Union Product Database (UPD) release notes
Referring to version 1.7.2424-1

Release date: 2 July 2024

Version 2

Changes made in revised version 2 of release notes:

- correct the link for the search endpoint of VNRAs;
- aligning the version with the one displayed in the UPD portal (1.7.2424-1);
- adding two new issues in section 1.2 and correcting the number of know issues.

Acronym key and glossary terms

ADO	Azure DevOps	**OPAD**	Other Post Authorisation Data
API	Application Programming Interface	**PET**	Veterinary medicinal products intended for animals which are exclusively kept as pets: aquarium or pond animals, ornamental fish, cage birds, homing pigeons, terrarium animals, small rodents, ferrets and rabbits
APIM	API Manager	**PMS**	Product Management Service
AvS	Availability Status	**PSMF**	Pharmacovigilance System Master File
CA	Competent Authority	**QPPV**	Qualified Person Responsible For Pharmacovigilance
CAP	Centrally Authorised Products	**RMS**	Reference Member State
CMDv	Coordination group for mutual recognition and decentralised procedures for veterinary medicinal products	**RN**	Release Notes
CMS	Concerned Member State	**SIAMED**	EMA product information and application tracking system
CSV	Comma-separated values	**SIT**	System Integration Testing
DCP	Decentralised Procedure	**SMS**	Substances Management Services
EAM	EMA Account Management	**SPOR**	Substances, Products, Organisations and Referentials
EC	European Commission	**SRP**	Subsequent Recognition Procedure
EEA	European Economic Area	**UAT**	User Acceptance Testing
EMA	European Medicines Agency	**UC**	User Case
EP	End Point	**UI**	User Interface
EU IG	European Union Implementation Guide	**UPD**	Union Product Database
FHIR	Fast Healthcare Interoperability Resources	**NCA**	National Competent Authority
HF	Hot Fix	**NP**	National Procedure
HL7	Health Level Seven	**OMS**	Organisation Management Service
JSON	JavaScript Object Notation	**URN**	Uniform Resource Names
LOC ID	Location identifier	**UUID**	Universally Unique Identifier
MAH	Marketing Authorisation Holder	**VNeeS**	Veterinary Non eCTD Electronic Submission
MDM	Master Data Management	**VNRA**	Variations not requiring assessment
MRP	Mutual Recognition Procedure	**VoS** **XML**	Volume of Sales eXtensible Markup Language
MS	Member State		
NAP	Nationally Authorised Products		

The structure of these release notes has been refined and simplified for enhanced accessibility to all users. The document contains now 3 sections and 4 annexes. It should be noted that specific segments have been excised, owing to their availability within other documents (such as the EU IG).

Overview of key changes:

With every new release, the UPD release notes are updated to highlight to the user the changes compared to previous versions by detailing new/updated functionalities and/or issues that have been resolved, are known, and/or are newly reported.

Resolved issues since the previous release (UPD version 1.7.2424, released on 13 June 2024)	**37**
Known Issues	**36**
Next release's expected date	*Q3 2024 releases will be considered at the next Program Increment planning to be held on 3-4 July 2024 and communicated in due course.*

Overview of new functionality(ies):

- **Receiving UPD notifications by email (MAHs & CAs)**

    o The scope of the notifications is to inform the Users that specific actions have been performed in the UPD system for which they should be aware either for their information or to perform further actions.

    o A new form called "*Email Configuration*" is available in which the Super users of each organisation can configure the email address(es) where the UPD notifications will be sent for each involved ORG-Id.

    o All emails will be sent from upd.notification@ema.europa.eu email address and users should make sure that this email adddress is not blocked by their firewall and security systems.

    o Email notifications will be sent after business hours and users will be able to see them in the next day.

Further guidance for Super users **is** available on **EMA's UPD webpage**.

Notes:

- In case of receiving an error file after the Availability Status (AvS) submission, MAHs are advised to follow these steps:

    o If the errors in the file are due to business validations (see section 4.3.2 of Vet EU IG Chapter 7), **fix the errors and resubmit the file**.

    o **If the file contains ER.36** (see section 4.3.1 of Vet EU IG Chapter 7), then you may receive two types of error files:
        - In the first case, **no updates have been processed successfully**. This can be evidenced by the fact that the last column in the error report only contains ER.36 and values of type 'N/A'. In this case, capture the ER.36 errors in an Excel or CSV file and submit it as a ticket to EMA Service Now: https://support.ema.europa.eu/, and then **resubmit the part of the file containing values 'N/A'**.
        - In the second case, **some updates have been processed successfully**. This can be evidenced by the fact that the last column in the error report contains ER.36 values and values of the type 'Database updated -

Submission 0000 - Product 00000'. In this case, just capture the ER.36 errors in an Excel or CSV file and submit it as a ticket to EMA Service Now: https://support.ema.europa.eu/. No need to resubmit the part of the file containing values type 'Database updated - Submission 0000 - Product 00000'.

- o Once the errors of type ER.36 have been addressed, incorporate the AvS of those products into the next submission, and if you again receive any error repeat all the above steps.

Over time, as ER.36 issues are cleaned up, the size of the carry forward from month to month should diminish in size and eventually disappear.

For information:
- **Between August and September 2024, marketing authorisation holders will be required to manually add in UPD the relevant email addresses of the QPPV for their products, without submitting a VNRA.** Currently, UPD only contains the name and location of the QPPV. For the purpose of Regulation (EU) 2024/568 on fees and charges payable to the European Medicines Agency which will become applicable from 1 January 2025, advice notes, chargeable units line listing(s) and communications will be sent to the QPPV email address available in UPD. Please note that the feature will be available for a limited time and is only for the addition of the QPPV email address. Any other change to QPPV details (name and/or location) must follow the C.1 VNRA process. After this period, any necessary changes to QPPV details including the addition or update of email address, must follow the C.1 VNRA process. Detailed information will be communicated in advance via email to all industry users registered in the UPD in the upcoming weeks. A separate information will be sent to all NCA users too.
- **New naming convention for releases:** after version 1.6.42, the new format will include the year, quarter and sprint. For example, in release 1.7.**2413,** 24 stands for the year; **1** for the quarter, and **3** for the sprint.
- **VNRA supergrouping**: due to the complexity of the functionality, MAHs **are strongly advised to read the revised** CMDv Best Practice Guide for Variations Not Requiring Assessment and watch the "How to submit VNRA Supergrouping" video tutorial available on EMA's UPD webpage.
- **Updates of legacy data**: for some of the products approved under DCP/MRP, it could be the case that only one RMS and no CMS(s) are involved in the process. Given that the current implementation of the UPD does not support this scenario, the workaround for recording and updating these products will be as follows:
  - o **Step 1)** the RMS creates the DCP adding as CMS a country belonging to EEA (this country should preferably have very few CMSs and no RMS products).
  - o **Step 2)** to prevent the product from being available to the general public and the MAH, the CMS will not update the national part of the product
  - o **Step 3)** finally, the CMS product will be nullified by the CMS once UPD allows having these products with only one RMS.

Table of Contents

1. Summary of issues

1.1. Resolved issues

Use Case	Affects API and/or UI	Issue reference (ADO)	Resolved issues
All UC	NCA UI & MAH UI	83277	Clarification: in the previous release notes for version 1.7.2417 published on 24 April 2024 it is written that this ticket has been closed because the issue is considered obsolete. This is not the case and therefore the following clarification is required: Some CAPs with status of Withdrawn or Surrendered have been loaded into UPD from EMA's source system (SIAMED) with status of Valid. This ticket has been replaced by the User Story 162162 (see Annex 2 below) which will cover all cases where for CAP products the MA status has been loaded to UPD incorrectly.
UC01 Create product	API	82249	Validation in all resources of URN UUID for full URL attribute: letters allowed are only a to f to form the hexadecimal set from 0 to f pattern of 8-4-4-4-12 The post may not be rejected or may not give an error message that clearly identifies this as being the issue. This ticket has been closed as it has never been reported by an API user since UPD went live.
UC01 Create product	API	168950	Create Homeopathic Product via API: if payload contains attributes with CMS information this is accepted and the information stored. These attributes should either give validation error or be ignored as not applicable for this procedure type.
UC01 Create product	NCA UI	171860	When creating a product with multiple ingredients, the unit of presentation dropdown does not present any options for the subsequent ingredients.
UC03 Search product	API	123745	API user was not able to search and view products and receives 403 invalid query and 403 Product is NOT in user affiliations response.

UC03 Search product	API	83332	API user only: A search of products using parameters of _lastUpdated works as expected. User can define an date interval on the search.
UC01 Create product **UC08 Update product**	API & NCA UI	82570	UC01 Create & UC08 Update Product - POST should be valid where Reference Strength is populated but there is no Substance Strength; or if specify Substance Strength a Reference Substance and no Reference Substance Strength. Instead, there is a validation error and Substance Strength must always be specified. This error has not been reported by any user and so was considered obsolete.
UC01 Create product **UC08 Update product**	NCA UI	83327	If product contains two or more Pharmaceutical products, the labels are not properly formatted on the View product screen. The case where two or more Pharmaceutical products should link to the same Ingredient to be considered and review documentation. This was considered not a bug and Data Quality Framework will be dealing with products currently facing this situation.
UC01 Create product **UC08 Update product**	API & NCA UI	147296	CA should only be able to add Availability status entry for the same country as the Authorisation country of their product.
UC01 Create product **UC08 Update product**	NCA UI	82452	All procedure types - leading and trailing spaces in free-text fields should be removed by the system before validation.
UC01 Create product **UC08 Update product**	API & NCA UI	82761	The Manufactured Item Quantity will be truncated to 2 decimal places. It should be possible to enter greater precision if required of up to 8 decimal places.
UC03 Search product	NCA UI & MAH UI	173475	MA Number is not displayed in the search results view, if defined at package level.
UC03 Search product	NCA UI & MAH UI	162057	The value for the attribute strength will appear as 'N/A' in the search results table for the cases where the strength of an ingredient was provided in terms of concentration.
UC05 View product	NCA UI & MAH UI	173232	In Package section - (5.6.2.) Manufactured item quantity is missing the Units of measurement in the view
UC06 Submit VNRA	MAH UI	161519	Foreseen Decision Maker dropdown list was not displaying all countries (options).
UC06 Submit VNRA	MAH UI	83112	This ticket has been closed as it is considered obsolete since the expected behaviour of the system today is that a MAH will be blocked by the system when trying to submit VNRAs for automated codes if any of the products within the submission

			belonging to a DC/MR/SR procedure are missing mandatory national data.
UC09 Approve/Reject VNRA	NCA UI	84163	CMS NCA was able to select Approve/Reject checkbox when viewing a VNRA, although the Submit button correctly remained disabled.
UC08 Update product	NCA API	172176	It is possible for a user to remove common data in a national update via API
UC08 Update product	NCA UI	175359	An error was raised while updating a PET product, stating field resource.basis was not available
UC08 Update product	NCA UI	180599	Common data updates were failing for products with no Authorization Status defined.
UC08 Update product	NCA UI	180887	On an National Data update, a valid payload was altered by the system (duplicating Manufactured Item Definitions) rendering it invalid
UC08 Update product	NCA UI	180943	National data update was failing with error message after updating common data by deleting Pharmaceutical Product of DCP product
UC08 Update product	API & NCA UI	109885	Products that had previously been affected by Bug 89511 (replacing Pharmaceutical product removed the Ingredients) cannot be further updated. Datafix for affected products was executed.
UC08 Update product	API & NCA UI	83203	An error from previous failed update with an incorrect payload prevented a subsequent update. The scenario described to achieve this failed updated is no longer reproducible due to new validations added.
UC09 Approve/Reject VNRA	NCA UI	168118	Decision table is not updated if information is added at VNRA level.
UC19 Nullify product	API	82811	API Manager Nullification endpoint: when Try It option is selected the Content-Type request header defaults to application/json and it should be application/fhir+json. Using the default value will give an error.
UC21 Manage Notifications	NCA UI & MAH UI	83254	Date format inconsistent between different actions. Ticket deemed obsolete after implementation of cognitive search.
UC21 Manage Notifications	NCA UI & MAH UI	175866	Notifications for failed VNRA submissions are not generated
UC21 Manage Notifications	NCA UI & MAH UI	171293	Search by product owner is returning wrong results

UC25 Update Availability status	MAH UI	153934	When Availability Status is submitted by MAHs, if an ER.36 is thrown by the system (see Vet EUIG-Chapter 7), the description of the error provided in the csv file does not comply with the format expected, even though is correct
UC25 Update Availability status	MAH UI	161155	A submission of Availability Status for a DCP/MRP/SRP product where a CMS was removed and then re-added will fail as invalid
UC25 - Update availability status and placing on the market via UI	MAH UI	160241	Surrendered packages were included in the downloaded AVS csv file.
UC28 View VNRA	NCA UI & MAH UI	175982	VNRA PDF information missing for the new codes: C.10.d) and C.10.e)
UC33 Manage Third Country Product Names	MAH UI	159277	Submission of Third country data of the DCP/SRP Product will fail if one of the CMS products is nullified or has a CMS which has marketing status set to suspended.
UC07 – Download Packages and Submission of Volume Sales via Form	MAH UI	158743	Surrendered packages are included in the downloaded VoS csv file.
Data Fix	NCA UI & MAH UI	83291	Data Fix Parallel Trade products: where Source Member State product had two or more Ingredients, the first Ingredient from that product was duplicated in the new Parallel trade product.
UC33 Manage Third Country Product Names	MAH UI	180823	'View Submission of third country product names' returns results for new and previous submissions

1.2. New issues since last release

This table is ordered by Use Case number. This section lists known issues in this release that have not previously been included in the Release Notes. Some issues had existed in a previous release, and some are new issues in this new release.

Use Case	Affects API and/or UI	Issue reference (ADO)	New Issue description	Workaround
UC01	NCA UI	183496	When resuming a product draft, the validation of ATC vet code flag is incorrect	User needs to interact with the element to reset the validation. For instance, remove and re-add the ATC Vet Code check in order to unblock the create button

UC01 Create Product	NCA UI	183127	When creating an Homeopathic product via API, chapter 4 validation rules are incorrect and allow the user to create a product without a package	
UC01 Create Product/ UC08 Update Product	NCA UI	185225	Substance manufacturer information is not being displayed on product view or edit forms even though it is defined	
UC08 Update Product	NCA UI	183038	Incorrect validation error is raised when adding a package to a homeopathic product	
UC08 Update Product	NCA UI	184011	Timeout waiting for connection from pool	
UC08 Update Product	NCA UI & API	184794	A common update to an MRP product will fail if a user had defined a Marketing Authorization Number at product level, given that the original reference NAP product had Marketing Authorization Number at package level	
UC08 Update Product	NCA API	180967	When updating a product via API, if MedicinalProductDefinition is not the first resource entry in the payload the version date displays {{date}} in the UI view	With MedicinalProductDefinition set as the first resource in the payload there will be no issues.
UC08 Update Product	NCA UI	182508	On a common data update, a payload with reference to deleted Ingredient in Administrable Product Definition is accepted and invalid data is incorrectly saved	
UC08 Update Product	NCA UI	189601	Search Manufacturer modal window fails when using filter 'City'	
UC09 Approve/Reject VNRA	NCA UI	189270	VNRA submission for CAP product with incorrect Decision Maker blocks user from submitting any decision	
UC21 Manage Notifications	NCA UI	180324	Notifications are not being generated for the migrated CAP products	
UC21 Manage Notifications	NCA UI	180398	Nullify of a CAP product triggers 2 notifications, the second one incorrectly with an UPDATE action	
UC25 Availability Status	MAH UI	183756	The download starts automatically if the user leaves the VNRA Submission page and opens the AvS download page	

UC28 View VNRA	NCA UI	185240	Incorrect number of submissions shown on VNRA View table when navigating to further pages of the results	When navigating to page 2, system loses the filter by Submission Status. As a workaround the user can explicity select this value to be filterer.
UC31 Manage VNRA via API	NCA API & MAH API	194352	Summary parameter does not return expected results.	Summary parameter is effectvly ignored at the moment.
UC31 Manage VNRA via API	NCA API & MAH API	194891	Download vnees endpoint is not working as expected	Endpoint to download Vnees file should not be used until this ticket is resolved.
UC37 Automatic sending of notifications	NCA UI & MAH UI	189584	When the user changes the Authorization Status, the email notification for this update will state it as a new created field	
UC37 Automatic sending of notifications	NCA UI & MAH UI	192235	When a user changes the PSMF field, the email notification for this update will state an update to Documents	

2. User support

API and UI users may seek support by contacting the User Support via EMA Service Now: https://support.ema.europa.eu/.

For the technical team to address your query in a timely manner, please include the following information as appropriate:

- UI: Print screen of the information entered to create a veterinary product (go to your browser settings, select Print (or press Control + P) and "Save as PDF" on your computer

- API: Operational outcome of the unsuccessful task; the request URL and request headers; and for a Create or Update the request body

2.1. Available training materials and guidance

- Webinars
- Video tutorials
- Guidance for National Competent Authorities
- Guidance for Marketing Authorisation Holders
- EU Implementation Guide
- Release notes

3. References

1. Registration Process for UPD (See under section 'How to register') (PDF document)
2. SPOR API Specification V2_R5 (europa.eu) API specifications for SMS and PMS, based on FHIR
3. HL7 FHIR Release 5 Preview 2: the authoritative source for the FHIR specifications used by EMA to implement SMS and PMS API
4. Referentials Management System
5. Additional information on the Referentials Management System
6. Organisations Management System
7. Additional information on the Organisations Management System

Annex 1: Overview of functionality and business value

Functionalities provided in this release

API	
	RMS can create DCP products (data and documents)
	RMS can create MRP products (data and documents)
	RMS can create SRP products (data and documents)
	RMS and CMS can complement DCP/MRP/SRP products with national DCP/MRP/SRP data and documents
	RMS can update Common data for DCP/MRP/SRP products (data and documents)
	NCA can create and update NAP products (data and documents)
	NCA can create & update Registered Homeopathic products (data and documents)
	NCA can create & update Parallel Trade products (data and documents)
	NCA can create & update Pet products (data and documents)
	NCA can Nullify product
	NCA can Search/view product (data and documents)
	NCA can Search, View and Approve/Reject VNRA submissions
	NCA can Approve/Reject VNRA submissions on behalf of other NCAs when a Supergouping VNRA submission applies
	NCA can View Volume of Sales data

NCA UI	RMS can create DCP products (data and documents)
	RMS can create MRP products (data and documents)
	RMS can create SRP RMS can create SRP products (data and documents)
	RMS and CMS can complement DCP/MRP/SRP products with national DCP/MRP data (including documents)
	RMS can update Common data for DCP/MRP/SRP products (data and documents)
	NCA can create and update NAP products (data and documents)
	NCA can create & update Registered Homeopathic products (data and documents)
	NCA can create & update Parallel Trade products (data and documents)
	NCA can create & update Pet products (data and documents)
	NCA can save and retrieve drafts for product submissions
	NCA can Nullify product
	NCA can Bulk Upload Documents
	NCA can Transfer Marketing Authorisation
	Search/view/export products (data and documents)
	Notifications for Create and Update of products and Other Post-Authorisation Data actions
	View Volume of Sales information
	Search, View and Approve/Reject VNRA submissions
	NCA can Approve/Reject VNRA submissions on behalf of other NCAs when a Supergouping VNRA submission applies
	EMA and EC staff can update CAP products

MAH UI	Search/view/export products (data and documents)
	Notifications for Create and Update of products and Other Post-Authorisation Data actions
	Download, Submit, and View Volume of Sales information
	Submit VNRA and View VNRA submissions
	Submit Supergouping VNRAs with the selection of the Foreseen Decision Maker that will approve/reject the whole submission on behalf of the others NCAs involved
	Submit updates for Marketing authorisation status
	Download and Submit updates for Availability status
	Submit Products Grouping
	Submit 3rd country product names

MAH Validation UI	Validate Volume of Sales submission file

Authorisation for NCA & MAH UI	Integration with EMA Account Management (EAM) system for CA and Industry (MAH) roles
	CA users may search and view all Vet products
	MAH users may search and view only products under the responsibility of the organisations the user represents

Banner for UPD UI	EMA can maintain messages to appear in banner of UPD UI

Functionality not included in this release

The following functionality is not included in this release.

NCA UI:

- None

MAH UI:

- None

Annex 2: Known issues

Issue reference is an internal number used by the UPD Project team when managing issues. It has been included as User Support may refer to this reference number when responding to your queries. In addition, you can include this reference number when contacting user support on this topic and seeking clarification.

Filter the columns to find those tickets relevant to your role and for NCAs whether you are an API or NCA User or both.

This table is ordered by Use Case number.

Use Case	Affects user	Issue reference (ADO)	Known Issue Description	Workaround
All UC	API & NCA UI & MAH UI	143996	CAP: there are now two products for Exzolt and expected there just to be one.	
API Manager	API	82994	API Manager has duplicate Products listed for "UPD API" (v1 and v3 versions of EP); and exposes many EP not intended to be used by API NCA Users. There should only be the one product at this time with v1 Endpoints.	
UC01 Create product	API	83042	Create parallel trade product via API: the GET OperationOutcome response is populating in the DCP format and it was expected would use same pattern as NAP.	
UC01 Create product UC08 Update product	NCA UI & API	154083	(Marketing authorisation application) Legal basis: Vet EU IG Chapter 2 section 1.7.1 : some terms from the RMS list are missing.	
UC03 Search product	MAH UI	107914	After organization merge, MAH cannot find their products in General search, VNRA submission screen or VoS csv (UPD, VNRA or OPAD databases). Note: even though this issue has been in UPD and known for a while, but it has not been well documented in a ticket. The issue is expected to be resolved in the near future.	

UC03 Search product	NCA UI & MAH UI	83234	Search limitations due to FHIR limitation or MS FHIR limitation.
UC05 View product	NCA UI & MAH UI	83259	When View product QPPV displays as N/A even although the product does have a LOC-ID populated. This affects only some products and may be due to some Data Quality issue in the affected products.
UC08 Update product	API & NCA UI	79977	All procedure types: if product does not contain any existing value for Responsible Authority or Product Owner, when an update is submitted the new LOC-ID is not saved.
UC08 Update product	API & NCA UI	152242	CAP product only - after updating product in UPD there is a duplicated Pack size attribute. This duplicate attribute is only seen view Retrieve product via API. Subsequent updates via UPD for affected products are successful.
UC08 Update product	API	82437	Change to procedure number not saved if existing inline attribute id is not included in the request body.
UC08 Update product	NCA UI & MAH UI	83142	For CAP products: there are examples where two products have been created and expected just one. This may occur when a new package has been added or package information has been updated. The cause of the issue will be resolved and affected products corrected.
UC08 Update product	API	82569	UC08 Update SC2 NAP - should reject update with validation error message if MedicinalProductDefinition.id is not populated.
UC08 Update product	API & NCA UI	144350	Update Common Data DCP/MRP/SRP to remove the last remaining country from the list of Concerned MS fails with Validation error when submitting via NCA UI. There is no validation error if submitted via API. Acceptance criteria and validation required to be reviewed so that API and NCA UI are aligned.
UC08 Update product	ETL for CAP products	162162	Retrieve from UPD correct information on 2.5. Authorisation status (MA status) and 2.6. Date of authorisation status change for CAP products

UC19 Nullify product	API	132758	Nullify Product via API - OperationOutcome ID now has suffix of "-Patch" which is not expected and is potentially a breaking change for API users. When submitting GET OperationOutcome/ID the response code is 499 Client Closed Request. Therefore it is not possible to nullify a product via the API in this release and NCA UI will need to be used.	In order to nullify a product, please use the Web User Interface.
UC25 Update Availability status	MAH UI	177951	Submissions of Availability Status fails for some CAP products with Error 36	
UC28 View VNRA	NCA UI	83344	For a VNRA submitted for a product where the Responsible Authority is not correctly populated (for example may have incorrectly been populated with MAH LOC-ID): an NCA User for that Authorisation country is not able to view the VNRA Submission even after the Responsible Authority has been corrected in the product(s) included in the submission.	
UC31 Manage VNRA Submissions via API	API	142804	All of the endpoints for VNRA API https://spor.azure-api.net/upd/api/vnra/v3/vnra-submission fail with 404 Resource Not Found.	

Annex 3: Release Schedule

Environment	Closed from	Closed to	Expected to be open	Description
PROD	23 April 2024	23 April 2024	24 April 2024	Upgrade of UPD to **1.7.2417**
UAT	21 May 2024	21 May 2024	21 May 2024	Upgrade of UPD to **1.7.2417-6** (this update contains only hot fixes and does not include other bug fixes nor new features).
PROD	30 May 2024	30 May 2024	31 May 2024	Upgrade of UPD to **1.7.2417-6** (this update contains only hot fixes and does not include other bug fixes nor new features).
UAT	4 June 2024	4 June 2024	5 June 2024	Upgrade of UPD to **1.7.2424**
PROD	12 June 2024	12 June 2024	13 June 2024	Upgrade of UPD to **1.7.2424**
UAT	20 June 2024	20 June 2024	20 June 2024	Upgrade of UPD to **1.7.2424-5**
PROD	1 July 2024	1 July 2024	2 July 2024	Upgrade of UPD to **1.7.2424-5**
UAT/PROD				*Q3 2024 releases will be considered at the next Program Increment planning to be held on 3-4 July 2024 and communicated in due course.*

Annex 4: Guidance for API users

4.1 UPD API to Maintain Products and Product Documents

4.1.1. Scope of this release for API

- Create DCP based on Chapter 4 Legacy or Chapter 2 rules

- Create MRP based on Chapter 4 Legacy or Chapter 2 rules

- Create SRP based on Chapter 4 Legacy or Chapter 2 rules

- RMS can update Common Data for products under DCP/MRP/SRP (data and documents)

- RMS and CMS can complement DCP/MRP/SRP product with national data

- Create NP & Registered Homeopathic based on Chapter 4 Legacy or Chapter 2 rules

- Update NP & Registered Homeopathic product based on Chapter 4 Legacy or Chapter 2 rules

    o Edit existing, add new, or delete an existing non-mandatory attribute

    o Add new resources. For example: add an Ingredient or add another Package

    o Delete an existing non-mandatory resource. For example: remove an Ingredient

- Create & Update Parallel trade based on Chapter 4 Legacy or Chapter 2 rules

- Create & Update Pet products based on Chapter 4 Legacy or Chapter 2 rules

- Search and retrieve products

- Nullify product

- Upload, search, retrieve, and update Documents (for product under any procedure type)

4.1.2. UPD API supported Product Service endpoints

EP302 Search Product Part and EP305 Get Product Part endpoints are no longer available.

SPOR API Specification v2	API Manager
EP301 Search Product	**GET** MedicinalProductDefinition - Search for a MedicinalProductDefinition resource or resources
EP303 Get Product	**GET** MedicinalProductDefinition - Get a MedicinalProductDefinition ID
EP304 Get Product Full	**GET** Everything Current - Get $everything for a MedicinalProductDefinition ID
EP306 Get Product Version	**GET** MedicinalProductDefinition Version - Get version of MedicinalProductDefinition ID
EP306a Get Product Version Full	**GET** Everything Versioned - Get $everything for a version of MedicinalProductDefinition ID
EP307 Get Product Versions	**GET** MedicinalProductDefinition - Get history of MedicinalProductDefinition ID

SPOR API Specification v2	API Manager
EP309 Create Product	NAP: `POST` Bundle - Create/Update resources in the bundle DCP: `POST` dcp-bundle - Submit a Create DCP payload MRP: `POST` mrp_bundle – Submit a Create MRP payload SRP: `POST` srp_bundle – Submit a Create SRP payload Registered homeopathic: `POST` Bundle - Create/Update resources in the bundle Parallel trade: `POST` ptp-bundle - Create/Update resources in the bundle Pet: `POST` pet-bundle - Create/Update resources in the bundle Refer to 4.1.5.2. Create and Update endpoints
EP309 Create Product EP311 Update Product for use with any Create or Update	`GET` OperationOutcome - Get a resource by ID Note: use this to query the outcome of Create or Update when response to Post is "202 Accepted"
EP311 Update Product	NAP: `POST` Bundle - Create/Update resources in the bundle Update National Data: `POST` /upd/api/v1/national-data-bundle/ - Submit an Update National Data payload for DCP/MRP/SRP products Update Common Data: `POST` /upd/api/v1/common-data-bundle/ - Submit an Update Common Data payload for DCP/MRP/SRP products

SPOR API Specification v2	API Manager
EP318 Validate Product	**POST** Validate Bundle – To validate a bundle and the resources in the bundle Used for all procedure types; for both chapter 2 or legacy validation rules; and for both Create & Update
EP UC19 Nullify Product	**POST** /upd/api/v1/vmp-nullification/
EP401 Search document	**GET** DocumentReference - Search for DocumentReference No
EP402 Get/Retrieve document by Id	**GET** DocumentReference - Get a DocumentReference by Id Note
EP403 Create document	**POST** DocumentReference - Create a DocumentReference
EP404 Update document by Id	**PUT** DocumentReference - Update a DocumentReference Please note: API Manager method shows as PUT however please use **POST** with request header is_update=true.

4.1.3. API Manager product subscription

Any new API users should register a user and subscribe to the product Authorised - UPD API - Milestone 3 (UPD 1.03) in API Manager.

The credentials for this new product can be used for all supported endpoints as listed in section 4.1.2. UPD API supported Product Service endpoints

Refer to the document UPD 01.03 Registration Process for UPD API in Production/UAT listed in the References section.

4.1.4. Apply Chapter 4 Legacy or Chapter 2 Validation rules

When submitting a POST for EP309 Create Product or EP311 Update Product, there is a Request header that is used to specify which validation rules are to be applied.

Please note that each type of update may use a different value for the Key.

Value	Validation rules applied
Request header not included	Vet EUIG Chapter 2
false	Vet EUIG Chapter 2
true	Vet EUIG Chapter 4 Legacy

4.1.5. API EP309 Create, EP311 Update & Nullify product endpoints

4.1.5.1. Request headers applicable for all Create, Update & Nullify POST

When submitting a POST for EP309 Create Product or EP311 Update or Nullify Product, the same Request headers are used for all endpoints that specify the format for the request and response.

Request Header: Key	Values	Purpose
Content-type	application/fhir+xml application/fhir+json	Specifies the format of the request body that is being submitted

Request Header: Key	Values	Purpose
Accept	application/fhir+xml application/fhir+json	Specifies the format for the response body of the POST if there are any validation or other errors

4.1.5.2. Create and Update endpoints

- As specified in SPOR API v2 Specification section 6.4.12

- Refer to API Manager developer portal

- The Request body is a Bundle (type=transaction) of MedicinalProductDefinition and other resources

- For all the Update endpoints, the Bundle should be based on all data in the existing product. This includes Update Common Data DCP/MRP/SRP where all existing National data should also be included in the bundle even although it is only Common data that will be updated

- Create MRP is an update to an existing NP product. The Bundle should be based on all national data in that product, with the additional Common data added, and the procedure type updated to MRP

- Create SRP is an update to an existing DCP/MRP/SRP product. The Bundle should be based on all national data in that product, with the additional Common data added

- Please refer to the example bundles and recommended approach sections

Type and Procedure	POST Endpoint	Request header Key for validation rules	Additional Request header
Create NP	/pms/api/v2	chapter4	
Update NP	/pms/api/v2	chapter4	is update = true
Create DCP	/upd/api/v1/dcp-bundle/	chapter4	

Type and Procedure	POST Endpoint	Request header Key for validation rules	Additional Request header
Update Common Data DCP/MRP/SRP	/upd/api/v1/common-data-bundle/	chapter4	is update = true
Update National Data DCP/MRP/SRP	/upd/api/v1/national-data-bundle/	chapter4	is update = true
Create MRP	/upd/api/v1/mrp-bundle/	chapter4	
Create SRP	/upd/api/v1/srp-bundle/	chapter4	
Create Registered Homeopathic	/pms/api/v2	homeopathicschapter2 = true OR homeopathicschapter4 = true	
Update Registered Homeopathic	/pms/api/v2	homeopathicschapter2 = true OR homeopathicschapter4 = true	is update = true
Create Parallel Trade	/upd/api/v1/ptp-bundle/	parallelchapter2 = true OR	

Type and Procedure	POST Endpoint	Request header Key for validation rules	Additional Request header
		parallelchapter4 - true	
Update Parallel Trade	/upd/api/v1/ptp-bundle/	parallelchapter2 = true OR parallelchapter4 - true	is update = true
Create Pet	/upd/api/v1/pet-bundle/	chapter4	
Update Pet	/upd/api/v1/pet-bundle/	chapter4	is update = true
To Validate any Create or Update bundle	/pms/api/v2/$Validate	Use appropriate request header to apply validation rules based on the procedure type	Use is update = true when validating the following bundles: • Update NP • Update Registered Homeopathic • Update Parallel Trade • Update Pet • Update Common Data DCP/MRP/SRP • Update National Data DCP/MRP/SRP • Create MRP • Create SRP

4.1.5.3. Nullify endpoint

Type and Procedure	POST Endpoint	Request header Key for validation rules	Additional Request header
Nullify product	/upd/api/v1/vmp-nullification/	not required	

Content-Type	Request body

JSON	{
	
	   "permanentId": "*Permanent Identifier*"
	
	}

	For example:
	
	{
	
	   "permanentId": "600011984989"
	
	}

XML	<root><permanentId> *Permanent Identifier* </permanentId></root>
	For example: <root><permanentId>600011353107</permanentId></root>

Response to POST:

- Response code 202 Accepted indicates the nullification has been successfully submitted

- Response code 400 Bad request indicates there is a validation error and the Response body will contain error message. For example: "Resource type 'Bundle' with id '600011984989' couldn't be found."

4.1.5.4. Response to POST for Create, Update or Nullify and use of Get OperationOutcome

When POST for Create, Update or Nullify is successful and it cannot be honoured timely it is automatically queued. The Response header **Content-Location** contains an id that can be used to obtain the status of the operation.

Content-Location has two parts: **post-operation**/**operation-outcome-id**

The status of the operation can be consulted, it is one of:

- QUEUED

- IN_PROGRESS

- MSG_CREATED

- ERROR

Upon successful creation, update or nullification of the medicinal product, the operation outcome will show a status of MSG_CREATED along with the unique Permanent identifier(s) of the product(s).

The endpoint GET OperationOutcome/**operation-outcome-id** is used to query the status of the operation and this should be repeated until it is successful with MSG_CREATED or has ERROR.

The format of the Content-Location is showing in the following table, and the response value can be used for Get OperationOutcome.

POST	Content Location example showing format of the operation-outcome-id
Create NP	OperationOutcome/baab996e-8e58-4825-89d1-90a8f30458db
Update NP	OperationOutcome/c2e2275c-141c-4631-a42e-045726d95adb

POST	Content Location example showing format of the operation-outcome-id
Create DCP	Release 1.6.16 and prior: dcp-operation-outcome/ddb9f96b-10f5-4428-9503-170feb5c58db-DCP Release 1.6.20 is now: OperationOutcome/ddb9f96b-10f5-4428-9503-170feb5c58db-DCP
Update Common Data DCP/MRP/SRP	Release 1.6.16 and prior: common-data-operation-outcome/f4d76850-358a-48f1-a9bb-3fb4b1615bdb-CD Release 1.6.20 is now: OperationOutcome/ f4d76850-358a-48f1-a9bb-3fb4b1615bdb-CD
Update National Data DCP/MRP/SRP	Release 1.6.16 and prior: national-data-operation-outcome/b371f2db-dd29-4c60-b6ab-63b0abf95bdb-ND Release 1.6.20 is now: OperationOutcome/ b371f2db-dd29-4c60-b6ab-63b0abf95bdb-ND
Create MRP	Release 1.6.16 and prior: mrp-operation-outcome/2f89089c-3ad7-4427-9311-7ea491395ddb-MRP Release 1.6.20 is now: OperationOutcome/2f89089c-3ad7-4427-9311-7ea491395ddb-MRP
Create SRP	Release 1.6.16 and prior: srp-operation-outcome/cf7af9a9-b34d-4db9-a551-89d40c077306-SRP Release 1.6.20 is now: OperationOutcome/cf7af9a9-b34d-4db9-a551-89d40c077306-SRP
Create & Update Registered Homeopathic	OperationOutcome/a588416b-7a0b-40b1-8d03-a88ea4668f8f
Create & Update Parallel Trade	OperationOutcome/04b5bc00-16f4-4ea0-b33e-1a95029d8f8f-PTP
Create & Update Pet	OperationOutcome/2664fdf2-6aef-4540-8254-b6df6451b8af-PET

4.1.5.5. Creating products for DCP or Update Common Data if national data is provided

When the RMS submits a request bundle to create DCP products, they should only provide Common Data. Refer to Annex 1 of Vet EU IG Chapter 2.

If any National data attributes are populated in the create request bundle this does not result in a validation error. The products for the RMS and each CMS will be created, and any national data entered will be silently ignored.

The same applies for Update Common Data. The RMS should populate the complete Update bundle for their RMS product containing all existing Common and National Data. Only Common Data will be updated to the RMS product and the CMS products under the Product identifier.

4.1.5.6. Key changes in valid request bundle for create and update

Attribute	Change
None	

4.1.6. API EP309 Create product example request bundles

Examples for EP309 Create Product for NP and DCP. Please note that the purpose of these examples is as illustration of the FHIR attributes to be populated.

The value for MedicinalProductDefinition as a cross referenced product is a valid permanent identifier from UAT.

Please note: example files still to be updated and re-released taking into account that pack size is now mandatory.

Procedure type	Validation rules	Example file
DCP	Chapter 2	UPD_1.6.5-6_DCP_Chpt2_C2_Mandatory_VetIG.JSON
		UPD_1.6.5-6_DCP_Chpt2_C2_Mandatory_VetIG.XML
		UPD_1.6.5-6_DCP_Chpt2_C110_VetEUIG_AllData.JSON
		UPD_1.6.5-6_DCP_Chpt2_C110_VetEUIG_AllData.XML
DCP	Chapter 4 Legacy	UPD_1.6.5-6_DCP_Legacy_C2_Mandatory_VetIG.JSON
		UPD_1.6.5-6_DCP_Legacy_C2_Mandatory_VetIG.XML

Procedure type	Validation rules	Example file
		UPD_1.6.5-6_DCP_Legacy_C110_VetEUIG_AllData.JSON
		UPD_1.6.5-6_DCP_Legacy_C110_VetEUIG_AllData.XML
NAP	Chapter 2	2.2 Authorisation/registration/entitlement number is specified at Product level
		UPD_1.6.1-4_NAP_Chpt2_C2_Mandatory_VetIG_MANumber_AtMedicinalProductLevel.JSON
		UPD_1.6.1-4_NAP_Chpt2_C2_Mandatory_VetIG_MANumber_AtMedicinalProductLevel.XML
		UPD_1.5.1-0_NAP_Chpt2_C110_VetEUIG_AllData_MANumber_AtMedicinalProductLevel.JSON
		UPD_1.5.1-0_NAP_Chpt2_C110_VetEUIG_AllData_MANumber_AtMedicinalProductLevel.XML
		5.5 Marketing authorisation (package level)
		UPD_1.5.1-0_NAP_Chpt2_C111_VetEUIG_AllData_MANumber_AtPackageLevel.JSON
		This example contains 2 packages.
		There are 3 RegulatedAuthorization resources:
		• One with subject reference = MedicinalProductDefinition resource; populated with attributes from Section 2 (Vet EUIG Chapter 2), excluding the marketing authorisation number
		• One with subject reference = 1st PackagedProductDefinition resource; populated with the Marketing authorisation number for Package 1
		• One with subject reference = 2nd PackagedProductDefinition resource; populate with the Marketing authorisation number for Package 2
NAP	Chapter 4 Legacy	UPD_1.6.1-4_NAP_Legacy_C2_Mandatory_VetIG_MANumber_AtMedicinalProductLevel.JSON

Procedure type	Validation rules	Example file
		UPD_1.6.1-4_NAP_Legacy_C2_Mandatory_VetIG_MANumber_AtMedicinalProductLevel.XML
		UPD_1.5.1-0_NAP_Legacy_C110_VetEUIG_AllData_MANumber_AtMedicinalProductLevel.JSON
		UPD_1.5.1-0_NAP_Legacy_C110_VetEUIG_AllData_MANumber_AtMedicinalProductLevel.XML
NAP	Chapter 4 Legacy	UPD_1.5.1-0_NAP_Legacy_Cx_ManyAttributesAndResources_MANumberAtMedicinalProductLevel.XML This example contains: • 2 or more values for those attributes that are repeatable. For example, Product name, ATC Vet Code, Manufacturing Business Operation • 2 Packages (PackagedProductDefinition) • 2 Manufactured Items (ManufacturedItemDefinition) • 3 Ingredients (Ingredient)
NAP	Chapter 2	UPD_1.5.1-0_NAP_Chpt2_ExampleForStrengthAsPresentationOrConcentration.XML This example contains Ingredient resources that illustrate how to specify Substance and Reference Strength as either Presentation or Concentration.
NAP	Chapter 2	NAP_Chpt2_Create_BR-178_StrengthFreeTextExample_1.6.22-6.XML F178: This example contains Ingredient resources that illustrate how to specify free-text substance or reference substance strength
Registered Homeopathic	Chapter 2	UPD_1.6.1-4_HOM_Chpt2_C2_Mandatory_VetIG_MANumber_AtMedicinalProductLevel.JSON UPD_1.6.1-4_HOM_Chpt2_C110_VetEUIG_AllData_MANumber_AtMedicinalProductLevel.JSON
Parallel Trade	Chapter 2	UPD_1.6.8-4_PAT_Chpt2_C2_Mandatory_VetIGl.JSON

Procedure type	Validation rules	Example file
		UPD_1.6.8-4_PAT_Chpt2_C110_VetEUIG_AllData.JSON
Pet	Chapter 2	PET_Chpt2_C2_Mandatory_VetIG_MANumber_AtMedicinalProductLevel_1.6.34-5.json PET_Chpt2_C110_AllData_VetIG_MANumber_AtMedicinalProductLevel_1.6.34-5.json

4.1.6.1. Recommended approach to prepare update request bundle

The recommended approach for preparing a request bundle to update a product (any procedure type) is:

- Use the response from EP304 GET MedicinalProductDefinition/{permanent identifier}/$everything as a starting point

- Add Bundle.entry.request for each resource and update Bundle.type

Attribute	Change
Bundle.type	Must be "transaction"
For every Bundle.entry	Bundle.entry.request must also be populated. Bundle.entry.request.method should be: • PUT to update an existing resource • POST to add a new resource Bundle.entry.request.url should be: • Same value as Bundle.entry.fullUrl

For example:

```
<?xml version="1.0" encoding="utf-8"?>
<Bundle xmlns="http://hl7.org/fhir">
    <id value="600000022531" />
    <meta>
        <versionId value="1" />
        <lastUpdated value="2021-07-07T08:52:51.607+00:00" />
    </meta>
    <type value="transaction" />
    <entry>
        <fullUrl value="MedicinalProductDefinition/600000022531" />
        <resource>
            <MedicinalProductDefinition>
        </resource>
        <request>
            <method value="PUT" />
            <url value="MedicinalProductDefinition/600000022531" />
        </request>
    </entry>
    <entry>
        <fullUrl value="PackagedProductDefinition/170427" />
        <resource>
            <PackagedProductDefinition>
        </resource>
        <request>
            <method value="PUT" />
            <url value="PackagedProductDefinition/170427" />
        </request>
    </entry>
```

- DO NOT edit or remove the IDs for each resource and in-line within each resource in the EP304 Get $everything response

4.1.6.2. How to use Update NP product endpoint and example bundle

Create product via API	POST Bundle	Sample XML bundle used:

		UPD_1.5.1-0_NAP_Legacy_C110_VetEUIG_AllData_MANumber_AtMedicinalProductLevel.XML
Check operation outcome	MSG_CREATED message expected containing Permanent identifier	
EP304 Get Product Full	Prepare update bundle based on the response by updating Bundle.type to transaction and adding Bundle.entry.request.method for each resource. Edit the payload e.g. - modify product name - add another ATC Vet code - add another ManufacturedItemDefinition including this into the existing PackagedProductDefinition	Sample XML of Get Everything response used as a starting point: UPD_1.5.1-0_EP311_UpdateProduct_GetEverything_version1.XML Update bundle prepared: UPD_1.5.1-0_EP311_UpdateProduct_RequestBundle.XML
Update product via API	POST Bundle with request headers to /pms/api/v2 • "is_update=true" • "chapter4" = true or false for the validation rules to apply	
Check operation outcome	MSG_CREATED message expected containing Permanent identifier	
EP304 Get Product Full	Check the response for modifications	Sample XML of GET everything after update: UPD_1.5.1-0_EP311_UpdateProduct_GetEverything_version2.XML

4.1.6.3. How to use Update National Data DCP/MRP/SRP product endpoint and example bundle

EP304 Get Product Full	Prepare update bundle based on the response by updating Bundle.type to transaction and adding Bundle.entry.request.method for each resource.
	
	Edit the payload and add national data e.g.
	   - Product name
	   - Legal status of supply (product level)
	   - Package description
	   - Marketing authorisation number (product level)
	   - Marketing authorisation status & dates
	   - Responsible authority
		Create DCP using this example file:
		UPD_1.6.16-5_CreateDCPForUpdateNationalData.XML
		
		Product Identifier: d0f4414c-cd65-478b-921e-f107c66f7a85
		
		CMS for Italy **Permanent identifier:** 600000251886
		Sample XML of Get Everything response used as a starting point:
		UPD_1.6.16_DCP_UpdateNationalData_600000251886_GetEverything_v1.XML
		
		Update bundle prepared:
		UPD_1.6.16_DCP_UpdateNationalData_600000251886_BasedOn_v1.XML

Update product via API	POST Bundle with request headers to /upd/api/v1/national-data-bundle/
	
	   • "is_update=true"
	   • "chapter4" = true or false for the validation rules to apply	

Check operation outcome	MSG_CREATED message expected containing Permanent identifier	
EP304 Get Product Full	Check the response for modifications	Sample XML of GET everything after update: UPD_1.6.16_DCP_UpdateNationalData_600000251886_GetEverything_v2.XML

4.1.6.4. How to use Update Common Data DCP/MRP/SRP product endpoint and example bundle

EP304 Get Product Full	Prepare update bundle based on the response by updating Bundle.type to transaction and adding Bundle.entry.request.method for each resource.
	
	Edit the payload
	e.g.
	   - modify common product name
	   - add another ATC Vet code
	
	Important: any national data that has been populated should be also included in the update bundle.
		Sample XML of Get Everything response used as a starting point:
		
		UPD_1.5.3-4_DCP_UpdateCommonData_Product_600000149642_GetEverything_Version1.XML
		
		Update bundle prepared:
		
		UPD_1.5.3-4_DCP_UpdateCommonData_Product_600000149642_UpdateBundleBasedOnVersion1.XML

Update product via API	POST Bundle with request headers to /upd/api/v1/common-data-bundle/ • "is_update=true" • "chapter4" = true or false for the validation rules to apply	
Check operation outcome	MSG_CREATED message expected containing Permanent identifiers	
EP304 Get Product Full	Only the Common data in the RMS and CMS products under that Product Identifier will be updated	Please refer to Known issues section for any outstanding issues where national data submitted when updating common data is not being ignored.

4.1.6.5. How to use Create MRP product endpoint and example bundle

EP304 Get Product Full	Prepare update bundle based on the response by updating Bundle.type to transaction and adding Bundle.entry.request.method for each resource.	Sample XML of Get Everything response used as a starting point: UPD_1.5.3-4_CreateMRP_NP_600000184179_GetEverything_version1.XML
Prepare Create MRP Bundle	• Change procedure type from NP to MRP • Add Common Name with Country = EU and Language = English • Add Reference member state and Concerned member state • Add Common package description in English (if doesn't exist)	Create MRP bundle prepared: UPD_1.5.3-4_CreateMRP_BasedOn_NP_version1.XML
Create MRP via API	POST Bundle with request headers to /upd/api/v1/mrp-bundle/ • "chapter4" = true or false for the validation rules to apply	
Check operation outcome	MSG_CREATED message expected containing Permanent identifiers for RMS NP product and products created for each CMS	
EP304 Get Product Full	RMS: • Contains the Common data that was added CMS:	

	• Each new product is only populated with Common data, with status of Provisional	

4.1.6.6. How to use Create SRP product endpoint and example bundle

EP304 Get Product Full	Prepare update bundle based on the response by updating Bundle.type to transaction and adding Bundle.entry.request.method for each resource.	Sample XML of Get Everything response used as a starting point: UPD_1.6.1-4_CreateSRP_RMSProduct_GetEverything_version1.XML
Prepare Create SRP Bundle	• Add new Concerned member state(s) • Update common data as required	Create SRP bundle prepared: UPD_1.6.1-4_CreateSRP_BasedOnRMSProduct_version1.XML
Create SRP via API	POST Bundle with request headers to /upd/api/v1/srp-bundle/ • "chapter4" = true or false for the validation rules to apply	
Check operation outcome	MSG_CREATED message expected containing Permanent identifiers for existing RMS & CMS products and products created for each new CMS	
EP304 Get Product Full	RMS & existing CMS: • Contains the new CMS • Procedure type remains unchanged • Contains the Common data that was updated	

	New CMS: • Each new product is only populated with Common data, with status of Provisional, and procedure type of SRP	

4.1.7. API Manage document

4.1.7.1. EP403 Create document

Resource Information

Endpoint	POST /pms/api/v2/DocumentReference
Request	
Accept	application/fhir+xml application/fhir+json
Body	<DocumentReference .. </DocumentReference>
Content-type	application/fhir+xml application/fhir+json

Response	
Body	Document with version 1 and document ID returned Note: ID expected format example: 3c46270e-3c3d-4869-a73c-ad4d7c3f2893

Query Parameters

None

Example Request

For UAT environment: POST https://spor-uat.azure-api.net/pms/api/v2/DocumentReference

Example file for request body: UPD_1.6.1-4_Doc_EP403_CreateDocument.XML

PDF document that was converted to base64: EP403_UploadDocument.PDF

- Document status value is case-sensitive (e.g.: current will work; CURRENT will fail)
- Document language value is case-sensitive (e.g.: en will work; EN will fail)

4.1.7.2. EP401 Search document

Resource Information

Endpoint	GET /pms/api/v2/DocumentReference?{ param}={value}[&{param}={value}]
Request	
Accept	application/fhir+xml application/fhir+json
Body	n/a
Content-Type	n/a
Response	

Body	Bundle of <DocumentReference>(s)
	
	e.g.
	Bundle
	  Total value=N
	  [entry
	     {DocumentReference Resource Type}
	  ] *

Path Parameters

Name	Description
Version	Service version number **Example value:** 2

Query Parameters

Name	Description
related	Permanent identifier of the product the document is related to
type	Type of document
_summary	Boolean set to true or false. If set to true, the contents of the document is not populated in the response in DocumentReference.content.atttachement,data. There is a url provided but it is not intended that you can use this to retrieve the document.

Example request

GET /pms/api/v2/DocumentReference?related=MedicinalProductDefinition/600000216133

GET /pms/api/v2/DocumentReference?type=100000155538

GET /pms/api/v2/DocumentReference?related=MedicinalProductDefinition/600000216133&_summary=true

4.1.7.3. EP402 Get/retrieve document

Resource Information

Endpoint	GET /pms/api/v2/DocumentReference/{document-id}

Request	
Accept	application/fhir+xml
	application/fhir+json
Body	n/a
Content-Type	n/a
Response	
Body	Resource of type MedicinalProductDefinition

Path Parameters

Name	Description
Document id	A unique document identifier UUID
	Example value:
	7a88176d-10f9-4db3-8fa0-4e4ae4594df7
version	Service version number
	Example value:
	2

Query Parameters

None

Example Request

GET /v2/DocumentReference/3c46270e-3c3d-4869-a73c-ad4d7c3f2893

4.1.7.4. EP404 Update document

Resource Information

Endpoint	POST /pms/api/v2/DocumentReference
Request	
Accept	application/fhir+xml application/fhir+json
Body	<DocumentReference> <id value="fcd2c31c-0ef9-455c-99a0-75149b888a27"/> .. </DocumentReference>
Content-type	application/fhir+xml application/fhir+json
is_update	true
Response	
Body	Document with version number incremented by 1

Query Parameters

None

Example Request

For UAT environment: POST https://spor-uat.azure-api.net/pms/api/v2/DocumentReference

Example file for request body:

- GET of document before update: UPD_1.6.1-4_Doc_EP402_GetDocument_version1.XML

- Update posted: UPD_1.6.1-4_Doc_EP404_UpdateDocument_BasedOnVersion1.XML

- Response to POST: UPD_1.6.1-4_Doc_EP404_ResponseAfterUpdate.XML

- GET of document after update: UPD_1.6.1-4_Doc_EP402_GetDocument_AfterEP404Update_version2.XML

4.1.7.5. Changes for Create and Update document payload

- There are no changes to payload

4.2. UPD API for VNRA

4.2.1. Scope of this release for VNRA API

UPD-UC31 Manage VNRA Submissions via API

- Search and Retrieve VNRA

- Approve/Reject VNRA

4.2.2. UPD API supported VNRA endpoints

4.2.2.1. Query / Retrieve VNRA Submission

Query / Retrieve VNRA Submission	GET	*Returns the* complete collection of submissions which the caller is entitled to view* /vnra/v3?permanentIdentifier={permanentId}* *upd/api/vnra/v3?permanentIdentifier=600013438271*
APIM entry point	UAT	***https://spor-uat.azure-api.net/upd/api/vnra/v3?permanentIdentifier=600013438271***
APIM entry point	PROD	***https://spor.azure-api.net/upd/api/vnra/v3?permanentIdentifier=600013438271***
Query Parameters		**Query Parameters (All Are Optional)** *Note: Calls to base url , (without parameters) /vnra/v3 will return the* complete collection of submissions *which the caller is entitled to view* 1. **productName : Product name – free text field and case insensitive** 2. **productIdentifier : Product identifier – free text field** 3. **permanentIdentifier : Permanent identifier – free text field**

4. **mah : OMS LOC_ID of Product owner – LOC-100005358**
5. **responsibleAuthority : OMS LOC_ID of Responsible authority (organisation) – LOC-100001603**
6. **maNumber :   Authorisation/registration/entitlement number – free text field**
7. **procedureType : Procedure type – RMS Code**
8. **procedureNumber : Procedure number – free text field with "Starts with" and "Contains" and case insensitive**
9. **submissionIdentifier : Submission identifier – free text field**
10. **submissionStatus : Submission status – PENDING | APPROVED | PARTIALLY_APPROVED | REJECTED**
11. **dateFrom : Date From-To – calendar field to add interval "from"**
12. **dateTo : Date From-To – calendar field to add interval "to"**
13. **vnraStatus : VNRA Status – single selection field with list of VNRA status -PENDING | APPROVED | REJECTED**
14. **vnraClassificationIdentifier : vnraClassificationIdentifierClassification – field with list of VNRA classifications - RMS Code**

Headers

Headers

The following Headers will be provided / injected by APIM -

1.   APIM-Correlation-ID   Generated and Included with all POST / PUT / DELETE by default. For future BAM requirements include with GET
2.   APIM-User-ID ==> From User's bearer token.
3.   APIM-Org-ID ==> org affiliations are included.

Security Headers (Mandatory)

v3 of the API require a mandatory Bearer Token which is passed via the Authorization header

Oauth Bearer Token

curl -X GET \
  -H "Authorization: Bearer $(oauth-access-token)" \
  https://spor.azure-api.net/upd/api/vnra/v3

Pagination

Pagination

Pagination is implemented using Spring Boot Pagination which returns the following standard **Pagination Payload.**
submission data are returned with in "content": [...],

PageSize is set using the _size parameter.
Iterating through the pages is managed via _page=x totalPages: y evaluation,
If totalPages=y and the consumer searches for the last page, then _number should be set to y-1.
https://spor.azure-api.net/***upd/api/vnra/v3?***_size=5
https://spor.azure-api.net/***upd/api/vnra/v3***?_size=5&_page=2

Pagination Payload
```
{
    "content": [...],
    "pageable": {
   "sort": {
    "empty": false,
    "sorted": true,
    "unsorted": false
   },
   "offset": 0,
   "pageNumber": 0,
   "pageSize": 1,
   "paged": true,
   "unpaged": false
  },
  "totalPages": 485,
  "totalElements": 485,
  "last": false,
  "sort": {
   "empty": false,
   "sorted": true,
   "unsorted": false
  },
  "size": 1,
  "number": 0,
  "first": true,
  "numberOfElements": 1,
```

```json
        "empty": false
      }
```

Sample Payload

```json
{
  "content": [
    {
      "submissionId": 1588,
      "submissionDate": 1694433983143,
      "submissionComment": "NoComments",
      "submissionStatus": "PENDING",
      "products": [
        {
          "permanentId": "600001120431",
          "procedureType": "100000155062",
          "productRelationships": [
            {
              "organisationId": "ORG-100004089",
              "relationship": "Holder"
            },
            {
              "organisationId": "ORG-100003944",
              "relationship": "Regulator"
            }
          ]
        },
        {
          "permanentId": "600001120431",
          "procedureType": "100000155062",
          "productRelationships": [
            {
              "organisationId": "ORG-100004089",
              "relationship": "Holder"
            },
            {
              "organisationId": "ORG-100003944",
              "relationship": "Regulator"
```

```
        }
      ]
    }
  ]
}
],
"pageable": {
 "sort": {
   "empty": false,
   "sorted": true,
   "unsorted": false
 },
 "offset": 0,
 "pageNumber": 0,
 "pageSize": 1,
 "paged": true,
 "unpaged": false
},
"totalPages": 485,
"totalElements": 485,
"last": false,
"sort": {
 "empty": false,
 "sorted": true,
 "unsorted": false
},
"size": 1,
"number": 0,
"first": true,
"numberOfElements": 1,
"empty": false
}
```

4.2.2.2. Retrieve a VNRA Submission

Retrieve a VNRA Submission	GET	Retrieve a specific VNRA submission identified by its submissionId **/\<submissionId\>?summary={true|false}** **upd/api/vnra/v3/456?summary=true**
APIM entry point	UAT	**https://spor-uat.azure-api.net/upd/api/vnra/v3/456?summary=false**
APIM entry point	PROD	**https://spor.azure-api.net/upd/api/vnra/v3/456?summary=false**
Path Parameter		**/\<submissionId\>** **\<SubmissionId\> is the ID of the submission to retrieve**
Query Parameters		**Query Parameter (All Are Optional)** summary (Optional) : (true|false) Returns a summary view of the submission else a full view

Headers		**Headers**
		The following Headers will be provided / injected by APIM -
		  1. APIM-Correlation-ID Generated and Included with all POST / PUT / DELETE by default. For future BAM requirements include with GET
		  2. APIM-User-ID ==> From User's bearer token.
		  3. APIM-Org-ID ==> org affiliations are included.
		
		Security Headers (Mandatory)
		v3 of the API require a mandatory Bearer Token which is passed via the Authorization header
		Oauth Bearer Token
		curl -X GET \\
		  -H "Authorization: Bearer $(oauth-access-token)" \\
		  https://spor.azure-api.net/upd/api/vnra/v3/456?summary=false

Sample Payload
 	
Summary=false
		`{`
		  `"submissionId": 1596,`
		  `"submissionDate": 1694450625907,`
		  `"submissionComment": "Submit VNRA For NAP 11/09/2023",`
		  `"submissionStatus": "APPROVED",`

```
"variations": [
  {
    "variationId": 16517,
    "vnraGroup": "a458cce6-5553-4efb-b974-7147069d13fc",
    "productName": "Automation Test Create NAP CH2 2023-09-11 GYxEGh",
    "productIdentifier": "926d544f-3fd6-44a3-9150-48bbb277fed6",
    "permanentIdentifier": "600001120724",
    "procedureNumber": "EMEA/V/C/777777",
    "responsibleAuthority": "LOC-100000065",
    "authorisationCountry": "100000000535",
    "marketingAuthorisationNumber": "EMEA/V/C/777777",
    "vnraCode": "200000018624",
    "implementationDate": 1694390400000,
    "decisionDate": 1694390400000,
    "decisionAuthor": "Beyond Automation",
    "decisionMaker": "ORG-100003944",
    "decisionComment": "Comment Beyond Automation",
    "status": "APPROVED",
    "marketingAuthorisationHolder": "LOC-100002851",
    "fieldChanges": []
  }
],
"vnessFileName": "Test.zip"
}
```

Sample Payload

Summary=true

```
{
  "submissionId": 1596,
  "submissionDate": 1694450625907,
  "submissionComment": "Submit VNRA For NAP 11/09/2023",
  "submissionStatus": "APPROVED",
  "vnessFileName": "Test.zip"
}
```

4.2.2.3. Download a VNeeS

Download a VNeeS	GET	Download a VNeeS linked to a VNRA Submission **/<submissionId>/vness** **upd/api/vnra/v3/456/vness**
APIM entry point	UAT	https://spor-uat.azure-api.net/upd/api/vnra/v3/456/vnees
APIM entry point	PROD	https://spor.azure-api.net/upd/api/vnra/v3/456/vn**ee**s
Path Parameter		**/<submissionId>** **<SubmissionId> is the ID of the submission to retrieve**
Query Parameters		None

Headers		**Headers**
		The following Headers will be provided / injected by APIM -
		  1. APIM-Correlation-ID Generated and Included with all POST / PUT / DELETE by default. For future BAM requirements include with GET
		  2. APIM-User-ID ==> From User's bearer token.
		  3. APIM-Org-ID ==> org affiliations are included.
		
		Security Headers (Mandatory)
		v3 of the API require a mandatory Bearer Token which is passed via the Authorization header
		Oauth Bearer Token
		curl -X GET \
		  -H "Authorization: Bearer $(oauth-access-token)" \
		  https://spor.azure-api.net/upd/api/vnra/v3/456/vnees

4.2.2.4. Submit a decision for the VNRA

Submit a decision for the VNRA	PUT	VNRA submit decision - Approve/Reject VNRA ***/<submissionId>/decision*** **upd/api/vnra/v3/456/decision**
APIM entry point	UAT	https://spor-uat.azure-api.net/upd/api/vnra/v3/456/decision
APIM entry point	PROD	***https://spor.azure-api.net/upd/api/vnra/v3/456/decision***
Path Parameter		***/<submissionId>*** ***<SubmissionId> is the ID of the submission containing the variation to approve***
Query Parameters		**None**

Headers		**Headers**
		The following Headers will be provided / injected by APIM -
		    1. APIM-Correlation-ID Generated and Included with all POST / PUT / DELETE by default. For future BAM requirements include with GET
		    2. APIM-User-ID ==> From User's bearer token.
		    3. APIM-Org-ID ==> org affiliations are included.
		
		Security Headers (Mandatory)
		v3 of the API require a mandatory Bearer Token which is passed via the Authorization header
		Oauth Bearer Token
		curl -X GET \\
		  -H "Authorization: Bearer $(oauth-access-token)" \\
		  https://spor.azure-api.net/upd/api/vnra/v3/456/decision

Sample Payload		```{```
		``` "vnraDecisionItems": [```
		``` {```
		``` "variationId": 3711,```
		``` "vnraDecision": "APPROVED",```
		``` "decisionComment": "Submission-decision-approve-all test case",```
		``` "decisionAuthor": "Beyond Automation",```
		``` "decisionDate": "2022-05-03T12:00:00Z",```

```
                    "decisionMaker": "ORG-100003944",
                    "utils": {}
                }
            ]
        }
```

4.2.2.5. User registration for VNRA API

Access to the VNRA API is requested by the Super user of an NCA (i.e. user with the role "UPD - CA Super User"); who will request a new role of "UPD CA API".

On receipt of the email confirming API role has been approved, the API credentials can be used to obtain the OAuth bearer token required to use with the VNRA API endpoints.

Refer to the document Registration guide: Union product database for veterinary medicinal products listed in the References section.

4.3. UPD API for Volume of Sales Data

4.3.1. Scope of this release for Volume of Sales API

- Retrieve Volume of Sales Data

4.3.2. Endpoint, Authorisation header, Query Parameters, Pagination

Endpoint

UAT   `GET` https://spor-uat.azure-api.net/upd/api/vos/v3/vos-sales-json?

PROD   `GET` https://spor.azure-api.net/upd/api/vos/v3/vos-sales-json?

Request Security Header (Mandatory)
This endpoint requires a mandatory OAuth Bearer Token which is passed via the Authorization header

---

Query Parameters

Note: Calls to the base url without any parameters will return the complete collection of sales data for all products.

/upd/api/vos/v3/vos-sales-json?permanentId= {permanentID}&yearFrom={yearFrom}&yearTo={yearTo}&modifiedDate={modifiedDate}

permanentId (optional) :- Permanent identifier of Medicinal Product. Will return sales for the provided Permanent identifier   e.g. permanentId=600000225806

yearFrom (optional) :- yearFrom={year-month} Start date for range of sales data to be returned

yearTo (optional) :- yearTo={year-month} End date for range of sales data to be returned

e.g. yearFrom=2020-01&yearTo=2021-07

modifiedDate (optional) :- Modified Date of Sales data of Medicinal Product. Will return sales modified since a date
The following prefixes apply to date comparisons against a stored (modified date) value. If no prefixes are specified, the default is eq.
• eq: equals, the exact stored value is inside the range defined by the precision of the parameter value
• gt: the exact stored value is greater than the exact parameter value

e.g. modifiedDate=2023-03-01   or with prefix modifiedDate=gt2023-03-01

Examples:
GET https://spor-uat.azure-api.net/upd/api/vos/v3/vos-sales-json?permanentId=600000225806&yearFrom=2020-01&yearTo=2021-07&modifiedDate=gt2023-01-01

GET https://spor-uat.azure-api.net/upd/api/vos/v3/vos-sales-json?yearFrom=2020-01&yearTo=2021-07

GET https://spor-uat.azure-api.net/upd/api/vos/v3/vos-sales-json?permanentId=600000225806

Pagination

Pagination is implemented using Spring Boot Pagination which returns the following standard **Pagination Payload.**

- sales data is returned within "content": [...],

- pageSize is set using the _size parameter

- iterating through the pages is managed using the _page=x parameter

- totalPages: y evaluation: If totalPages=y and the consumer searches for the last page, then page number parameter should be set to y-1.

Examples:
GET https://spor-uat.azure-api.net/upd/api/vos/v3/vos-sales-json?_size=5

GET https://spor-uat.azure-api.net/upd/api/vos/v3/vos-sales-json?_size=5&_page=2

Pagination Payload

```
{
  "content": [...],
  "pageable": {
   "sort": {
    "empty": false,
    "sorted": true,
    "unsorted": false
   },
   "offset": 0,
   "pageNumber": 1,
   "pageSize": 100,
   "paged": true,
   "unpaged": false
```

    },
    "totalPages": 6,
    "totalElements": 596,
    "last": false,
    "sort": {
      "empty": false,
      "sorted": true,
      "unsorted": false
    },
    "size": 100,
    "number": 0,
    "numberOfElements": 100,
    "first": true,
    "empty": false
}

Sample Response Payload
{
  "content": [
    {
      "productIdentifier": "c74a510c-1689-4f46-bdce-f3a5dd84b1da",
      "productName": "TEST-PRODUCT-NAME2-95363f02-c9b9-442b-8bdf-21a54bf15b2e-VOS",
      "permanentIdentifier": "600013438271",
      "authorisationProcedureNumber": "VOS/TEST/HOLDER-NAME2/TEST/EMEA/H/C/000175",
      "packageIdentifier": "be7bfd42-df3f-45e2-8af9-3d96a870f5f7",
      "packageDescription": "PACKAGE3-TEST-PRODUCT-NAME2-95363f02-c9b9-442b-8bdf-21a54bf15b2e-VOS",
      "packSizeNumericValue": "94",
      "packSizeUnitOfPresentation": "Capsule",
      "packSizeUnitOfPresentationIdentifier": "200000002113",
      "country": "European Union",
      "countryIdentifier": "100000000390",
      "marketingAuthorisationNumber": "VOS/TEST/HOLDER-NAME2-1591819011837",
      "creationDateOfProduct": "2021-11-12",

```
      "yearMonth": "2021-03",
      "volumeOfSales": "111",
      "speciesIdentifier": "100000108926",
      "speciesPercent": "100.00",
      "doseFactor": "1.00",
      "comment": "Mandatory",
      "modifiedDate": "2023-06-14 09:06:28.047"
    }
  ],
  "pageable": {
   "sort": {
     "empty": true,
     "unsorted": true,
     "sorted": false
   },
   "offset": 0,
   "pageNumber": 0,
   "pageSize": 1,
   "paged": true,
   "unpaged": false
  },
  "totalElements": 5,
  "totalPages": 5,
  "last": false,
  "sort": {
   "empty": true,
   "unsorted": true,
   "sorted": false
  },
  "size": 1,
  "number": 0,
  "first": true,
  "numberOfElements": 1,
```

```
  "empty": false
}
```

4.3.3. User registration for Volume of Sales Data API

Access to the Volume of Sales API is requested by the Super user of an NCA (i.e. user with the role "UPD - CA Super User"); who will request a new role of "UPD CA API".

On receipt of the email confirming API role has been approved, the API credentials can be used to obtain the OAuth bearer token required to use with the VoS API endpoint.