

UPD Release Notes 1.4.1-0

Veterinary Medicinal Products Regulation: Union Product Database

Release date: 6 September 2021



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1. Overview of functionality and business value

This release is the next iterative version of the Union Product Database, v 1.4.1-0

This version allows NCAs to submit/enter legacy product information (MRP/DCP/NAP), as per Art 155 of Reg 2019/6, compliant with Chapter 4 of the July21 Vet EU Implementation Guide.

The high-level functionality provided by this release is:

- API:
 - RMS can create DCP / MRP products (data and documents)
 - RMS and CMS can complement DCP/MRP product with national DCP/MRP data and documents
 - NCA can create and update NAP products (data and documents)
 - Search/view product (data and documents)
- UI:
- o RMS can create DCP products (data and documents)
- NCA can create NAP products (data and documents)
- Search/view/export product (data and documents)
- Notification
- Additional functionality for the components of the UPD that were delivered in release 01.02,
 i.e. the core UPD Repository, Application Programming Interface (API), the NCA User interface and the document management functionality.

More functionality and additional components will be made gradually available between now and January 2022.

This release is based on FHIR version R5 Preview #2, http://hl7.org/fhir/2020May/resourcelist.html

The sections below contain all required information to register for usage of the UI or API, connect to the API or UI and to use the available functionality.

2. Changes made compared to 01.03

2.1. New functionality

• UC04 Export search results

2.2. Resolved issues

Use Case	Issue reference	Vet EUIG Chapter 2 section	Issue that has been resolved
UI only:	UPD-1661		Search for cross-reference product by exact product name does not work

Use Case	Issue reference	Vet EUIG Chapter 2 section	Issue that has been resolved
UC01 Create Product			
UI only: UC01 Create Product	UPD-2267		Submit create and advised create is successful. However, when view product there are no attached documents and only creation of the product has been successful.
			This rarely occurs.
UI only: UC01	UPD-5126	1.11.5 (Attached document) country	This is a mandatory attribute and a value must be selected to add the document.
Create product			However, the selected country is not displayed in the table of documents and the value is not saved when the product is created.
UI only: UC01 Create	UPD-5208		Search filter when you start typing to select value from a drop-down list for a term code is not working for the following lists:
product			- Authorised Pharmaceutical form
			- Reference strength numerator
			Reference strength denominator
UI only: UC05 View	UPD-4289	Documents	All documents that have been loaded for a product are displayed.
product			If you click on the link to view the document you receive an error advising that you don't have permission to view.
UI only: UC05 View product	UPD-4858	Product header	The full list of product names should not be listed in the product header.

2.3. New issues

Use Case	Issue reference	Vet EUIG Chapter 2 section	New issue included in release notes
UI only: UC01 Create Product	UPD-5383		Not able to select "Tablet" or "Suspension" as term from Pharmaceutical Dose Form for Manufactured Dose Form or Authorised pharmaceutical form.

Hee Cose	Tecus	Vet FUTC	Novi issue included in valence nates
Use Case	Issue reference	Vet EUIG Chapter 2 section	New issue included in release notes
			Issue exists if there are more than 20 terms containing the single term name with a starting letter prior to the first letter of that single term.
API only: UC14 API EP311 Update Product	UPD-5384	5.1 Package description	New Package description added to product is output in main package description attribute and not as a translation as expected
UI only: UC01 Create Product	UPD-5625		Package description and Manufactured item quantity numeric value & Unit of Presentation term not saved correctly when there are 2 or more packages. The values from one of the packages are used in each of the other packages
UI only: UC03 Search Product	UPD-5875		Production environment only: When you select a product from the search results table, the extended details pane (product card) is empty. Therefore not able to view product. As a work-around, new products can be viewed by querying the Notification and
UI only: UC01 Create Product	UPD-5952	5.7.2 Availability status	selecting to view product. When creating a legacy product, the default value populated for availability status is using the value according to Chapter 2 rules of "Not marketed" and not value of "No data provided" as per Chapter 4 rules
API only: UC13 API EP309 Create Product	UPD-5974	2.7 Marketing authorisation date	Mismatch between Vet EUIG Chapter 2 and implementation for value in RegulatedAuthorization.relatedDate.type.syste m.value. Guide specifies "http://ema.europa.eu/fhir/authorisationDate Type" and implementation is using "http://ema.europa.eu/fhir/codesystems/authorisation-date-type". The example files provided are aligned with the implementation
API only: UC13 API EP309	UPD-5975	1.10.3 QPPV Location	There is no validation error if OMS location identifier is not populated for QPPV Location. The Post of the create bundle is accepted.

Use Case	Issue reference	Vet EUIG Chapter 2 section	New issue included in release notes
Create Product			However, response for GET OperationOutcome will show ERR-1002
UI only: UC01 Create UC03 Search UC05 View UC08 Update	UPD-6096		Embedded spaces within a product name are being removed when displayed in UI

3. Implementation based on the version of the Veterinary EU Implementation Guide revised in July 2021

UPD version 1.4.1-0 is based on the July 21 version of the Vet EU IG.

Note that three aspects of that version of the IG are not yet implemented but will be in next versions of UPD:.

3.1. Presentation strength

Chapter 2 sections 4.3.2.1.1 - Strength (presentation single value) and 4.3.3.1.2. Reference strength

- The denominator should be expressed by a numeric value and a unit (e.g. tablet) where the unit is a **unit of presentation**. Reference to unit of measurement has been deleted
- A product created with denominator using Unit of Measurement will be accepted and doesn't give a validation error. This will be corrected in a future release.
- For this release only use a term from Unit of Presentation so that created products will comply with the revised rules and avoid the need to correct the products in the future.
- This applies to products created using the NCA UI or API.

3.2. Date of authorisation status change for Legacy products

For **Date of authorisation status change,** section 2.6 Chapter 2:

- For Legacy products, the May21 Vet EUIG specified that this attribute is mandatory for legacy product.
- July21 Vet EUIG has changed this and it is no longer mandatory.
- The validation rules will be updated in a future release.
- For this release, a value will still need to be provided.

3.3. Administrable Dose Form

Administrable Dose form section 3.5 Chapter:

 Products created using the NCA UI do not yet use the new dummy value "pharmaceutical dose form not applicable". Currently is using term 100000073664 Tablet

4. NCA UI

4.1. Scope of this release for NCA UI

- UC01 Create Product via UI
 - o Scenario 1 Create Product CAP/NAP/National Registered products Manual Key In
 - o Scenario 2 Create Product Decentralised Procedure Manual Key In
 - Scenario 5 Cancel Create Product
 - Able to Create NAP or DCP products based on Chapter 4 Legacy or Chapter 2 Validation rules
- UPD UC03 Search Product via UI
- UPD UC04 Export search results
- UPD UC05 View Product via UI
- UPD UC21 Manage Notifications via UI
 - The flags for "Show only products under my responsibility" and "Exclude products where my role is RMS" were not in scope for this release and are not implemented

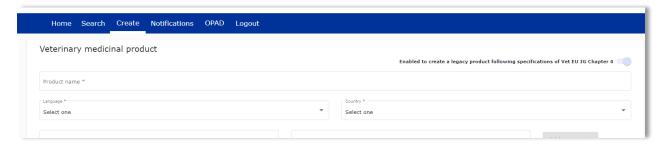
Other menu items or the edit option to update a product should not be used as these are not in scope for this release and are not fully implemented.

Supported browsers for the NCA UI are Chrome and Edge.

4.2. Apply Chapter 4 Legacy or Chapter 2 Validation rules

There is a new flag on the top right of the Create screens. This is used to indicate which validation rules are to be applied for this product.

When you select to Create from the menu, the flag is enabled with the message **Enabled to create a legacy product following specifications of Vet EU IG Chapter 4**".



4.3. Workaround required to Create products

There are some workarounds that are required in this release when creating products.

Issue reference	Vet EUIG Chapter 2 section	Issue and Workaround
UPD-5121	1.5 (Authorised) pharmaceutical form	You can't select any term from the "Combined Term" or "Combined Package" lists.
		Select the closest term from "Pharmaceutical Dose Form" or "Combined Pharmaceutical Dose Form" lists.
UPD-5122	1.7.2 ATC vet code(s)	The ATC vet code(s) flag should not be used.
UPD-5123	1.7.3 ATC vet code(s) flag	Select the closest ATC Vet code from the list.
		If you do select the flag and submit the create it will go into an endless loop showing the in-progress control.
UPD-5109	1.9	This should not be mandatory for Legacy product.
	(Pharmocovigilance System) Master file	A value must be provided in this release.
		 use value of 999 for PSM file code
		 use the same location as used for QPPV
UPD-4863	5.6.4 Ingredient	This should not be mandatory for Legacy product.
	(in Manufactured item)	An ingredient must be selected in this release.
	4.3.2.1.1 Strength (presentation single value)	May21 Vet EUIG specified that the denominator may be a term from the Unit of Presentation or the Unit of Measurement list.
		July21 Vet EUIG has updated this and the denominator may only be a term from the Unit of Presentation list.
		When entering strength for an ingredient and selecting a Unit of Measurement term for the denominator (for Per), please only select "Concentration single value".
		The Create screens will be updated to implement this change in a future release.

4.4. Known issues for UC01 Create product

In addition to the issues documented with a work-around, the following are known issues.

Issue reference	Vet EUIG Chapter 2 section	Issues for UC01 Create product
UPD-4269	All attributes entered using structured data	For those structured data elements which have a drop- down list of RMS terms, please select a value from the list and do not copy/paste the term name from some other source.

Issue reference	Vet EUIG Chapter 2 section	Issues for UC01 Create product
		If you do it is likely that the submission of your create is not successful and you will loose all data entered.
UPD-4752	1.11.4 (Attached document) type	"Public Assessment Report" can't be used as this results in a validation error and the product is not created.
UPD-3319	1.12 Product cross- reference	It is not possible to save any product cross-reference. When you search for and select a product as the cross-reference this is not displayed on the create screen and is not saved when the product is created.
UPD-5135	4 Ingredient	Create is not being rejected if there is not at least 1 Ingredient with role of Active
UPD-5128	5.6 Manufactured item	If there are two or more Manufactured Items with the same Ingredient(s), and no Unit of Presentation:
	(in Package)	it is not possible to identify which manufactured item to select as the manufactured dose form is not shown.
UPD-3346	5.6.4 Ingredient (in Manufactured item)	Each ingredient must be selected at least one in one of the manufactured items. This rule is not currently validated.
	item	If you don't include an Ingredient in a Manufactured item the product will be created but any Ingredient not referenced may not be saved.
UPD-5132		List of languages doesn't include Icelandic and Norwegian
UPD-5126		Attached document country is not populated into table of attached documents, and is not saved when product is created
UPD-5116	1.13.2 Manufacturing activity	Legacy create is not being rejected if there is not at least one Manufacturing business operation for "Batch release" activity
UPD-4746		DCP create is not being rejected when product name country is not European Union and/or language is not English
UPD-3192		Details of validation errors are not displayed. User is only advised "Create unsuccessful"
UPD-2235		NAP Create – implementation for Marketing authorisation at package level is incomplete. Authorisation country at Package level should be optional but currently this is mandatory.

Issue reference	Vet EUIG Chapter 2 section	Issues for UC01 Create product
UPD-1663		Search for cross-reference product by marketing authorisation number does not work
UPD-5134		Some mandatory fields may not have a * on the screen. For example: Unit of measurement for the Period is mandatory if a Withdrawal period is being specified.
UPD-4901	2.13.1 Procedure number	For NAP product (both Legacy Chapter 4 or Chapter 2 rules), the procedure number should not be mandatory. It is not marked as mandatory on the UI screen but the "Create product" button will not be enabled without inputting a value.
UPD-5383		Not able to select "Tablet" or "Suspension" as term from Pharmaceutical Dose Form for Manufactured Dose Form or Authorised pharmaceutical form.
		Issue exists if there are more than 20 terms containing the single term name with a starting letter prior to the first letter of that single term.
UPD-5625		Package description and Manufactured item quantity numeric value & Unit of Presentation term not saved correctly when there are 2 or more packages. The values from one of the packages are used in each of the other packages
UPD-5952	5.7.2 Availability status	When creating a legacy product, the default value populated for availability status is using the value according to Chapter 2 rules of "Not marketed" and not value of "No data provided" as per Chapter 4 rules
UPD-6096		Embedded spaces within a product name are being removed when displayed in UI. Therefore, if you copy/paste the name from the search screen for example to use when retrieving reference product no product will be found.

4.5. Known issues for UC03 Search product

Issue reference	Issues for UC03 Search product
UPD-5149	Search using both name and authorisation procedure type does not work
UPD-5147	Search NAP created via UI by authorisation country does not work
UPD-5146	Search NAP created via UI by authorisation number does not work
UPD-5144	Search by Marketing authorisation holder does not work

Issue reference	Issues for UC03 Search product
UPD-4758	Authorisation status value is N/A in extended details
UPD-1506	Search by authorisation status does not work
UPD-5164	Search by product identifier does not work
UPD-5875	Production environment only:
	When you select a product from the search results table, the extended details pane (product card) is empty. Therefore not able to view product.
	As a work-around, new products can be viewed by querying the Notification and selecting to view product.
UPD-6096	Embedded spaces within a product name are being removed when displayed in UI

4.6. Known issues for UC04 Export search results

Issue reference	Issues for UC04 Export search results
UPD-5468	If substance name contains a comma, the text after the comma is output in the Target species column and all other values are shifted by one or more columns to the right

4.7. Known issues for UC05 View product

Issue reference	Section & attribute	Issues for UC05 View product
UPD-5132	Name Package	The RMS Term code and not the RMS Term name is displayed for some countries or languages.
UPD-5129	Package > Manufactured item	Where a package has more than one manufactured item these are not all listed and only values for one are displayed.
UPD-5131	Package > Pack size	Only the numeric quantity is displayed and not the term name for Unit of presentation.
UPD-4289	Documents	All documents that have been loaded for a product are displayed.
		If you click on the link to view the document you receive an error advising that you don't have permission to view.
UPD-4758		Authorisation status value is N/A

Issue reference	Section & attribute	Issues for UC05 View product
UPD-5138	Manufacturing Business Operation	Active substances where manufacturer has been populated are not listed in the Manufacturing business operation section.
UPD-5137	Package > Manufactured item	Manufactured dose form and Ingredient(s) are not displayed
UPD-4262		Cross-referenced products are not displayed
UPD-2169		Marketing authorisation number may not always display the correct value
UPD-5139		Product identifier is not displayed in search results extended details or on View product
UPD-6096		Embedded spaces within a product name are being removed when displayed in UI

4.8. Known issues for UC21 Manage notifications

Issue reference	Issues for UC21 Manage notifications
UPD-5155	Sorting of search results table doesn't work for all columns
UPD-5153	Search by Product identifier does not work
UPD-4294	Product identifier is not populated in search results
UPD-4293	Authorisation country is not populated in search results

4.9. Registration process for access to the NCA UI in the UAT environment

To request access:

- Send an email requesting access to the NCA UI in the UAT environment to <u>UPD-Registration@ema.europa.eu</u>. Please send the request from your NCA email address so that EMA can verify it. Access is only being granted to NCA staff.
- Once you have been verified as an NCA staff, the UPD registration team will provide you with the login instructions. Registration to the NCA UI in the UAT environment may take up to 3 working days.
- Once registered, the UI in UAT can be found at:
 Union product database (upd-portal-uat.azurewebsites.net)

4.10. Registration process for access to the NCA UI in production (PROD) environment

We strongly recommend that before you request access to the UPD PROD environment to submit your legacy product data manually, you have:

- Participated (viewed recording) in the training/demo on how to submit legacy data in UPD of 4
 August 2021
- Carried out some testing in the UAT environment compliant with the latest version of the EU Implementation Guide.

To request access:

- Send an email requesting access to NCA UI in PROD to <u>UPD-Registration@ema.europa.eu</u>.
 Please send the request from your NCA email address so that EMA can verify it. Access will only be granted to NCA staff with an NCA email address, otherwise requests will be rejected.
- Once you have been verified as an NCA staff, the UPD registration team will provide you with the login instructions. Registration to the NCA UI in the PROD environment may take up to 3 working days.
- Once registered, the UI in PROD can be found at:
 Union product database (upd-portal-prod.azurewebsites.net)

5. UPD API

5.1. UPD API supported Product Service endpoints

SPOR API Specification v2	API Manager
EP301 Search Product	GET MedicinalProductDefinition - Search for a MedicinalProductDefinition resource or resources
EP302 Search Product Part - AdministrableProductDefinition	GET AdministrableProductDefinition - Search for a AdministrableProductDefinition resource or resources
EP302 Search Product Part - Ingredient	GET Ingredient - Search for a Ingredient resource or resources
EP302 Search Product Part - ManufacturedItemDefinition	GET ManufacturedItemDefinition - Search for a ManufacturedItemDefinition resource or resources
EP302 Search Product Part - PackagedProductDefinition	GET PackagedProductDefinition - Search for a PackagedProductDefinition resource or resources
EP302 Search Product Part - RegulatedAuthorization	GET RegulatedAuthorization - Search for a RegulatedAuthorization 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

SPOR API Specification v2	API Manager
EP305 Get Product Part - AdministrableProductDefinition	GET AdministrableProductDefinition - Get a AdministrableProductDefinition by ID
EP305 Get Product Part - Ingredient	GET Ingredient - Get a Ingredient resource by ID
EP305 Get Product Part - ManufacturedItemDefinition	GET ManufacturedItemDefinition - Get a ManufacturedItemDefinition resource by ID
EP305 Get Product Part - PackagedProductDefinition	GET PackagedProductDefinition - Get a PackagedProductDefinition resource by ID
EP305 Get Product Part - RegulatedAuthorization	GET RegulatedAuthorization - Get a RegulatedAuthorization resource by 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
EP309 Create Product	NAP: POST Bundle - Create/Update resources in the bundle
	DCP: POST dcp-bundle - Submit a DCP payload Refer to 5.5.1. Endpoint for NAP and DCP
EP309 Create Product	GET OperationOutcome - Get a resource by ID
- for use with these EP	Note: use this to query the outcome of Create when response to Post is "202 Accepted"
EP311 Update Product	POST Bundle - Create/Update resources in the bundle
EP318 Validate Product	POST Validate Bundle – To validate a bundle and the resources in the bundle
EP401 Search document	GET DocumentReference - Search for DocumentReference
	Note: previous release referred to EP51 and now changed to the correct EP number of EP401.
EP402 Get/Retrieve document by Id	GET DocumentReference - Get a DocumentReference by Id
	Note: previous release referred to EP51 and now changed to the correct EP number of EP402.
EP403 Create document	POST DocumentReference - Create a DocumentReference

SPOR API Specification v2	API Manager
	Note: previous release referred to EP51 and now changed to the correct EP number of EP403.
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.
	Note: previous release referred to EP51 and now changed to the correct EP number of EP404.

5.2. API Manager product subscription

There are now two endpoints for EP309 Create product depending on the procedure type.

Please 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 5.1. UPD API supported Product Service endpoints.

You will be unsubscribed from any existing subscriptions to PMS products.

5.3. Apply Chapter 4 Legacy or Chapter 2 Validation rules

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

Request Header: Key	Value	Validation rules applied
chapter4	Request header not included	Vet EUIG Chapter 2
chapter4	false	Vet EUIG Chapter 2
chapter4	true	Vet EUIG Chapter 4 Legacy

5.4. Scope of this release for API

- Create DCP based on Chapter 4 Legacy or Chapter 2 rules
- Create NAP based on Chapter 4 Legacy or Chapter 2 rules
- Update single product based on Chapter 4 Legacy or Chapter 2 rules
 - For DCP and changes to Common data by the RMS: the same change will need to be made to each product
 - 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
- o Nullifications were not in scope for this release
- For Legacy upload of MRP: RMS creates as DCP; and then each product needs to be updated and the procedure type changed from DCP to MRP
- Search and retrieve products
- Upload, search, retrieve, and update Documents

5.5. API EP309 Create product

5.5.1. Endpoint for NAP and DCP

There are two endpoints for EP309 Create Product.

5.5.1.1. Nationally authorised procedure product (NAP)

- As specified in SPOR API v2 Specification section 6.4.12
- POST /v{version} {root of server for this version}
- UAT for example is: POST https://spor-uat.azure-api.net/pms/api/v2

5.5.1.2. Decentralised procedure product (DCP)

Endpoint	POST /upd/api/v1/dcp-bundle/
Request	, , , , , , , , , , , , , , , , , , , ,
Accept	application/fhir+xml application/fhir+json
Body	<pre><bundle (another="" (not="" (type="transaction)" *="" *<="" [entry=""]="" and="" bundle="" e.g.="" entry="" fullurl="" id)="" itself)="" local="" medicinal="" medicinalproductdefinition="" method="" of="" other="" pre="" product="" regulatedauthorization="" request="" resources="" temporary="" type="" types="" value="POST" {other="" }=""></bundle></pre>
Content-type	application/fhir+xml application/fhir+json
Response	application/filli 1 joon
Body	<bundle (type="transaction-response)"> e.g.</bundle>

Bu	ndle
	type value="transaction-response
	entry
	response (states id of created resource)
	[entry
	response (for other linked child resources)
] *

Query Parameters

None

Example Request

For UAT environment: POST https://spor-uat.azure-api.net/upd/api/v1/dcp-bundle

5.5.2. Creating of products for DCP 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.

5.5.3. Key changes in valid request bundle for create

Implementation is now aligned with July21 Vet EU Implementation Guide. As a consequence there are a number of changes from the previous release. Please refer to the examples provided.

Some of the key changes are:

Attribute	Change
1.5 (Authorised) pharmaceutical form	MedicinalProductDefinition Was: combinedPharmaceuticalDoseForm Now: extension.authorisedDoseForm
1.8 Veterinary medicinal product name	Previous examples included MedicinalProductDefinition name.type. This attribute is no longer required.
1.9 PSMF masterFile	MedicinalProductDefinition Values are populated within a contained resource of type DocumentReference. Please refer to the example bundles.
1.10 QPPV contact	MedicinalProductDefinition Values are populated within a contained resource of type PractionerRole. Please refer to the example bundles.

Attribute	Change
3 Pharmaceutical product	Previous examples included population of: • AdministrableProductDefinition.unitOfPresentation
	This attribute is no longer required.
4.3.2 Strength	Previous examples included population of both: • Ingredient.substance.strength.presentation
	And
	Ingredient.substance.strength.concentration
	Only one value should be provided – either as presentation or concentration.
5 Packaged medicinal product	Previous examples included population of the following attributes: • PackagedProductDefinition.package.type • PackagedProductDefinition.package quantity
	These attributes are no longer required.
5.6 Manufactured item	Previous examples included population of: ManufacturedItemDefinition.property with type of "unit-of-measurement"
	This attribute is no longer required.

5.5.4. Known issues for API EP309 Create product

Issue reference	Resource & attribute	Issues for EP309 Create product
	2.6 Date of authorisation status change	For Legacy products May21 Vet EUIG specified that this attribute was mandatory for legacy load. July21 Vet EUIG has changed this and it is no longer mandatory. The validation rules will be updated in a future release. For this release, a value will still need to be provided.
	4.3.2.1.1 Strength (presentation single value)	May21 Vet EUIG specified that the denominator may be a term from the Unit of Presentation or the Unit of Measurement list. July21 Vet EUIG has updated this and the denominator may only be a term from the Unit of Presentation (UOP) list. Therefore, please only use a term from the UOP list so that products created comply with this change.

Issue	Resource &	Issues for EP309 Create product
reference	attribute	
		The validation rules for presentation strength will be updated in a future release.
	URN UUID	Validation in all resources of URN UUID for fullURL attribute:
		letters allowed are only a to f to form the hexadecimal set from 0 to f
		pattern of 8-4-4-12
		The post may not be rejected or may not give an error message that clearly identifies this as being the issue
UPD-5135	4 Ingredient	Create is not being rejected if there is not at least 1 Ingredient with role of Active
UPD-5116	1.13.2 Manufacturing activity	Legacy create is not being rejected if there is not at least one Manufacturing business operation for "Batch release" activity
UPD-4746		DCP create is not being rejected when product name country is not European Union and/or language is not English
UPD-4279		Submit of a request bundle for DCP procedure with national data populated to the Endpoint for NAP procedure is not rejected
UPD-3872	1.12 Product cross- reference	Cross-reference values are not being saved and therefore when retrieve the product those values are not included.
UPD-3097	4.3.3.2.1 Reference strength (Concentration)	The incorrect list ID is populated when view product details of the create product. It always has the list ID in the denominator for Unit of Presentation. Therefore, when submitting an Update based on the Get MedicinalProductDefinition/\$everythiing response the list ID needs to be corrected in order to successfully submit the Update
UPD-1889	5.5 Marketing	This has not been implemented.
	authorisation (package level)	In this release it is only possible to specify this at product level.
UPD-4750		DCP Legacy create incorrectly rejects if Ingredient is not specified for a Manufactured item
UPD-4747		DCP create is not ignoring any national product names include in the request. If country is not EU these should be silently ignored. Instead they are being output in the products created for the RMS and each CMS.

Issue reference	Resource & attribute	Issues for EP309 Create product
UPD-3096		Create is not rejected if Ingredient.strength.presentation or Ingredient.strength.concentration has the wrong list and term ID
UPD-4726	1.8.1 Veterinary medicinal product name	MedicinalProductDefinition.name.type used to be an attribute that was required to be populated. This is no longer required to be populated for the create.
		When you retrieve the product you will find this attribute has been populated with the term code for full name. This will be corrected in a future release.
UPD-4723		PackagedProductDefinition.package.quantity is not an attribute to be populated for a create.
		When you retrieve the product you will find this attribute has been populated with a value of zero. This will be corrected in a future release.
UPD-5974	2.7 Marketing authorisation date	Mismatch between Vet EUIG Chapter 2 and implementation for value in RegulatedAuthorization.relatedDate.type.system.value. Guide specifies "http://ema.europa.eu/fhir/authorisationDateType" and implementation is using "http://ema.europa.eu/fhir/code-systems/authorisationdate-type". The example files provided are aligned with the implementation
UPD-5975	1.10.3 QPPV Location	There is no validation error if OMS location identifier is not populated for QPPV Location. The Post of the create bundle is accepted. However, response for GET OperationOutcome will show ERR-1002

5.5.5. API EP309 Create product example request bundles

Examples for EP309 Create Product. 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 not a valid permanent identifier from UAT or PROD.

Procedure type	Validation rules	Example file
DCP	Chapter 2	UPD_01.03_DCP_Chpt2_C2_Mandatory_VetIG.JSON
		UPD_01.03_DCP_Chpt2_C2_Mandatory_VetIG.XML
		UPD_01.03_DCP_Chpt2_C110_VetEUIG_AllData.JSON

Procedure type	Validation rules	Example file
		UPD_01.03_DCP_Chpt2_C110_VetEUIG_AllData.XML
DCP	Chapter 4	UPD_01.03_DCP_Legacy_C2_Mandatory_VetIG.JSON
	Legacy	UPD_01.03_DCP_Legacy_C2_Mandatory_VetIG.XML
		UPD_01.03_DCP_Legacy_C110_VetEUIG_AllData.JSON
		UPD_01.03_DCP_Legacy_C110_VetEUIG_AllData.XML
NAP	Chapter 2	$lem:upd_01.03_NAP_Chpt2_C2_Mandatory_VetIG_MANumber_AtMedicinal Product Level. JSON$
		$lem:upd_01.03_NAP_Chpt2_C2_Mandatory_VetIG_MANumber_AtMedicinal Product Level. XML$
		UPD_01.03_NAP_Chpt2_C110_VetEUIG_AllData_MANumber_AtMedicinal ProductLevel.JSON
		UPD_01.03_NAP_Chpt2_C110_VetEUIG_AllData_MANumber_AtMedicinal ProductLevel.XML
NAP	Chapter 4 Legacy	UPD_01.03_NAP_Legacy_C2_Mandatory_VetIG_MANumber_AtMedicinalP roductLevel.JSON
		$lem:upd_01.03_NAP_Legacy_C2_Mandatory_VetIG_MANumber_AtMedicinal Product Level. XML$
		UPD_01.03_NAP_Legacy_C110_VetEUIG_AllData_MANumber_AtMedicina lProductLevel.JSON
		UPD_01.03_NAP_Legacy_C110_VetEUIG_AllData_MANumber_AtMedicina lProductLevel.XML

5.6. API EP311 Update product

5.6.1. Change in request bundle

As well as changes in attributes as for EP309 Create product, there are two additional changes in the request bundle for an update.

Attribute	Change
Bundle.type	Must be "transaction"
For every Bundle.entry	Previously for every Bundle.entry (each resource) only attributes within Bundle.entry.resource had to be populated. Now Bundle.entry.request must also be populated.
	Bundle.entry.request.method should be:PUT to update an existing resource

Attribute	Change
	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" />
    </entry>
    <entrv>
       <fullUrl value="PackagedProductDefinition/170427" />
           <PackagedProductDefinition>
        </resource>
        <request>
           <method value="PUT" />
           <url value="PackagedProductDefinition/170427" />
       </request>
    </entry>
```

5.6.2. Recommended approach to prepare update request bundle

The recommended approach for preparing a request bundle to update a product 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 refer to section 5.6.1. Change in request bundle
- DO NOT edit or remove the IDs returned by EP304 for each resource and in-line within each resource

5.6.3. How to use update product endpoint

Create product via API	POST Bundle	Sample XML bundle used: UPD_01.03_NAP_Legacy_C110_VetE UIG_AllData_MANumber_AtMedicinal ProductLevel.XML
Check operation outcome	MSG_CREATED message expected containing Permanent identifier	
EP304 Get Product Full	Edit the response e.g modify product name - add another ATC Vet code - add another ManufacturedItemDefinition	Sample XML of Get Everything response used as a starting point: UPD_01.03_EP311_UpdateProduct_R equestBundle.XML
Update product via API	POST Bundle with request header "is_update=true"	Sample XML bundle used: UPD_01.03_EP311_UpdateProduct_R equestBundle.XML
Check operation outcome	MSG_CREATED message expected	
EP304 Get Product Full	Check the response for modifications	Sample XML of GET everything after update: UPD_01.03_EP311_UpdateProduct_G etEverything_version2.XML

5.6.4. Known issues for API EP311 Update product

Many of the issues affecting EP309 Create product are also applicable to EP311 Update product and are not repeated in this section. Only those specific to an update are listed.

Issue reference	Issues for EP311 Update product
UPD-4714	If there are duplicate inline attribute IDs within a resource, the request will be rejected.
	The validation message will say that the resource is not included and is mandatory, with no other validation errors in the response
	As a workaround, remove the existing inline ID from one attribute so there is no longer duplicate values.
	This may occur and most frequently affects:
	 MedicinalProductDefinition.contact and MedicinalProductDefinition.masterFile
	 AdministrableProductDefinition.routeOfAdministration, AdministrableProductDefinition.routeOfAdministration.targetSpecies,

Issue	Issues for EP311 Update product
reference	
	$Administ rable Product Definition. route Of Administ ration. target Species \\. with draw al Period$
UPD-2922	Adding a new Target Species results in the existing Target species entries being duplicated
UPD-2664	Adding a new Route of Administration results in the existing Route of Administration entries being duplicated
UPD-1675	Not able to update the permanent identifier in cross-reference entry
UPD-4812	Change to procedure number not saved if existing inline attribute id is not included in the request body
UPD-4811	Change to Responsible authority or Product Owner is not saved if existing inline attribute id is not included in the request body
UPD-4810	Change to Authorised pharmaceutical for results in both old and new value in updated product if existing inline attribute id is not included in the request body
UPD-4796	Change to QPPV name is not saved if existing inline attribute id is not included in the request body
UPD-4736	Change to Ingredient reference strength from presentation to concentration saves new term code. However, updated product still has list id for the Unit of Presentation list and not the Unit of Measurement list id that was provided.
UPD-4734	Change of manufacturer in an Ingredient results in no manufacturer being populated in the updated product for that Ingredient
UPD-4733	Change to PSMF File location is not saved if existing inline attribute id is not included in the request body
UPD-4732	Change to QPPV File location is not saved (whether existing inline attribute id is included or not in the request body)
UPD-4290	Update DCP/MRP procedure product to add National data – values for Responsible authority and Product Owner are not saved
UPD-3313	Validation that Term code is from the specified List ID is missing for Manufactured item quantity
UPD-5186	When adding a Package to a product, the package identifier should not be populated as this is a system generated value. Incorrectly receive a validation error without populating a value for this identifier, and if provided the system does not overwrite with a system generated value.
UPD-5187	When adding an Ingredient, the update post is successful. However the new ingredient has not been saved and therefore not included when you retrieve the updated product.
UPD-5192	When updating product to change from specifying Legal status of supply at product level to package level, when you retrieve the updated product the previous value is still populated at the product level.

Issue reference	Issues for EP311 Update product
UPD-5384	New Package description added to product is output in main package description attribute and not as a translation as expected

5.7. API Manage document

5.7.1. EP403 Create document

Resource Information

Endpoint	POST /v {version}/DocumentReference		
Request	Request		
Accept	application/fhir+xml application/fhir+json		
Body	<documentreference <="" 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: 7a88176d-10f9-4db3-8fa0-4e4ae4594df7		

Query Parameters

None

Example Request

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

Example file for request body: UPD_01.03_EP403_CreateDocument

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)

5.7.2. EP401 Search document

Resource Information

Endpoint	Endpoint GET /v{version}/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)</documentreference>	
Souy	e.g. Bundle Total value=N [entry {DocumentReference Resource Type}	

Path Parameters

	Name	Description
Ī	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 = 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 /v2/DocumentReference?related=MedicinalProductDefinition/600000027688

GET /v2/DocumentReference?type=100000155538

GET /v2/DocumentReference?related=MedicinalProductDefinition/600000027688&_summary=true

5.7.3. EP402 Get/retrieve document

Resource Information

Endpoint	GET /v{version}/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/7a88176d-10f9-4db3-8fa0-4e4ae4594df7

5.7.4. EP404 Update document

Resource Information

Endpoint	POST /v {version}/DocumentReference		
Request			
Accept	application/fhir+xml		
	application/fhir+json		
Body	<documentreference></documentreference>		
	<id value="fcd2c31c-0ef9-455c-99a0-75149b888a27"></id>		
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/upd/api/v2/DocumentReference
Example file for request body:

- GET of document before update: UPD_01.03_EP402_GetDocument_version1.XML
- Update posted: UPD_01.03_EP404_UpdateDocument_BasedOnVersion1.XML
- Response to POST: UPD_01.03_EP404_ResponseAfterUpdate.XML

GET of document after update:
 UPD_01.03_EP402_GetDocument_AfterEP404Update_version2.XML

5.7.5. Known issues for Manage Document

Issue reference	Issues for Manage Document	
UPD-5143	Population for Attached document country incorrectly is rejected with a validation error	

5.8. Known issues for API EP301 Search product

Issue reference	Issues for EP309 Create product	
UPD-1024	Search should be accent insensitive when using the exact modifier and it's not	
UPD-140	Sort of search results does not work	

6. User support

API and UI users may seek support in uploading their legacy data into UPD by writing to <u>UPD-User-Support@ema.europa.eu</u>.

In order 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

7. References

- 1. UPD 01.03 Registration Process for UPD API in Production (PDF document)
- 2. UPD 01.03 Registration Process for UPD API in UAT (PDF document)
- 3. SPOR API Specification V2 R5 (europa.eu) API specifications for SMS and PMS, based on FHIR
- 4. <u>HL7 FHIR Release 5 Preview 2: the authoritative source for the FHIR specifications used by EMA to implement SMS and PMS API</u>
- 5. Referentials Management System
- 6. Additional information on the Referentials Management System
- 7. Organisations Management System
- 8. Additional information on the Organisations Management System
- 9. UPD 01.03 ReleaseNotes ExampleFilesForAPI (zip file)

10. Use cases implemented in the NCA UI:	