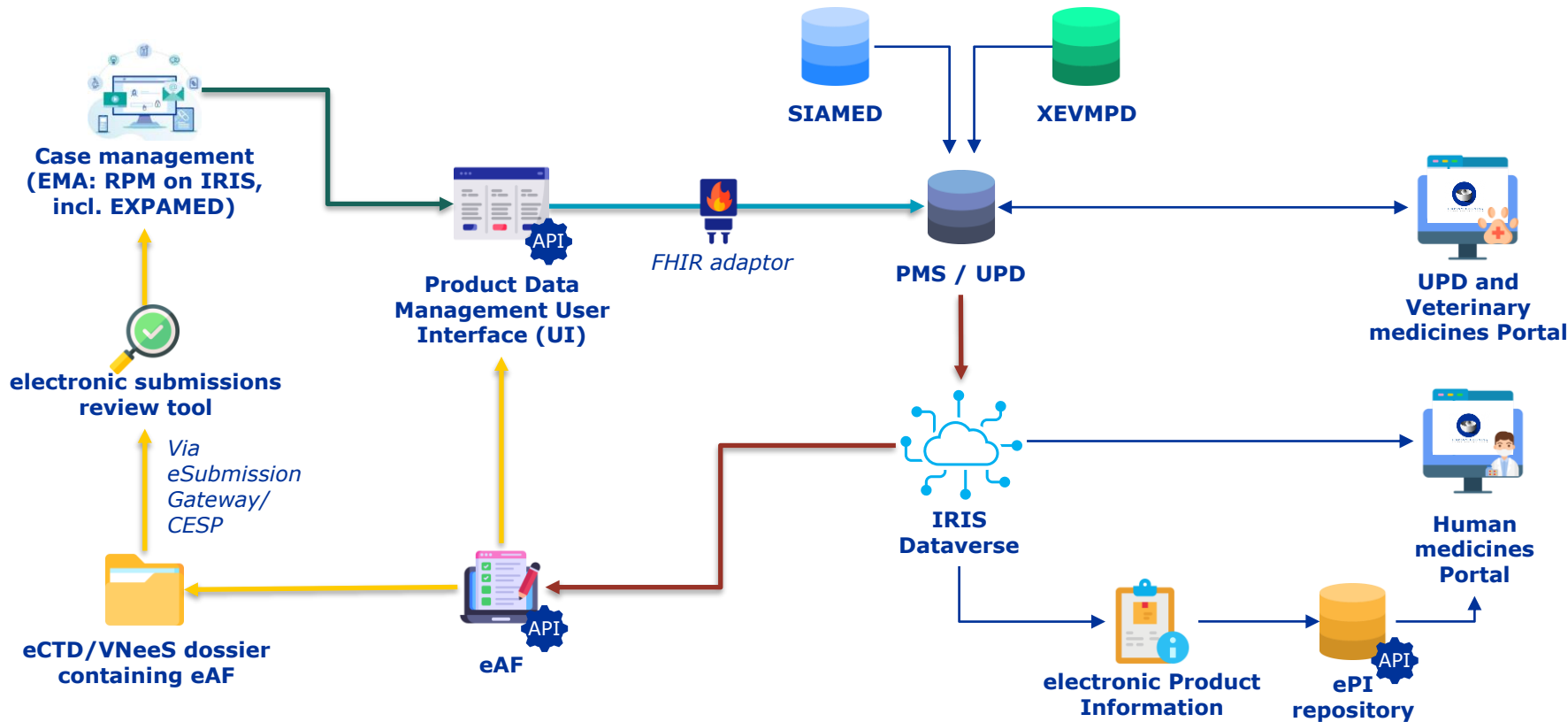
Kristiina Puusaari, *eAF EMA Product Owner*

Noel Diamant, *eAF Network Product Owner, UNICOM**



*The UNICOM Innovation Action has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 875299.

Overview of Product Lifecycle Management activities

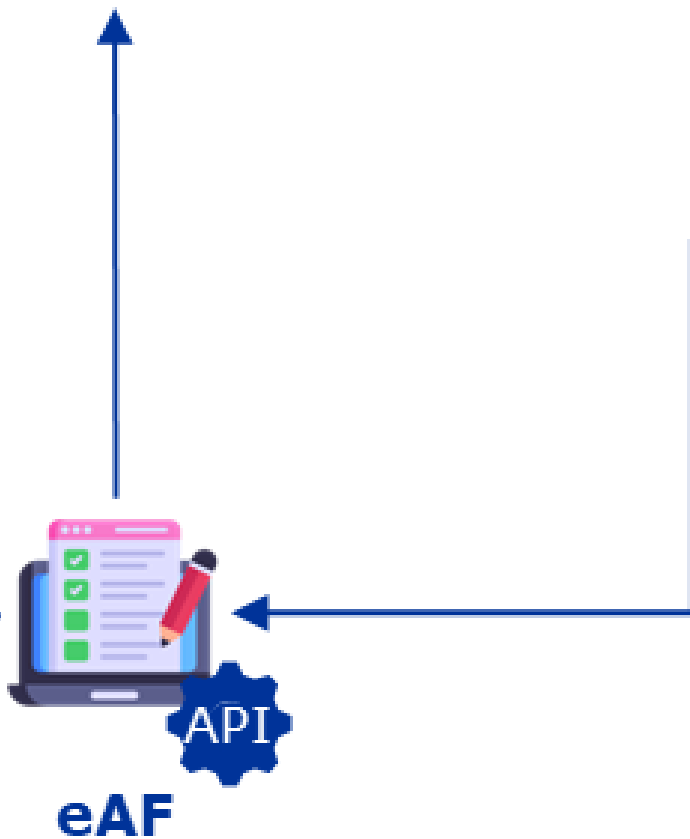


missions
ool

/ia
eSubmission
Gateway/
CESP



S dossier
g eAF



Vision

Streamline **user-friendly data input** for marketing authorisations, variations, and renewals, maintain **consistency in IT systems** and provide **high-quality ISO IDMP compliant information**, through the **creation of web-based forms for Human & Veterinary medicinal product applications**



Key changes



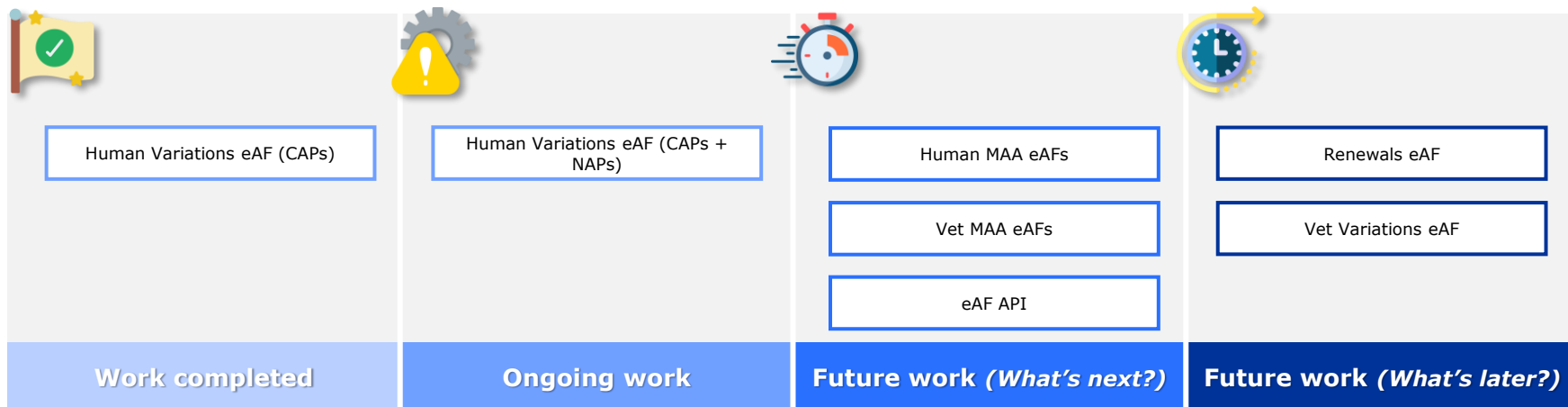
**New web-based
eAFs**



**Use of ISO IDMP/ FHIR
compliant structured data**



**Streamlined & simplified
processes**



Acronyms

API: Application Programming Interface

CAPs: Centrally Authorised Products

NAPs: Nationally Authorised Products

MAA: Marketing Authorisation Applications

IMPORTANT: this slide **DOES NOT represent timelines or sequencing of release** but pieces of work or events to be delivered and the impact on users.



- › **Provision of digital, user friendly, adaptable application forms**
- › Consistent **high-quality ISO IDMP** compliant data
- › **Standardised data entry**, thus making forms easier to access, process, validate, transmit and re-use
- › **Reuse of data** in end-to-end processes
- › **Integration with product lifecycle management processes** to optimise regulatory procedure management
- › **Easier and more automated** applications' validation and processing by National Competent Authorities (NCAs), reducing errors and discrepancies

1. NAPs & SPLIT CAPs RELEASE ON PLM PORTAL eAF

Key enablers for NAPs & split CAPs release on PLM Portal:

1. **Bug fixing Release of all products to PLM Portal** UAT environment
2. **Successful execution** of internal **User Acceptance Testing (UAT)** to confirm bug fixing for eAF use



2. NEXT UAT

- The UAT will take place when **all the necessary functionalities and features supported by the current PDF forms** (required for mandatory use) will be included in the web-based form
- It will be announced **at least 2 months in advance**



3. START OF TRANSITION PERIOD

- The **transition period** will start after a successful UAT, when the eAF has all the features necessary to start mandatory use and any issue identified during UAT has been solved
- The transition will be announced **at least 2 months in advance**

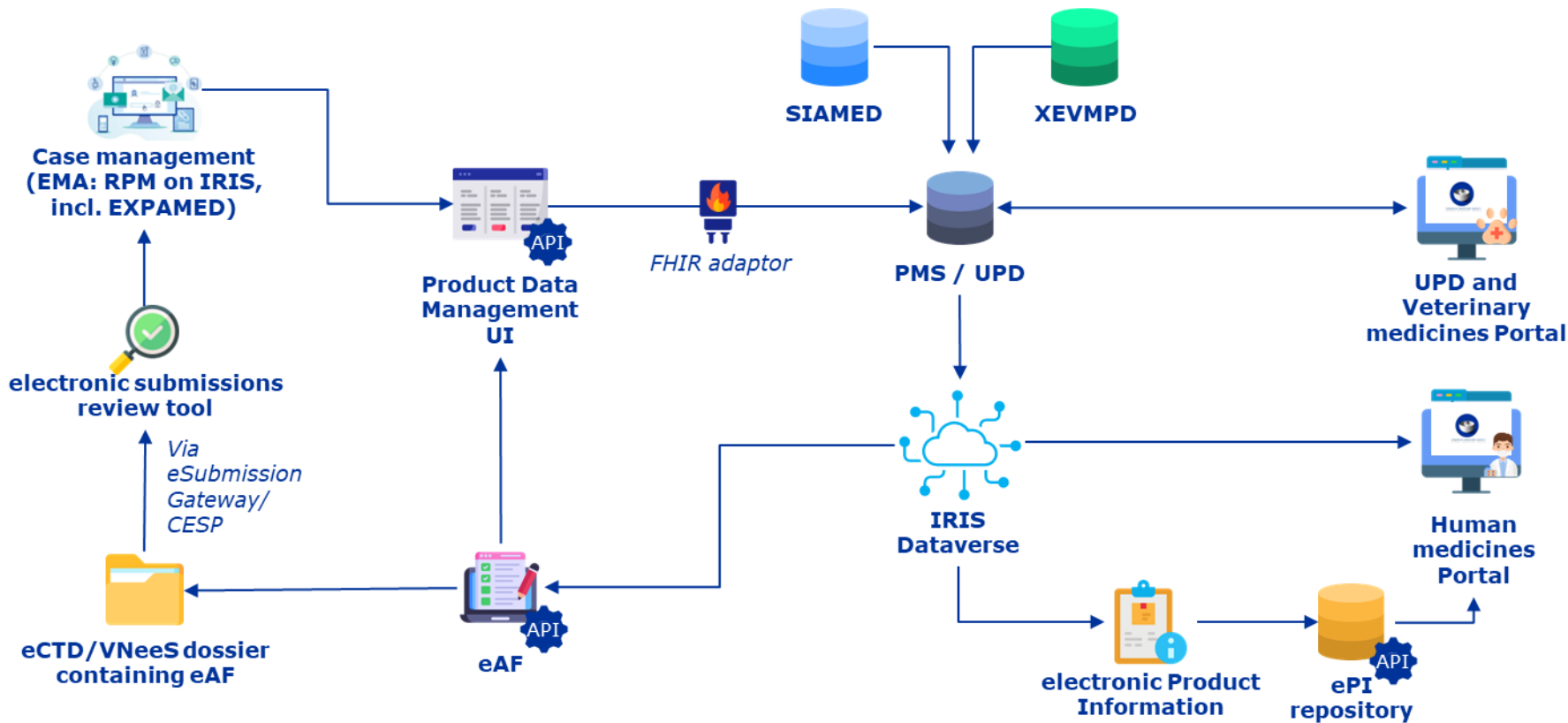


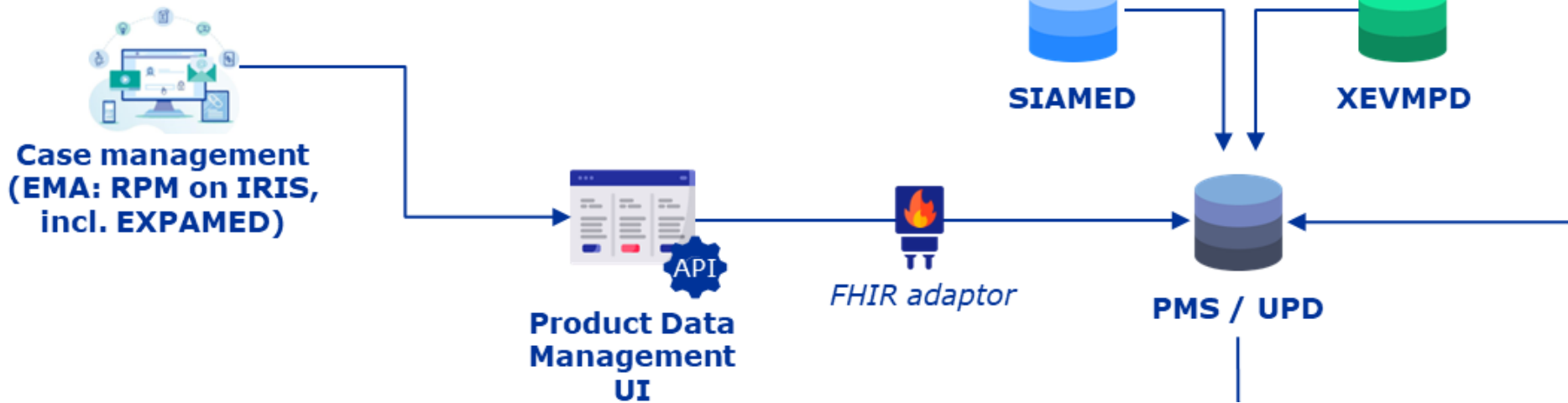


Focus on Product Management Service (PMS) & Product Data Management UI (User Interface)

Marcos Fernandez Gomez, *PMS & Product UI Product Owner, EMA*

Overview of Product Lifecycle Management activities





Vision

Product Management Service (PMS) will make available, for human and machine interaction, **structured, standardised and consistent authorised product data** from across the European Medicines Regulatory Network.

PMS data will be used by regulators and industry in **regulatory and non-regulatory procedures** as well for the general benefit of European citizens.



Key changes



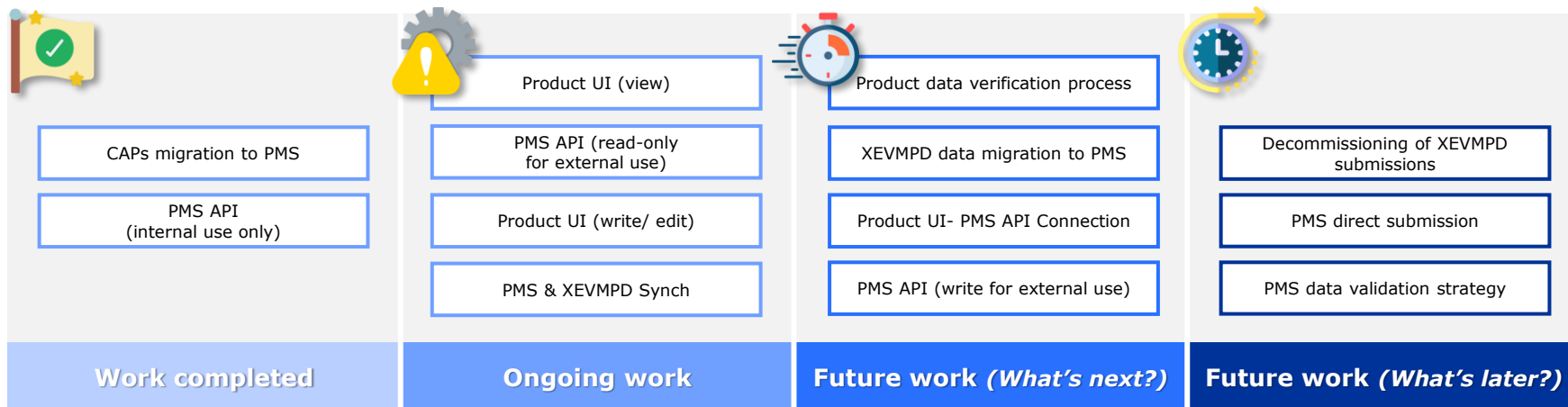
**Product data storage
in PMS database**



**Delivery of ISO IDMP-
compliant structured data**



**User interface/ API
to access data in PMS**



Acronyms

API: Application Programming Interface
CAPs: Centrally Authorised Products
NAPs: Nationally Authorised Products
XEVMPD: Extended EudraVigilance medicinal product dictionary

IMPORTANT: this slide **DOES NOT represent timelines or sequencing of release** but pieces of work or events to be delivered and the impact on users.



- › **Harmonisation of messaging standards** in the EU (FHIR)
- › **Data standardisation & consistency**
- › **Reusability of data** by different stakeholders
- › **Avoidance of data duplication**
- › **Streamlined regulatory processes**
- › **Trustworthy and good quality data** source
- › **Effective implementation** of the **target operating model (TOM)** for managing human medicinal product data

1. DATA IN PMS

- For the first release, the **data in PMS comes from SIAMED II** - the internal EMA database where CAP product data is stored and maintained.
- For the next release, **XEVMPD data will also be migrated to PMS**. XEVMPD data is provided and maintained by MAHs for both CAPs and Non-CAPs.



2. XEVMPD

- EMA is working to **decommission XEVMPD submissions** and guarantee that submissions can be done directly to PMS.
- Until further notice, the **current process for submission of product data to XEVMPD** shall be followed. MAHs are encouraged to continue **paying attention to the data quality** as it might impact PMS.



3. NEXT USER ACCEPTANCE TESTING

- **Product Data Management UI UAT: Alpha & Beta UATs** will take place in Q1 2024
- **PMS API UAT:**
 - **Alpha UAT** will take place in Q1 2024
 - **Beta UAT** is planned to take place in H1 2024

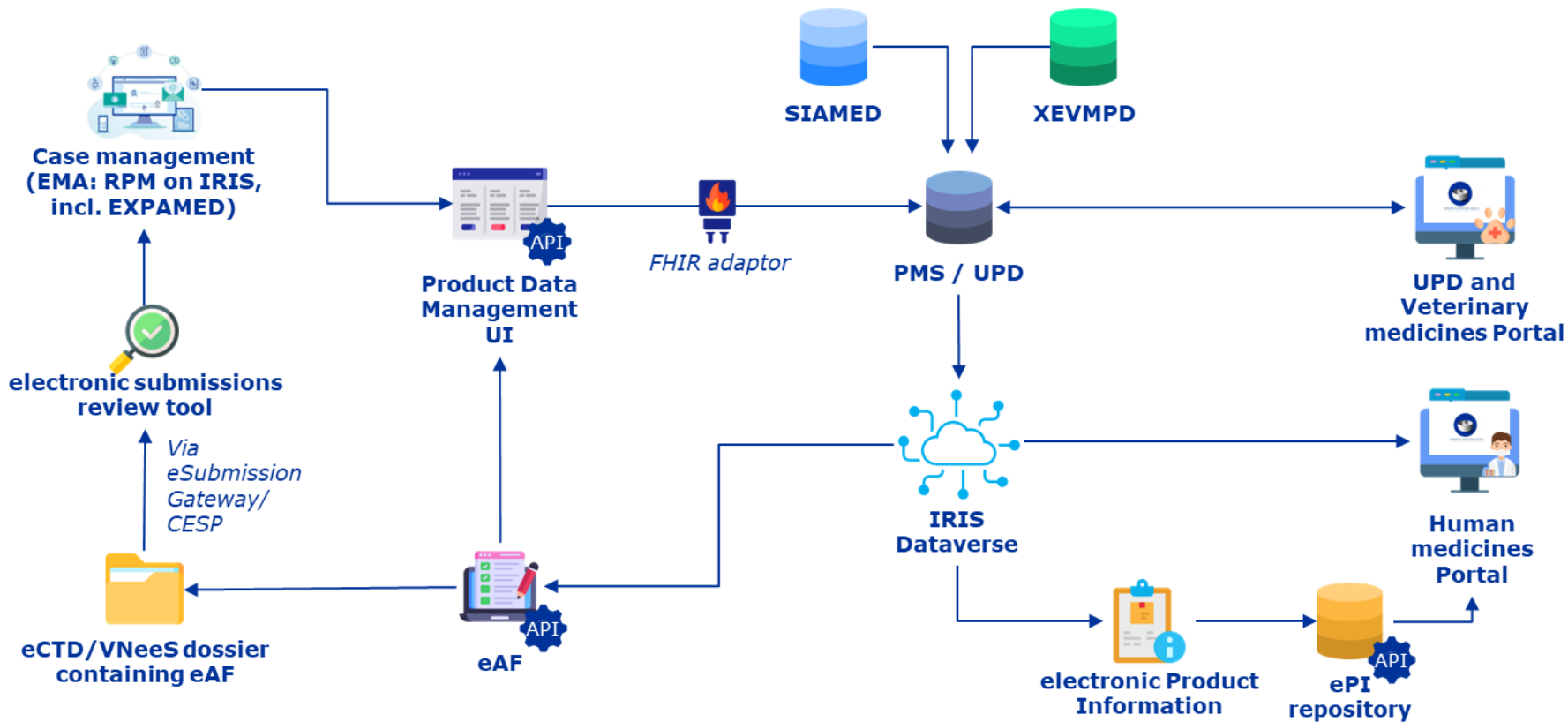




Focus on electronic Common Technical Document (eCTD) v4.0

Kristiina Puusaari, *eCTD v4.0 Product Owner, EMA*

Overview of Product Lifecycle Management activities



*Via
eSubmission
Gateway/
CESP*



**eCTD/VNeS dossier
containing eAF**

Vision

Implementation of internationally harmonised common rules (electronic Common Technical Document (eCTD) v4.0) to enable a modern and streamlined electronic submission process for human medicinal products in the EU



Key changes



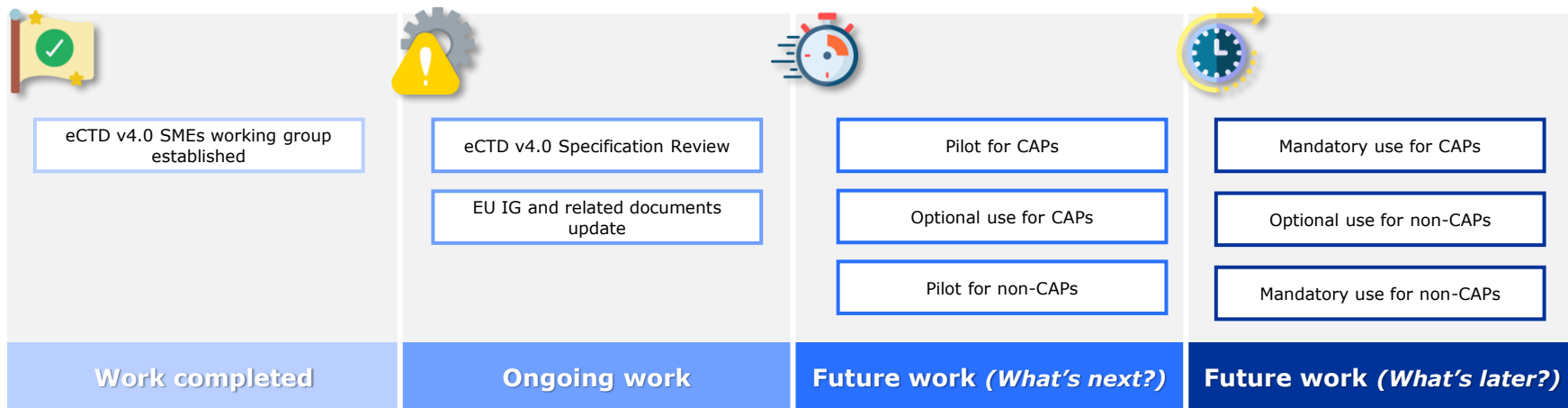
Simplification of specifications' maintenance



Streamlined & simplified process to correct and modify information



Re-use of submitted documents across applications



Acronyms

CAPs: Centrally Authorised Products

eCTD: electronic Common Technical Document

EU IG: European Union Implementation Guide

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- > **Simplification of all lifecycle activities** including flexible implementation of new submission requirements or modifications of the granularity of presented contents
- > Provision of **internationally harmonised common rules** to create and handle an electronic submission
- > **Single electronic exchange message** for regulatory information complying to regulatory standards
- > **Re-use/sharing of documents** across products and submissions
- > Improved **quality** and **accessibility of data**
- > Significant **reduction of maintenance effort** for submission management and reviewing tools

1. eCTD v4.0 MANDATORY

- Timeline is made public regularly
- The **first step** will be the **pilot for CAPs**, which is planned for Q4 2024



2. WEBINARS/WORKSHOPS PLANNED FOR eCTD v4.0

- Product team is currently preparing a **Vendor workshop** that will take place in **Q1 2024**
- **Further webinars** will be planned before the **mandatory use for CAPs**



3. RE-USE OF DOCUMENTS

- **For CAPs, the re-use of docs will be accepted**
- For Non-CAPs special conditions might be applicable, options still under discussion

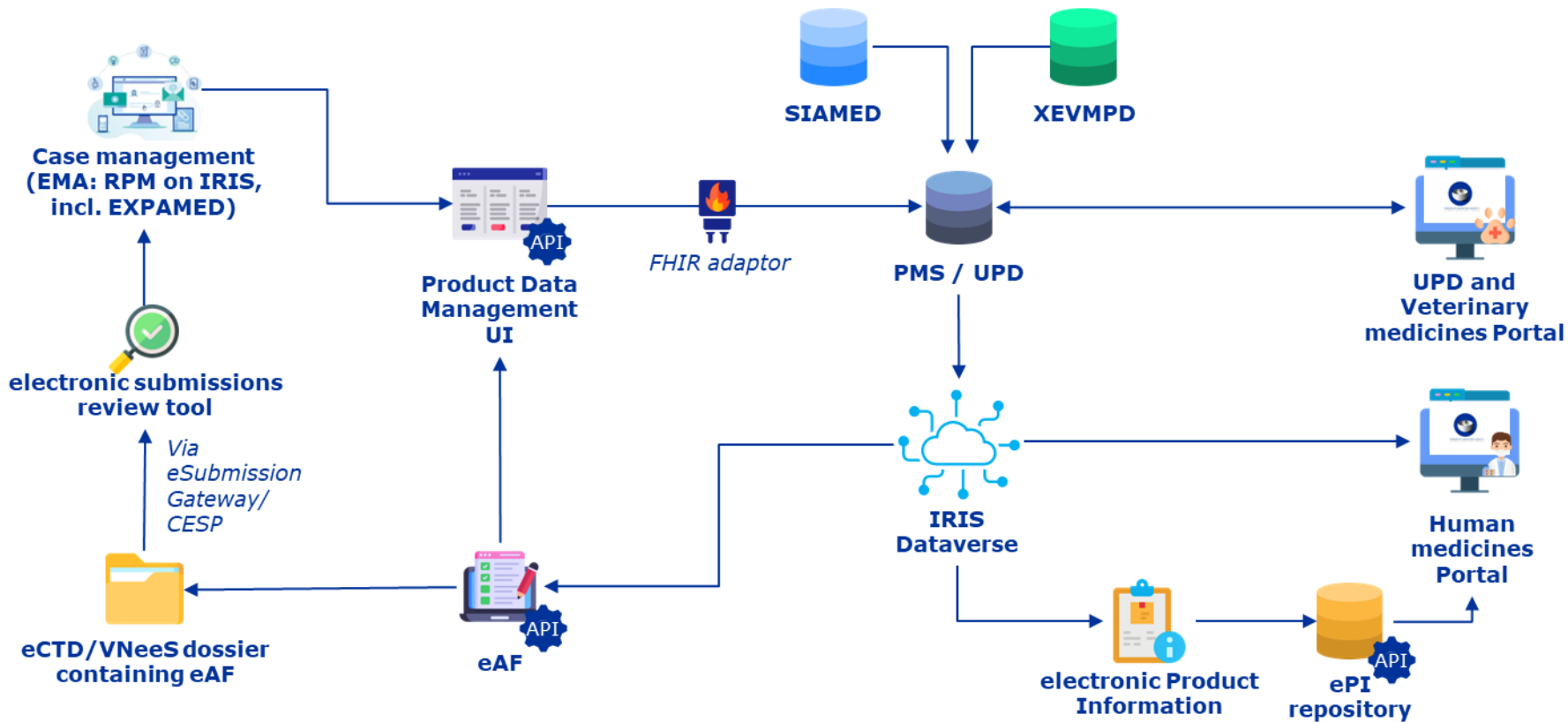


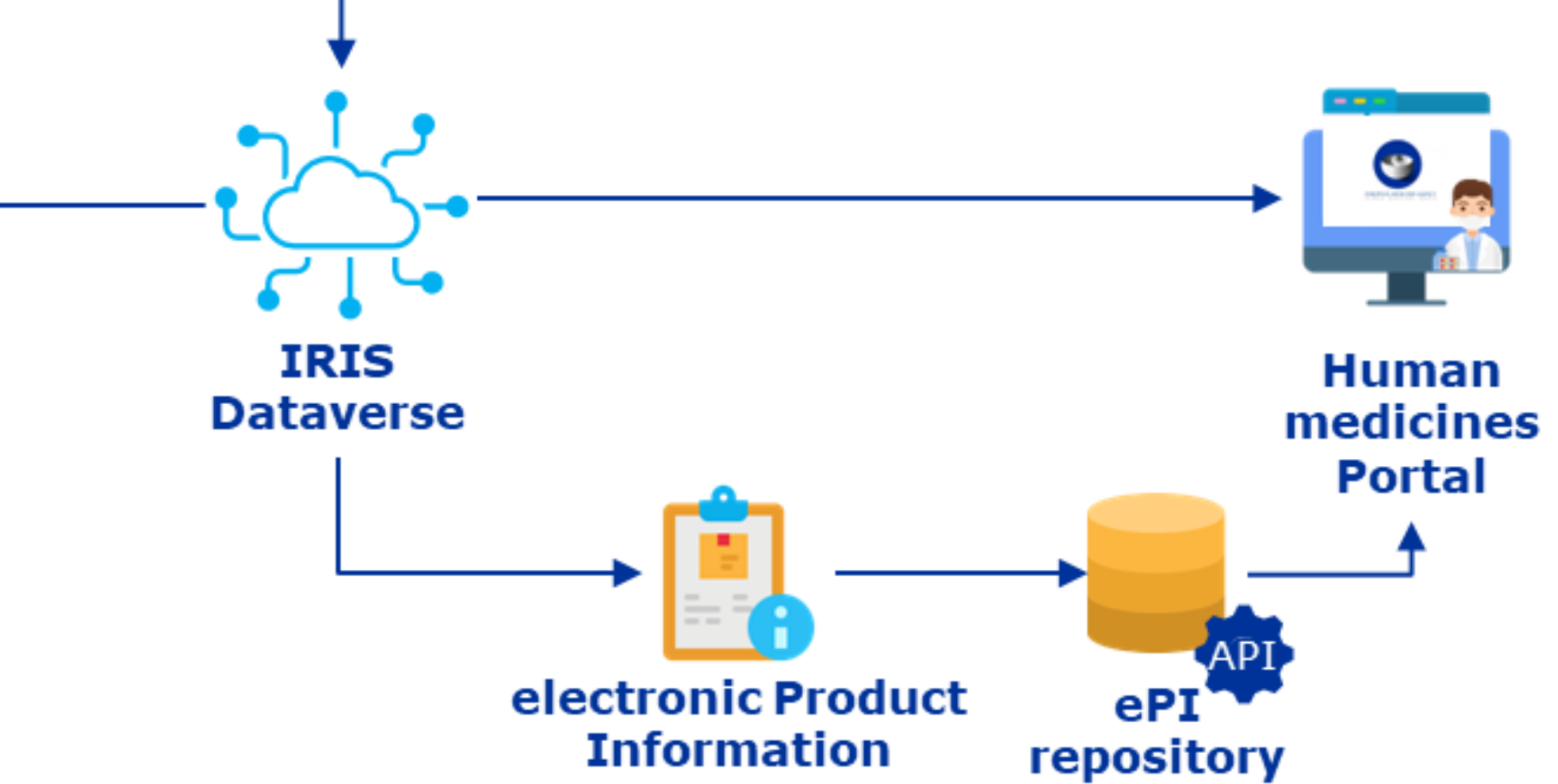


Focus on electronic Product Information (ePI)

Evinn Drusys, *ePI Network Product Owner*

Overview of Product Lifecycle Management activities





Vision

Make available **up-to-date and easily accessible, regulator-authorized electronic product information** on safe and effective use of human medicines in all available EU languages for all EU citizens



Key changes



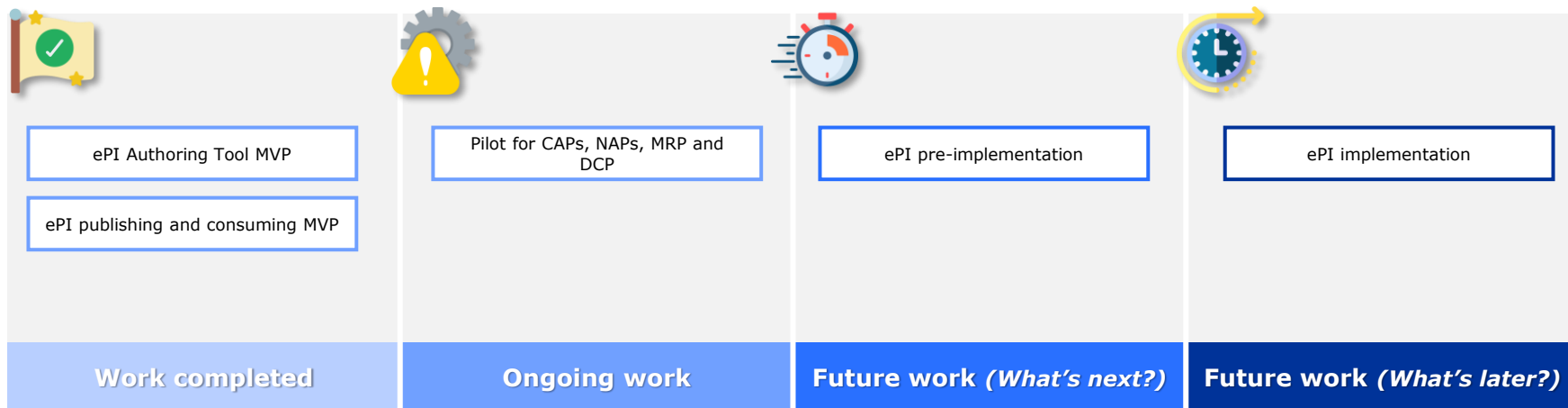
Harmonised ePI on medicines within EU



Product Information stored in FHIR and instantly available via API



Easier process to find ePI in different languages



Acronyms

CAPs: Centrally Authorised Products **MVP:** Minimum Viable Product
DCP: Decentralised Procedures **NAPs:** Nationally Authorised Products
MRP: Mutual Recognition Procedures

IMPORTANT: this slide **DOES NOT represent timelines or sequencing of release** but pieces of work or events to be delivered and the impact on users.



- > **Up-to-date** Product Information **easily accessible** to partners & stakeholders
- > **Easy ePI availability** of different medicinal products through the PLM portal and API
- > Facilitate **distribution of information** according to consumers' needs
- > **Information accessible** to consumers with diverse abilities
- > **Quick and immediately visible online update** of Product Information

1. ePI PILOT

- The ePI **pilot runs throughout July 2023 – July 2024** and will provide guidance for future development before implementation.
- Using a **Minimum Viable Product (MVP)**, it envisages the initial introduction of ePI at the beginning (creation of ePI prior to submission) and end (publication via API). **At a later stage, ePI can be integrated end-to-end into the procedure management.**
- The ePI team has created a **User Guide available on the [PLM Portal](#)**



2. ePI FUNCTIONALITIES

- The **MVP** consists of an **ePI authoring tool, repository and application programming interface**, and associated **guidance and business processes**. Functionalities include Rich text editing, Adding a co-author, Preview, Duplication of ePI documents, Export to Word, Export to FHIR, Publish via an application programming interface (API).



3. ePI LINK WITH SPOR & eAF

- In the MVP, **SPOR** is used for aspects such as product information section headings (RMS), marketing authorisation holder and competent authority (OMS). The objective is to fully maximise the use of SPOR data; in the MVP this will however not yet be the case. A stepwise approach is taken as per the Agile methodology.
- The objective is to **maximise the synergies with ePI and eAF**, which are part of the same Product Lifecycle Management value stream.

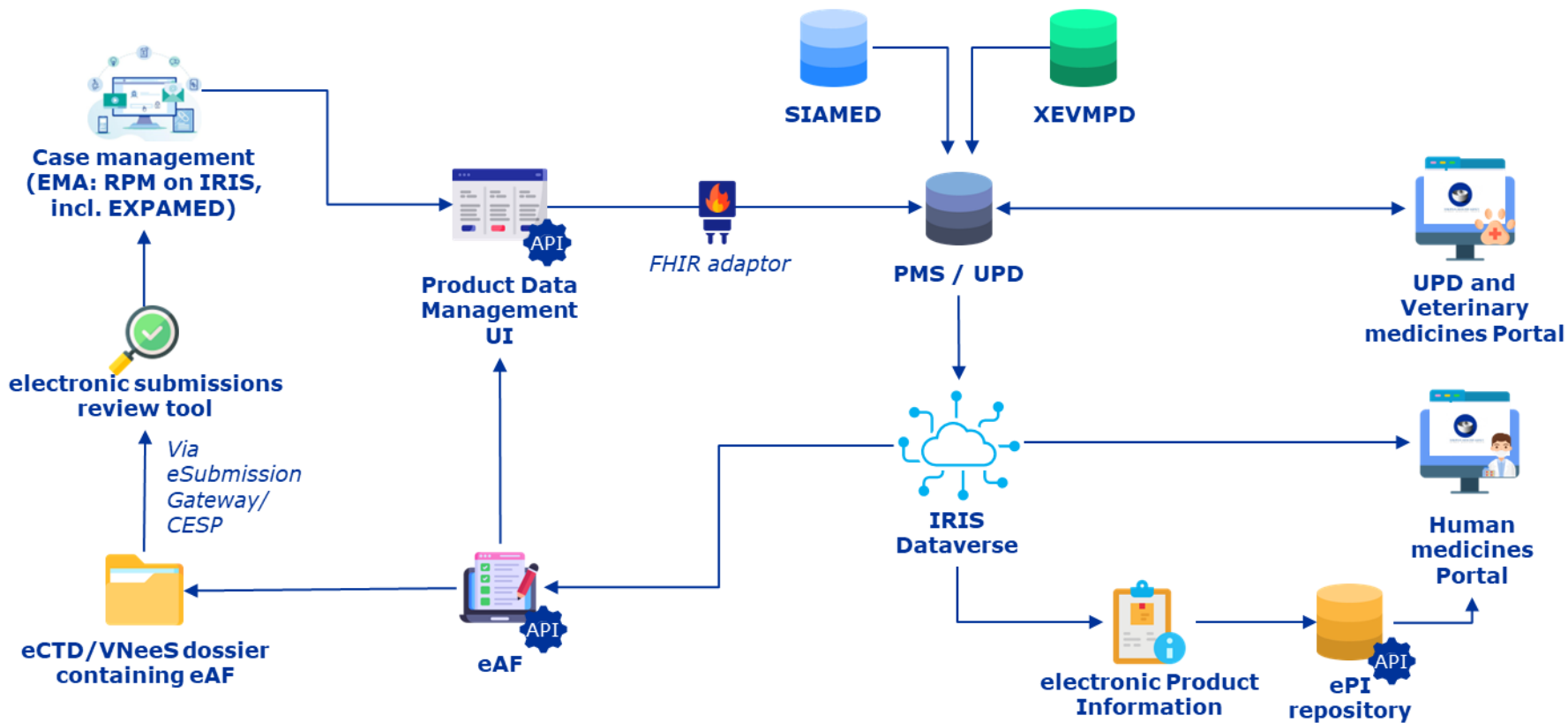




Focus on Regulatory Procedure Management (RPM) for PLM

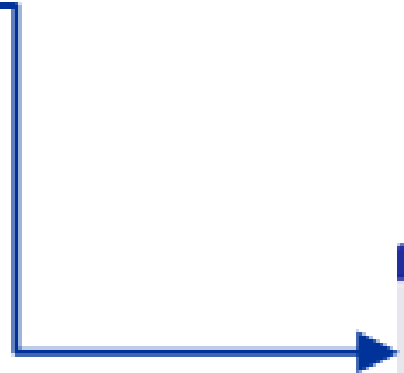
Madalina Duta-Mare, *RPM for PLM EMA Product Owner*

Overview of Product Lifecycle Management activities





Case management (EMA: RPM on IRIS, incl. EXPAMED)



**Product
Management**

Vision

Enhance **end-to-end medicinal product lifecycle management in IRIS platform** for Centrally Authorised Products by improving efficiency, data quality and collaboration, thus facilitating easier and secure access to information.

It enables **consistency of data** in an end-to end information flow by **exchanging and reusing ISO IDMP data** across IT systems



Key changes



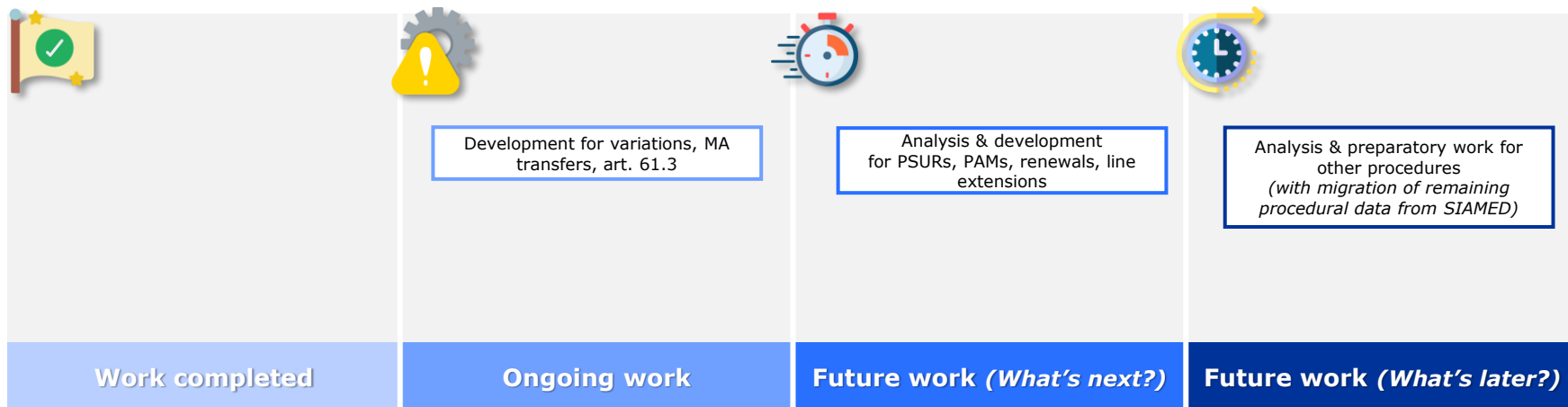
New cloud-based technology



Standardised functionalities for Human and Vet & automated checks



Re-use of SPOR master data



Acronyms

MA: Marketing Authorisation

PAMs: Post-Authorisation Measures

PSURs: Periodic Safety Update Reports

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- **Single process and system** with **standardised functionalities** for human and vet
- **Increased efficiency, optimised decision-making process and reduced number of errors** enabled by automation
- **Improved overall quality of data** ensured by the re-use of master data
- **Better collaboration** with NCAs enabled by more secure and improved collaboration tools to search, retrieve and share documents
- **Increased transparency and security** (consequently, reduced burden on e-mails to address queries)

1. IRIS RELATIONSHIP WITH OTHER PORTALS

- IRIS will be used for the **entire product lifecycles enabled by the transitioned regulatory procedures**.
- Other functions, like eCTD/NeS submission, will continue to be performed on separate portals.



2. PRODUCTS AFFECTED BY IRIS TRANSITION

- The transition to IRIS will **almost exclusively impact CAPs**, as IRIS is designed for managing regulatory procedures with EMA.
- However, a **small subset of NAPs' MRPs and DCPs** that are included in procedures overseen by EMA (e.g. worksharing, PSUSA). For these specific cases, NAPs will also be affected by IRIS.



3. NOTIFICATIONS MANAGEMENT

- Whenever the EMA provides MAHs with a document (e.g. assessment reports, opinions), the designated **contact person will receive an email notification**.
- This notification will serve as a general alert indicating the presence of new documents or information that require their attention. In general, this is a pull system where information is available in the portal for the user to access at any time without necessarily waiting for a notification.

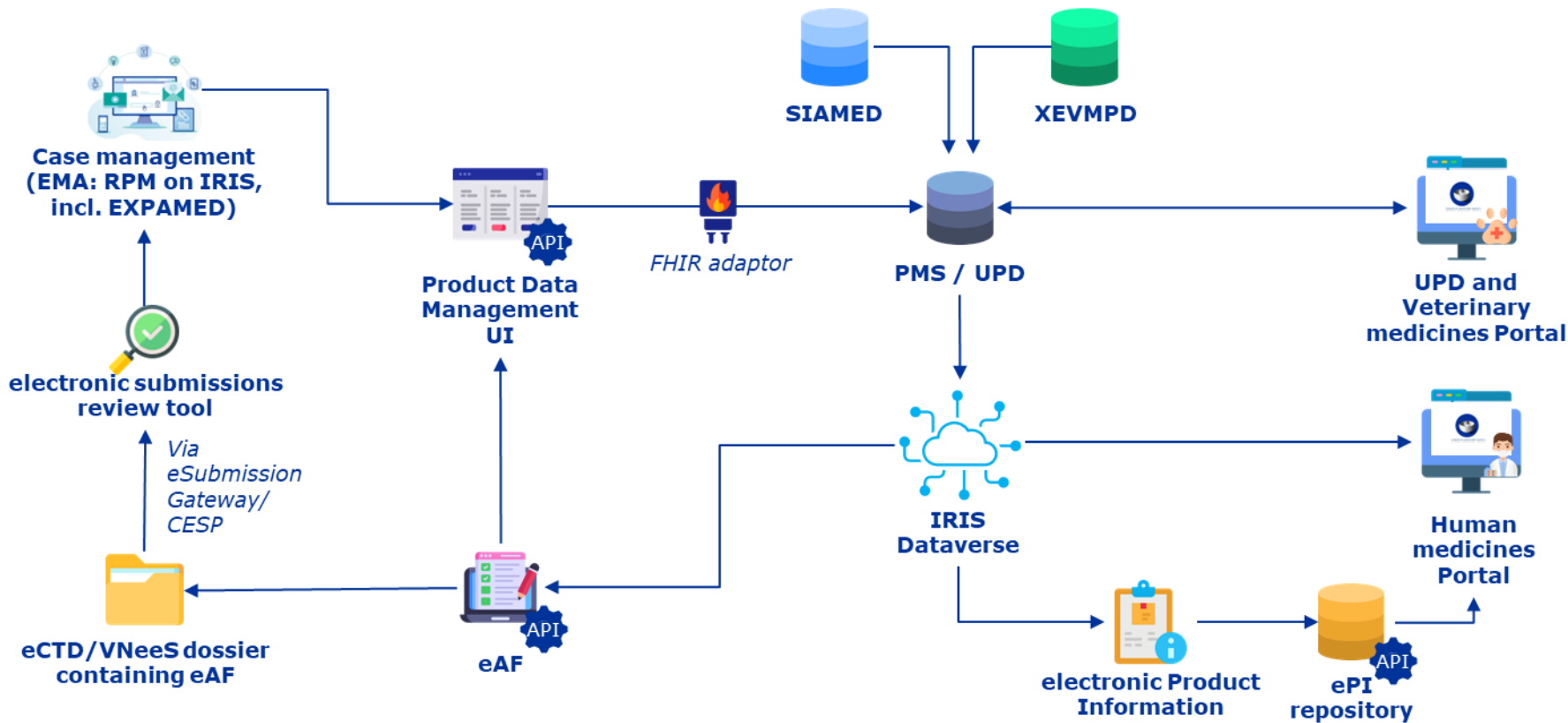


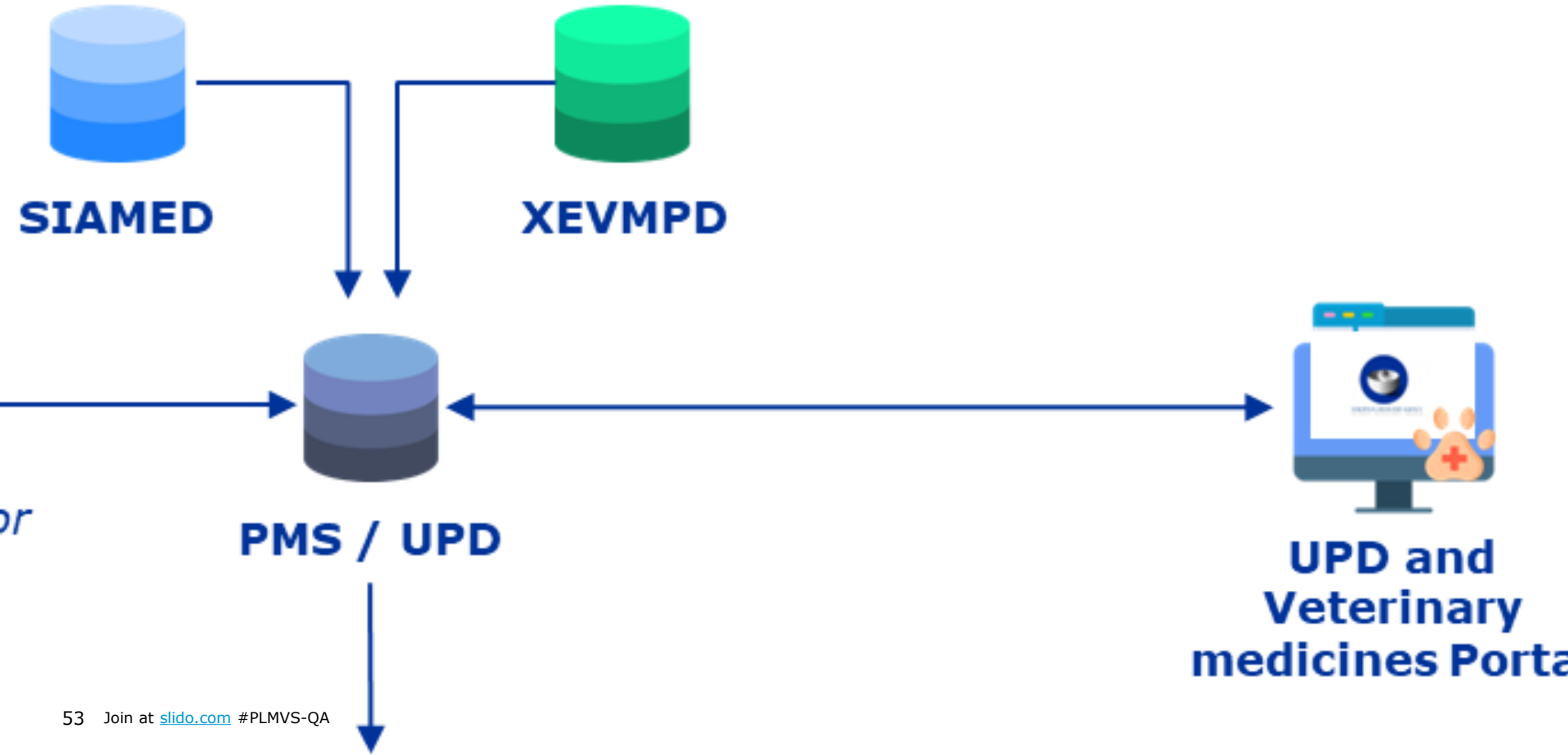


Focus on Union Product Database (UPD)

Beyhan Mustafov, *UPD EMA Product Owner*

Overview of Product Lifecycle Management activities





Vision

The **Union Product Database (UPD)** provides a **single source of information for all veterinary medicinal products (VMPs) approved and available in the EU/EEA**, including management of specific regulatory activities e.g. variations not requiring assessment.

It is a **trusted, transparent and high-quality source for product data** used by all veterinary stakeholders.



Key changes



Single source of product information on all VMPs



MAH submissions and NCA management of VNRA



MAH reporting of Availability Status and Volume of Sales



UPD went live in 2022 and since then delivered over 90 post-go live business requirements and change requests

Work completed



Ability to upload one document to several products

Addition of Procedure number in all search forms

Filters applied to Substances

QPPV and PSMF information becoming part of national product data

New fields in the VoS download file

Ongoing work



Management of certain VNRAs affected by national data when impacting MRP/DCP/SRP

VNRA supergrouping:

- MAHs ability to define the foreseen decision maker during the submission process
- Inclusion of Decision maker field in the results Notifications table and in the VNRA Submissions table
- Make additional information available at submission level

Enrich search criteria capabilities for search functionality in the UPD Portal

Future work (*What's next?*)



Save and resume draft VNRA submissions by a MAH

Automatic sending of notifications (email notifications)

API for MAHs and other EU organisations

Provision of detailed information in the notification triggered by an update

Future work (*What's later?*)

Acronyms

DCP: Decentralised Procedure

EU: European Union

MAH: Marketing Authorisation Holder

MRP: Mutual Recognition Procedure

PSMF: Pharmacovigilance System Master File

QPPV: Qualified Person for Pharmacovigilance

SRP: Subsequent Recognition Procedure

VNRA: Variation not Requiring Assessment

VoS: Volume of Sales

IMPORTANT: this slide **DOES NOT represent timelines or sequencing of release** but pieces of work or events to be delivered and the impact on users.



- > **Improved data quality** and consistency by using controlled vocabulary
- > **Increased transparency** on VMPs available in EU/EEA
- > **Use of UPD for variations** which do not require scientific assessment (VNRA)
- > Database for **effective network collaboration**
- > **Reduced administrative burden** on MAHs and NCAs
- > Provision of **Volume of Sales data**, paramount for Antimicrobial Sales and Use reporting
- > Provision of **Availability Status**
- > **Interconnection with the Union Pharmacovigilance Database and Antimicrobials Sales and Use platform** (including the volumes of sales data)

1. HOW TO REGISTER FOR UPD

Users with an **existing account for other EMA-hosted systems** (e.g. Eudralink, IRIS, SPOR) can use the same credentials, but will need to apply for the relevant UPD role(s) for their account on the [EMA Account Management Portal](#). Users can check whether they already have an EMA account and get more info about **EMA SSO** (Single Sign-on) by visiting <https://register.ema.europa.eu>.



2. WHAT DATA SHOULD MAHs SUBMIT TO THE UPD

Marketing authorisation holders must **submit the following** to the Union Product Database:

- Volume of sales (VoS);
- Availability status of the product;
- Any changes to the authorisation status in case of suspension or revocation;
- Variations not requiring assessment;
- Third country product names;
- MAH product grouping (optional but recommended).



3. WHAT DATA SHOULD CAs SUBMIT TO THE UPD

Competent Authorities must **upload and maintain product information** into the UPD, using either an API or a web user interface.

It is paramount to ensure that the **data quality at product and package level in UPD is to highest possible standard**. This applies to all veterinary medicinal products authorised in the EU via mutual recognition, decentralised procedure, national procedure or centralised procedure.

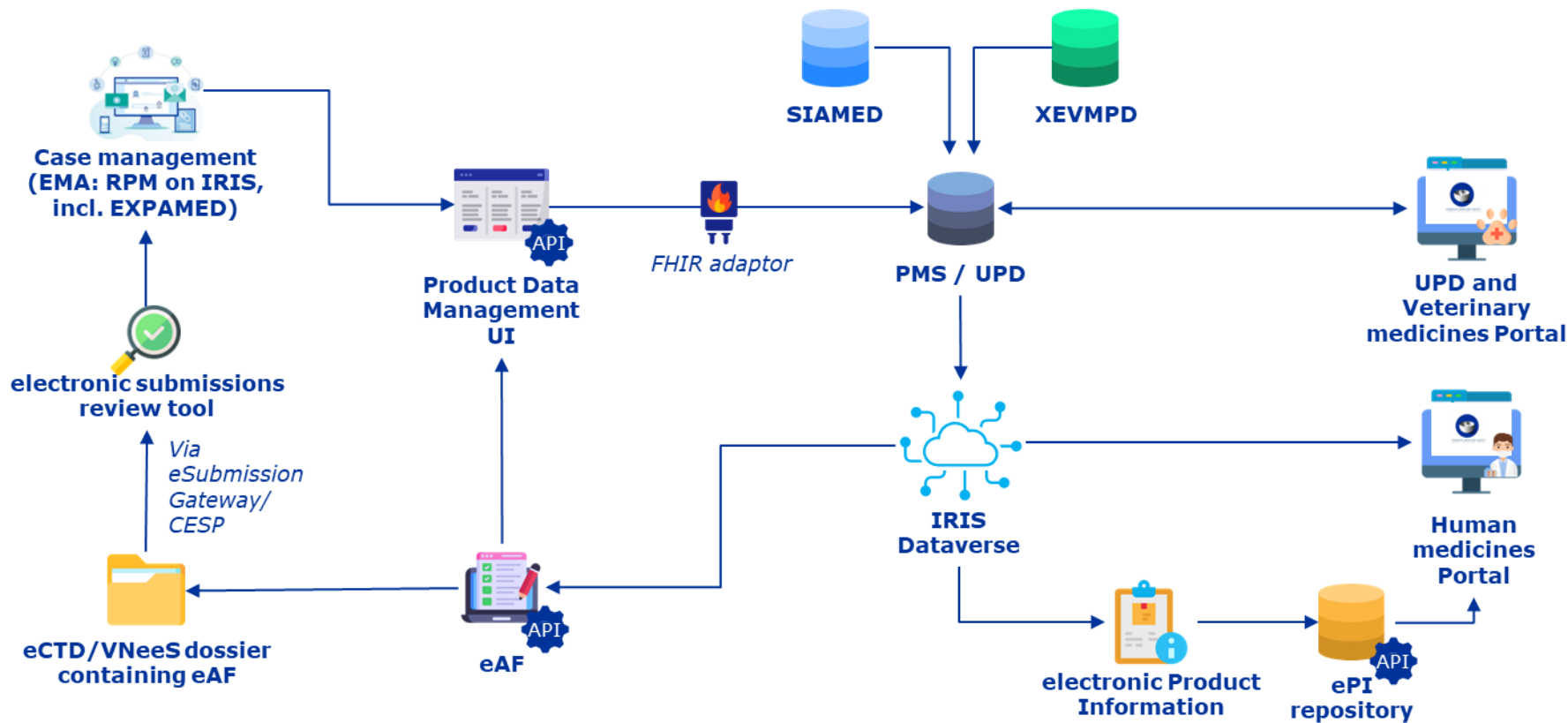




Focus on EXPAMED

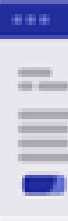
Michael Vogl, *EXPAMED EMA Product Owner*

Overview of Product Lifecycle Management activities





Case management (EMA: RPM on IRIS, incl. EXPAMED)



Prod

Vision

Enable the **assessment of the data** provided within the context of **Clinical Evaluation Consultation Procedure (CECP)** and **Performance Evaluation Consultation Procedure (PECP)** by both internal (EMA EXPAMED Secretariat) and external stakeholders (evaluators and notified bodies) through a **single Experts Management Tool**, in order to ensure an **end-to-end robust clinical evaluation** across the EU.



Key changes



New system with updated technology and integrated tools



Single platform for communication and data repository



Improved accessibility with a single log-in



- > **Increase of efficiency** thanks to manual tasks' reduction and less duplication of work
- > **Improvement of User Experience** with user-friendly system functionalities
- > **Improvement of the medical device experts' selection process** and their contracts and payments activities
- > **Improvement of accessibility and data protection**
- > **Increased transparency** of information

The Expert panels on medical devices and in vitro diagnostic medical devices (EXPAMED) lifecycle management tool went live in IRIS, on 29 March 2023.

The new tool enables the collaborative assessment of the data provided within the context of the clinical evaluation consultation procedure (CECP) and performance evaluation consultation procedure (PECP) by both internal (EMA EXPAMED Secretariat) and external stakeholders (experts).



1. PRODUCTS HANDLED IN EXPAMED

The EXPAMED system is only handling **Medical Devices Class III implantable** or **Class IIb active devices** intended to administer or remove medicinal products



2. ENGAGEMENT OF EXPERTS

The **full internal procedure lifecycle for the CECP and PECP processes** mandated to be carried out by the expert panels is **handled in the system** – this includes the collaboration between the experts and the agency while drafting the output documents.



3. SUBMISSION OF INFORMATION

In the absence of EUDAMED, the information is submitted through the **European Commissions Secure system CIRCABC** to the Agency and transferred to the internal systems.





Conclusions and general questions

Ivo Claassen, *EMA Business Owner and Head of Veterinary Medicines*

Alexis Nolte, *EMA Business Owner and Head of Human Medicines*

Zaide Frias, *EMA Business Owner and Head of Digital Business Transformation*

Moderator: Joris Wiemer, *EMA Change Management Lead*



- Q&A (Slido)
- Words from our business owners
- A quick poll for your feedback (Slido)
- How to stay informed on PLM work



System Demos

- See and discuss the latest developments of the system
- Give your feedback on features and priorities

Announced via EMA's Website Events Pages



Network Portfolio web page

- Consult updated Network Portfolio roadmap
- Stay informed on Agile ceremonies

To be published on EMA Website & available for subscription



PLM Portal & IRIS Forums

- Check:
 - > News
 - > Release notes
 - > Downtime comms
- Ask questions

Check regularly



Industry & Network SMEs

The Industry & Network SMEs are your connection to product development.

Engagement to be determined by NPO & SMEs



Closing

Karl Hamilton, *PLM Value Stream Owner, EMA*