



DG Health and Food Safety  
Unit Information Systems (SANTE.A4)

# Data Exchange Guide and Release Notes

## EUDAMED v2.0

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# 1 MACHINE TO MACHINE DESCRIPTION

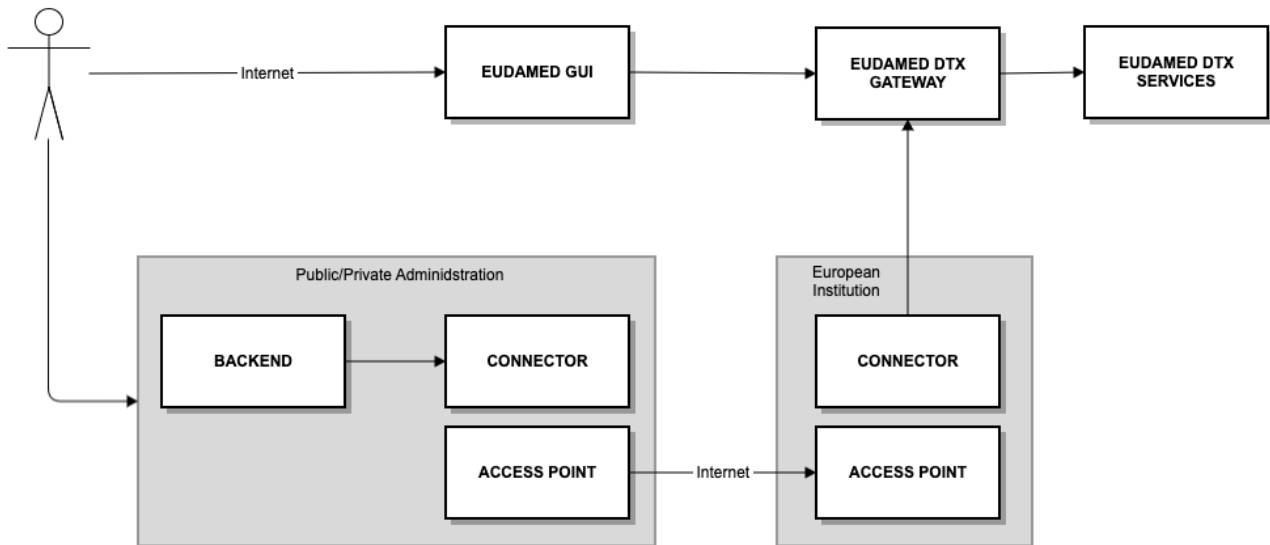


Figure 1: EUDAMED DTX; M2M and Bulk Upload/Download

For each use case, sample XML files will be circulated in order to help users test functionality. For the Playground environment, any reference to XSD files refer to that which has been circulated to Playground users. Please note that in future the playground XSD may differ to the XSD files available via the production EUDAMED or via the [Europa Medical Device website](#).

This document will explain the details of how to access the security token which is required for M2M connection with EUDAMED. It will NOT cover technical aspects of onboarding connections via eDelivery, which will occur *after* the steps in this document. Nonetheless, we encourage you to review the [CEF eDelivery access point documentation](#) as they may have been updated, and in particular their Access Point Test Guide available [here](#).

## 1.1 Contents of sent messages

Please note: the payload of messages is base64 encrypted, and a sent message for M2M will look something like that outlined in section 1.4.

Samples of XML files and responses for bulk upload and download are available alongside this document. You will notice that when compared with M2M, there is a key difference: The serviceAccessToken. This token is specific for each module of EUDAMED, and the combination of this token and the SRN of the sender is used as security to ensure that the message is received from the correct actor.

**Important:** Without this token, your message will not pass our security checks. An incorrect token will give the following error response:

```
<message:elementReport>
  <message:operationErrorCode>M-50000</message:operationErrorCode>
  <message:operationErrorDetail>The access point code is not valid: please contact the support</message:operationErrorDetail>
</message:elementReport>
</message:report>
<message:responseCode>SERVER_ERROR</message:responseCode>
</message:PullResponse>
```

## 1.2 How to generate your access token in EUDAMED

1. After you log into EUDAMED as a Local Actor Administrator, you will see the link “Machine to machine data delivery preferences” under the “My Actor data” section of your dashboard:

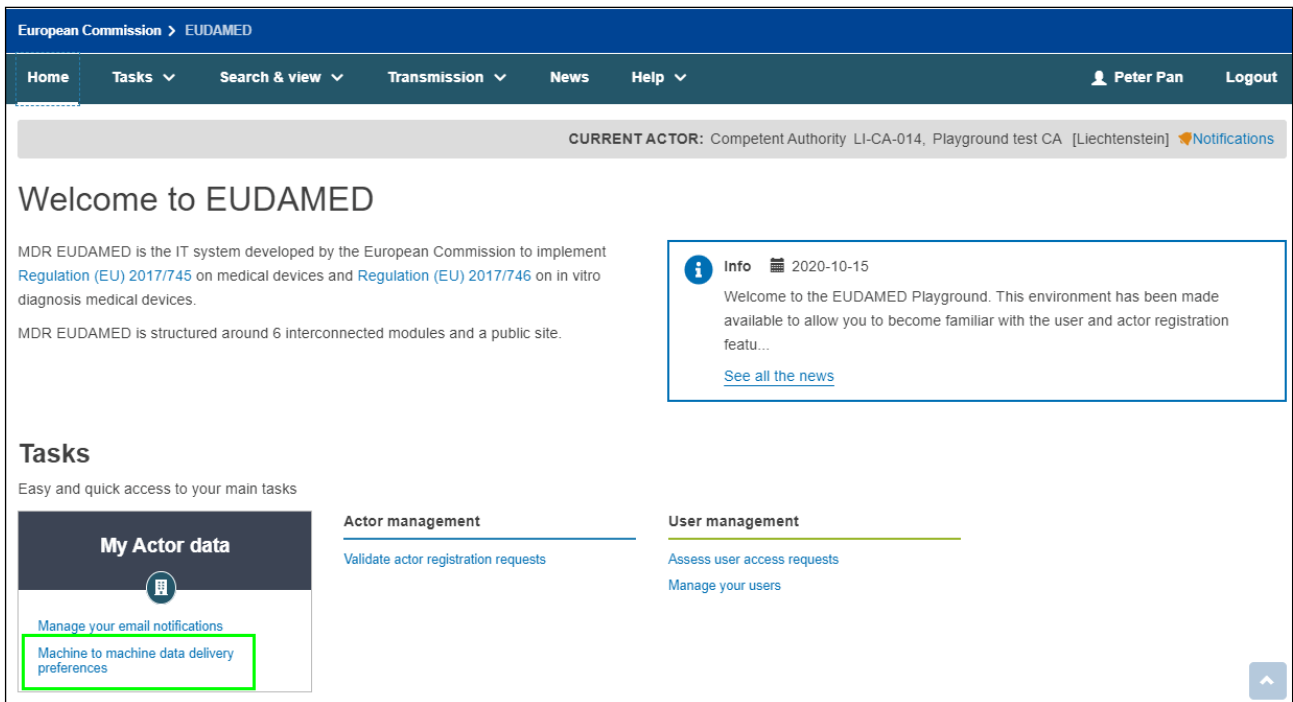


Figure 2: EUDAMED Restricted Dashboard for Competent Authority

The preferences are defaulted to “No” as a security measure:

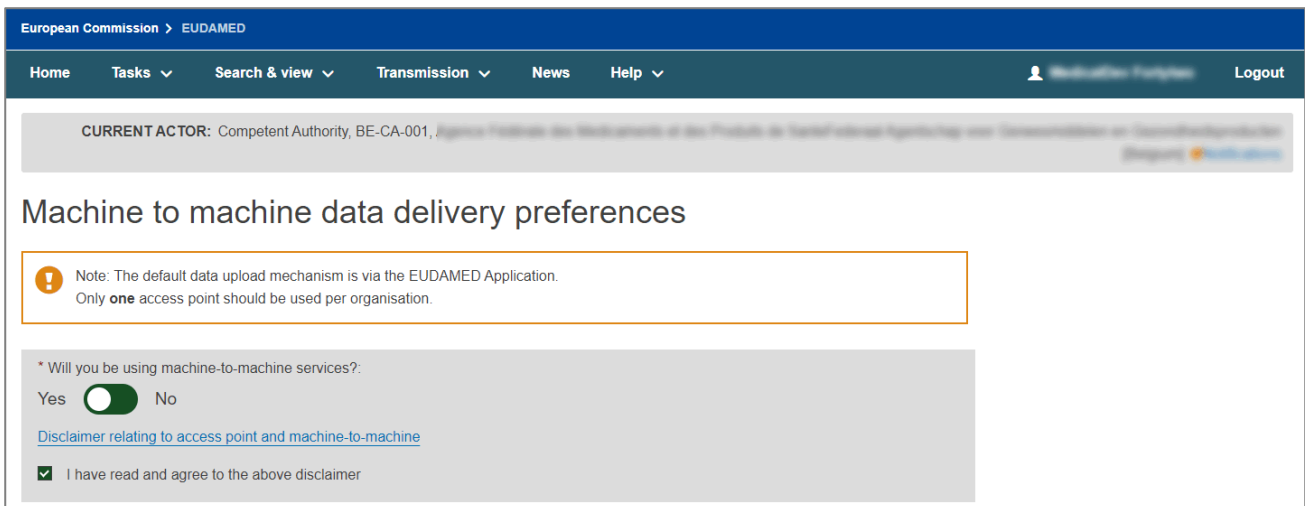


Figure 3: Machine to machine preferences

2. Select “Yes”, read and agree to the disclaimer. You will be presented with a list of services available to you. This list is specific to your actor type. Select the services you wish to activate and whether you require a new access point configuration:

**Data exchange services**

Please select the services you wish to use for data exchange

\* **Services list**

Actor download

Device download

Device upload

How many devices do you intend to exchange data on?

**Access point request information**

\* **Access point request**

[CEF eDelivery access point documentation](#)

Do you want to apply for a new access point configuration?

Yes  No

Do you already have your own eDelivery access point?

Yes  No

Is this access point already configured for EUDAMED?

Yes  No

**Figure 4: Machine to machine services and request information for a manufacturer**

3. If you require a new access point configuration, you will be asked to enter technical and legal contact details. Economic operators (i.e. non-supervisory bodies) who choose to use a third party must enter this information for the third party company when prompted. When you submit this information, you will be informed that this information will automatically be transmitted to the EUDAMED support team.

\* **Your eDelivery access point**

The information entered below will be submitted to the EUDAMED support team.

**Technical Contact**

\* Contact name:

\* Telephone:

Telephone format example: +32 x xxx xx xx

\* Email:

**Legal Contact**

\* Contact name:

\* Telephone:

Telephone format example: +32 x xxx xx xx

\* Email:

[xClose](#)

**Submission**

Are you sure you want to submit your request?

The details entered will be submitted to the EUDAMED support team. **You do not need to do anything else after submitting your details.** The EUDAMED support team will be in contact via email to assist in configuration of your access point.

**Figure 5: Submission of access point request information**

(**IMPORTANT:** email notifications are disabled for the playground, so at this stage you should email [EUDAMED Support](#) to inform us you have submitted an access point request. Please ensure to include:

- Your SRN, Party ID and EU Login username
- The software you are using and your endpoint address
- If you will be using PKI service

Once approved, the support team will contact you regarding technical details of onboarding)

4. Once you confirm submission, your Party ID and access token will be displayed:

### Machine to machine data delivery preferences

Will you be using machine-to-machine services?: Yes

#### Data exchange services

Party ID:	EUDAMED_000041
Services - Actor:	Actor download
Services - Udi-device:	Device download, Device upload

#### Access point request

Do you want to apply for a new access point configuration?:	Yes
Do you already have your own eDelivery access point?:	Yes
Is this access point already configured for EUDAMED?:	No

#### Technical Contact

Contact name:	ContactMF
Telephone:	+3212311231
Email:	contact@mf.com

#### Legal Contact

Contact name:	LegalMF
Telephone:	+3212311231
Email:	contact@mf.com

Your secure encrypted production codes

⚠ These codes must be included in your XML upload or download requests. Note: Codes differ per module.

<b>Actor</b>	0EFB8D1CA7077F3529BAAB83B0CD325B3A6B970BD1F6B2EFA847F96F14D97BB965F5428D7349D931458A9011C8658AFF70B11E88A0885D7C1C3D80E489DFCA0EB9D91A2E67267655EA5E591D5E81ADF6D0ACF6419AC4F5D747DCFO21DCD99776C3A47792EB3653D9D22673F04BFF5474986CF41DDCB88567FA36F912272A1EDE85C0E4E0F62A457FE143AE7EE53C655699EBA867906C15D0DBA181B9F19B8640737851130C991A718CB91CC15AE86F44A276B1E723741932D02D690C6A0270869419B9BEA76BFFC76C14C4E7AF26687207D5C6E29751F45D4B35761E73E3BDE3627A3E870B2BFC4E8CACA9E3B69679C040A4228E33AC47D0F9F94A277A6B1DB98655D9EB25DE1F57B987471E0E2853C2
<b>UDI/Device</b>	9ED1962BC8A7F016200E723FB16F1C9561C68724D3E3776B84F6F1C447E4AAD5CF4259BA1A618195E0C2440E47A4B7BE0A963FFD1511B2E619EF8938C5D270ECB53DDAF98AF56B879D6F14C1A48321C041B1DD1E2497E1100AC186CE660D58B5E42AED4D4839A49E63CBA81911895E791821C494598844673A3E9B53089368F2B582F08BF3797137CCE2E8E2952D6B91617C827E284CFB78C610FA15645844001156A432B296FF76C5B95B438928188B959F69F1DFC3A4DC02DD18E4D9BD6ABC2CA3676235A8F2F5E452BA7C52AC981CF6585D9CE469CE95BBA7957BD206E7818E0BDA38F2AAA46902D442EA65E7E13B727FE92234C35A97FE2620559272A9BCC6D8716F170A24367F230AE71A02AE0E

[Edit](#)

**Figure 6: M2M data delivery preferences overview, with Party ID and access tokens for Actor and Device module highlighted.**

*Specific notes for testing on the Playground environment.*

- Your Actor ID/SRN, access tokens and Party ID will be DIFFERENT between Playground and Production.
- You can continue to use access points from the previous Playground
- Email notifications are DISABLED for the Playground
- You **must** successfully connect to the Playground before you can request a Production access point
- Once successfully connected, the onboarding process as above must be repeated for Production

### 1.3 How to update/disable your machine to machine settings

If you no longer need to use machine to machine communication, you can edit this page by clicking the Edit button, and:

- Answering “No” to “Will you be using machine to machine services?”, or
- Deselecting the specific services you do not require


#### *Activation of new services:*

- When a new release of EUDAMED includes new machine to machine services, they will NOT be active by default
- You will not be able to use newly added services until you activate them on this page

#### Regenerating your access token:

If you have reason to believe your token is no longer secure, you can regenerate the code by clicking the Edit button, selecting the module for which you want to regenerate the code, and clicking submit.

Your secure encrypted production codes

 These codes must be included in your XML upload or download requests. Note: Codes differ per module.

Please select the module for which you want regenerate the code (the new code will be displayed after clicking submit)

Actor

80DF55C97F46AAD511154662F3CF23B245BD034BD1772A71FBA13C4E6CC42A59E26A6A1AFE5A4C75F569623AB96AF9F6BDFD06B360D4269F20B66960407AA3675D31F5CF8739927D10A68591E73423D96DB36C870413AA6FDD210EA963E9A521F03451FB1B0BDDCE02D91A649D2D0230A4E208EE56BA0D10C47D87588CC8F2A7BD12AF016A54038E5C0C3FA8649726B44187884C3B0BF03384C32D7D2A4FE6C26E1CBA3907D9EFBBE7F150EFB930166C83617DFC5A67B19180DCBA6770153F30FA7092C4146754432A7AB8A54E7E6A064FC0227B235ADB0F3B408B9B88E25B8E8689F2FDD0DB2CEB0CB94650B80298A1B742DEA28915818E2A49FBC5E91295F5D747FF7C4BA6140C571C56526C71CCE

**Figure 7: Machine to machine data delivery preferences edit page with regenerate selected for Actor module token.**

Remember: When a token is regenerated, all new files submitted from this point onwards must include the new token for that module or they will be rejected.

## 1.4 Example of a SOAP sendMessage

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:ns="http://docs.oasis-
open.org/ebxml-msg/ebms/v3.0/ns/core/200704/" xmlns:_1="http://org.ecodex.backend/1_1/">
  <soap:Header>
    <ns:Messaging>
      <ns:UserMessage>
        <ns:PartyInfo>
          <ns:From>
            <ns:PartyId type="urn:oasis:names:tc:ebcore:partyid-type:unregistered">eudamed_mdr_acc</ns:PartyId>
            <ns:Role>http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/ns/core/200704/initiator</ns:Role>
          </ns:From>
          <ns:To>
            <ns:PartyId type="urn:oasis:names:tc:ebcore:partyid-
type:unregistered">eudamed_mdr_demo</ns:PartyId>
            <ns:Role>http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/ns/core/200704/responder</ns:Role>
          </ns:To>
        </ns:PartyInfo>
        <ns:CollaborationInfo>
          <ns:Service type="tc1">bdx:noprocess</ns:Service>
          <ns:Action>TC1Leg1</ns:Action>
        </ns:CollaborationInfo>
        <ns:MessageProperties>
          <ns:Property name="originalSender">urn:oasis:names:tc:ebcore:partyid-type:unregistered:C1</ns:Property>
          <ns:Property name="finalRecipient">urn:oasis:names:tc:ebcore:partyid-type:unregistered:C4</ns:Property>
        </ns:MessageProperties>
        <ns:PayloadInfo>
          <ns:PartInfo href="cid:message">
            <ns:PartProperties>
              <ns:Property name="MimeType">text/xml</ns:Property>
            </ns:PartProperties>
          </ns:PartInfo>
        </ns:PayloadInfo>
      </ns:UserMessage>
    </ns:Messaging>
  </soap:Header>
  <soap:Body>
    <_1:submitRequest>
      <payload payloadId="cid:eudamedxmlAttachment" contentType="text/xml">
        <value>PD94bWwgdmVyc2lvbj0iMS4wliBlbmNvZGluZz0iVVRGLTgiPz4KPGhIbGxvPndvcmxkPC9oZWxsZ4=</value>
      </payload>
    </_1:submitRequest>
  </soap:Body>
</soap:Envelope>
```



## 2 BULK UPLOAD AND DOWNLOAD

Bulk requests may be sent via the EUDAMED interface in two ways:

- Click “Generate XML” to generate bulk files for download based on the results list on screen for
  - Search for actors
  - Search for your UDI-DIs/Devices
- Upload files
  - Upload search criteria XML files
  - Bulk upload device XML files (new devices, updates, new UDI for an existing Basic UDI-DI)
  - Upload SS(C)P download criteria

### 2.1 Bulk download requests via the EUDAMED interface

#### 2.1.1 Bulk download of actors via EUDAMED interface

In this Playground release **all actors** will be able to download registered economic operators via the EUDAMED interface. After successfully logging in, you will be able to access the actors registered in EUDAMED by using the Search and View functionalities for Actors:

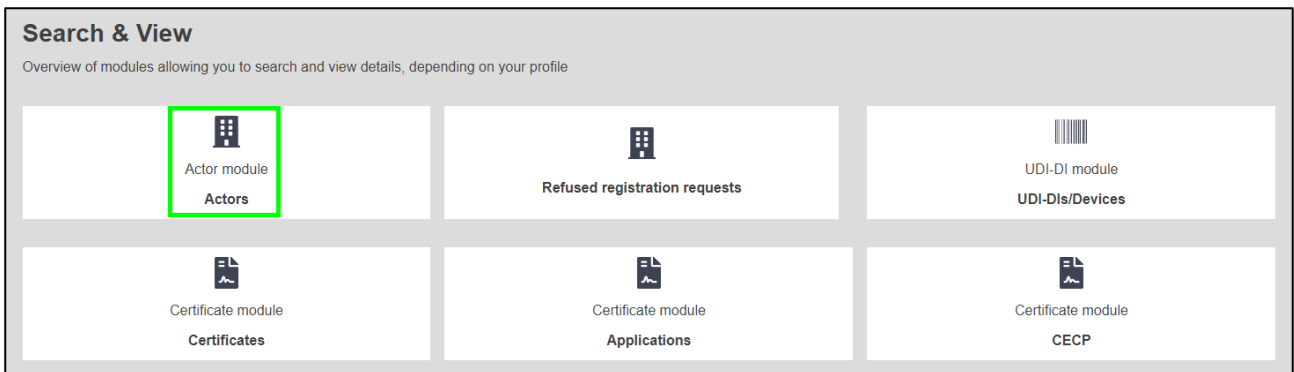


Figure 8: Search and view actors in dashboard screens

Enable the filter for bulk download of economic operators that will restrict your search criteria to those that are applicable according to the DTX service definition for actor download. You will notice that those that are not available will become shaded:

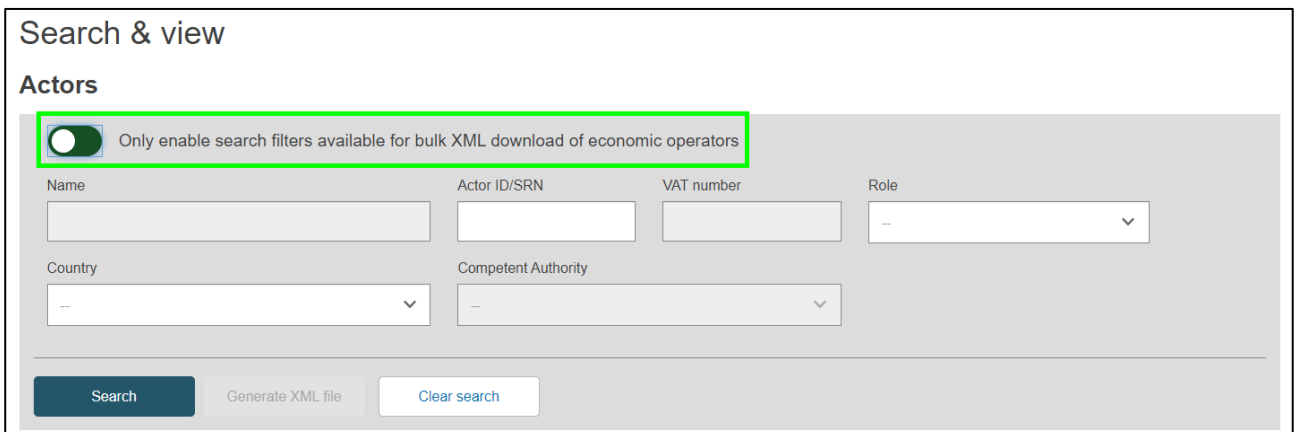
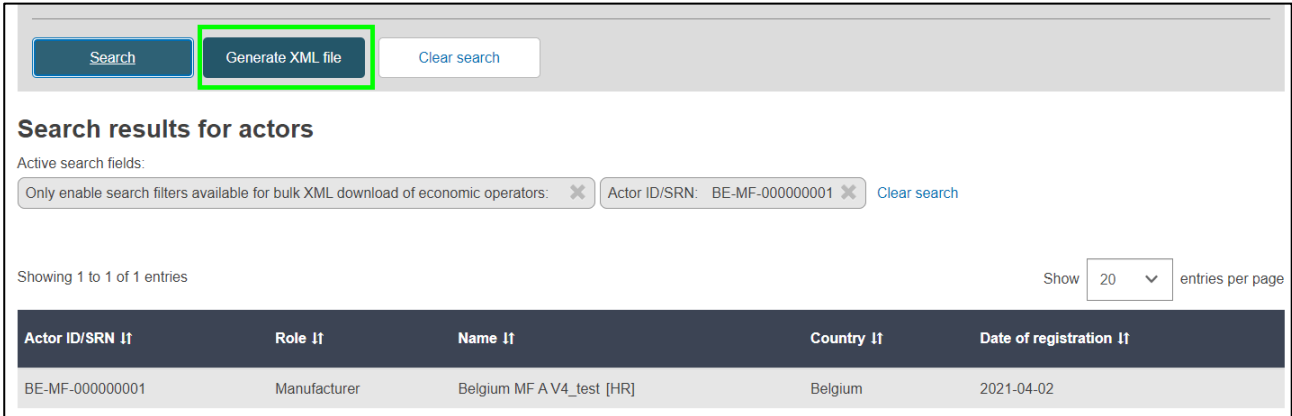


Figure 9: Filters for searching actors

After applying the desired search criteria, use the Search button in order to retrieve the list of actors. If you have provided search criteria that are not compatible with the DTX services definition, you will receive a warning prompt to amend your search.

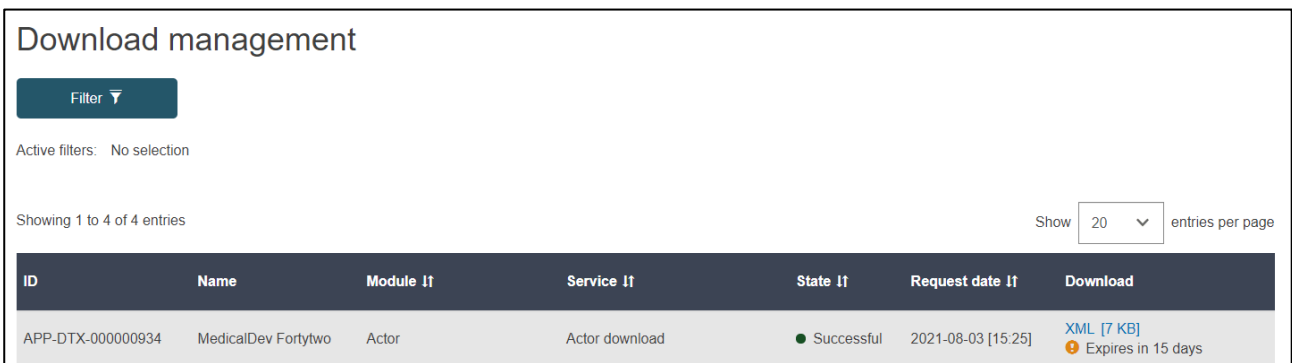
**Attention:** Before using the Generate XML file button it is important to retrieve the economic operators by using the Search button, otherwise, the list returned in the XML file will not correspond with the scope of the search.



**Figure 10: Generating the XML with the actor search results in the list**

A confirmation message will be triggered.

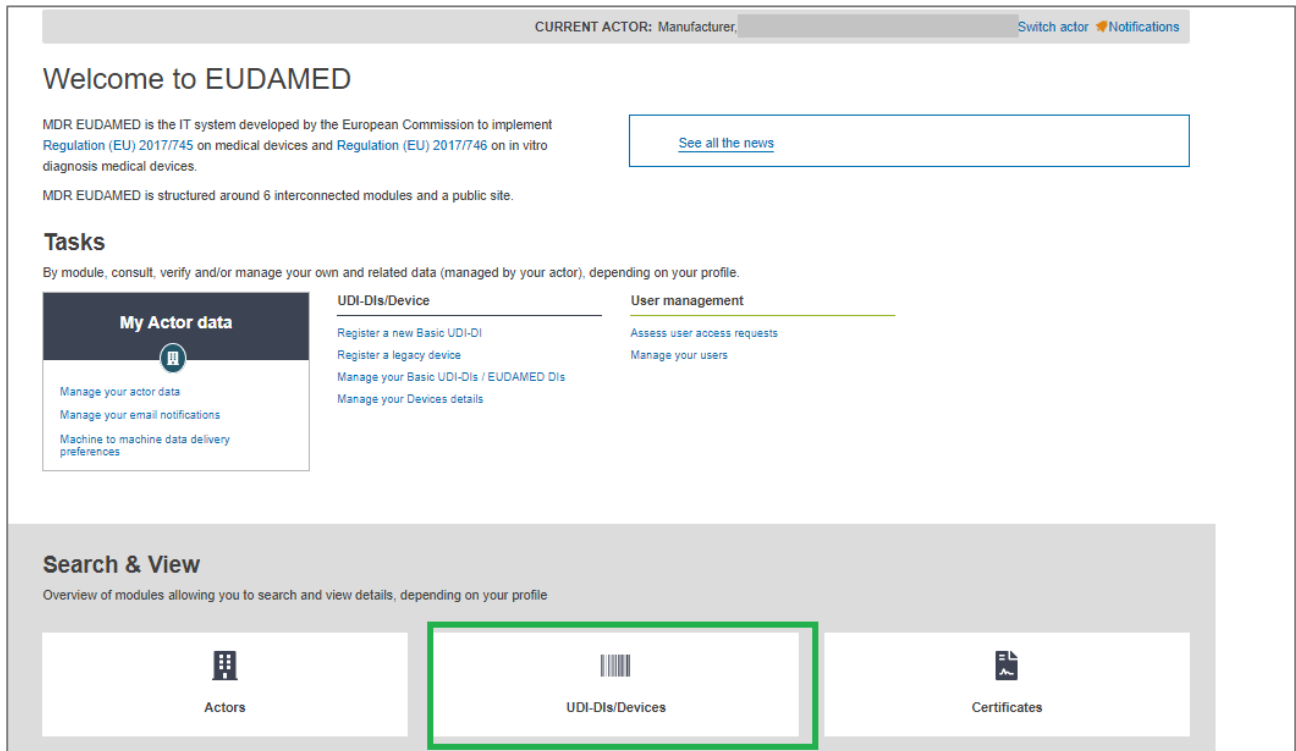
After confirming, you can click “Go to download management” to see the status of your request and download the response XML files. When the file is processing it will receive the state “Pending”:



**Figure 11: Download management list**

## 2.1.2 Bulk download of your devices via EUDAMED interface

After you log in as a user for an economic operator, you will be able to access the list of **your** Devices registered in EUDAMED by using the Search and View functionalities for Devices:



**Figure 12: Search and View Devices in Dashboard screens**

Apply the correct filters from the list presented in order to identify your devices that you want to download.

**Attention:** Use only the filters applicable in the Download Device service for Data Exchange: MFACTORCode/ PRACTORCode, ARACTORCode , BasicUDIDCode , UDIDCode, RiskClass, Country, Applicable Legislation , State.

(Please see Chapter 5 for the rules and applicability of these filters in the context of Download Devices)

The screenshot shows a web interface titled "Search for UDI-DIs". At the top, it indicates "CURRENT ACTOR: Manufacturer" and has links for "Switch actor" and "Notifications". The search filters are arranged in a grid:

- UDI-DI code (text input)
- Basic UDI-DI code (text input)
- Status (dropdown menu)
- Model (text input)
- Name (text input)
- Trade name (text input)
- Applicable regulation (dropdown menu, currently showing "MDR (REGULATION (EU) 2017/745 on medical devices)")
- Risk class (dropdown menu)
- Nomenclature code (text input)
- Reference/Catalogue number (text input)
- Country (dropdown menu)
- State (dropdown menu, currently showing "Registered")
- Scopes (text input with placeholder "You can select more than one value")
- MF / PR SRN (text input, containing "BE-MF-000000002")
- MF / PR Name (text input)
- AR SRN (text input)
- AR name (text input)

At the bottom, there are three buttons: "Search", "Generate XML file", and "Clear search".

**Figure 13: Filters for Searching Devices**

After applying any desired search criteria (your SRN/Actor ID will automatically complete in the search criteria), use the Search button in order to retrieve the Devices.

**Attention:** Before using the Generate XML file button it is important to retrieve the devices by using the Search button, otherwise, the list of Devices returned in the XML file will not correspond with the scope of the search.

### Search for UDI-DIs

UDI-DI code	Basic UDI-DI code	Status	Model
<input type="text"/>	<input type="text"/>	<input type="text" value="--"/>	<input type="text"/>
Name	Trade name	Applicable regulation	
<input type="text"/>	<input type="text"/>	<input type="text" value="MDR (REGULATION (EU) 2017/745 on medical devices)"/>	
Risk class	Nomenclature code	Reference/Catalogue number	Country
<input type="text" value="--"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="--"/>
State	Scopes		
<input type="text" value="Registered"/>	<input type="text" value="You can select more than one value"/>		

---

MF / PR SRN	MF / PR Name	AR SRN	AR name
<input type="text" value="BE-MF-000000002"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

### Search results for devices

Active search fields:

State: Registered MF / PR SRN: BE-MF-000000002 Applicable regulation: MDR (REGULATION (EU) 2017/745 on medical devices [Clear search](#)

Showing 1 to 20 of 25 entries Show  entries per page

UDI-DI code	Basic UDI-DI code	MF / PR SRN	Trade name	Risk class	Date	UDI-DI status
DD121	1211421211211EW	BE-MF-000000002	Trade Name	Class IIa	2021-03-23	On the EU market
1234_1235_3	2131211122348115KF	BE-MF-000000002	Generic Device Name_DEV_3	Class I	2021-03-22	On the EU market

**Figure 14: Generating the XML with the Devices in the list**

A confirmation message will be triggered.

After confirming, you can click “Go to download management” to see the status of your request and download the file. When the file is processing it will receive the state “Pending”:

### Download management

Active filters: No selection

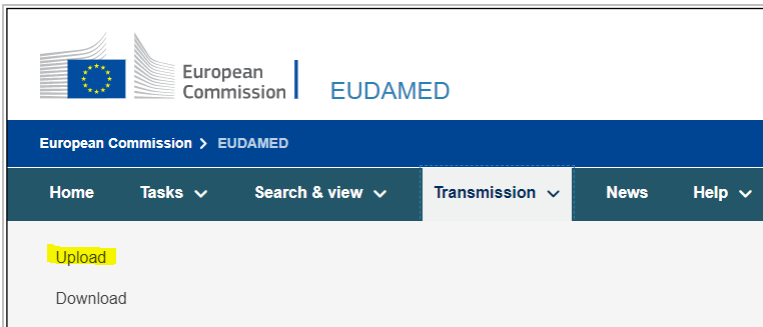
Showing 1 to 10 of 10 entries Show  entries per page

ID	Name	Module	Service	State	Request date	Download
		UDI/Device	Device download	● Pending	2021-03-23 [19:16]	

**Figure 15: Download management list**

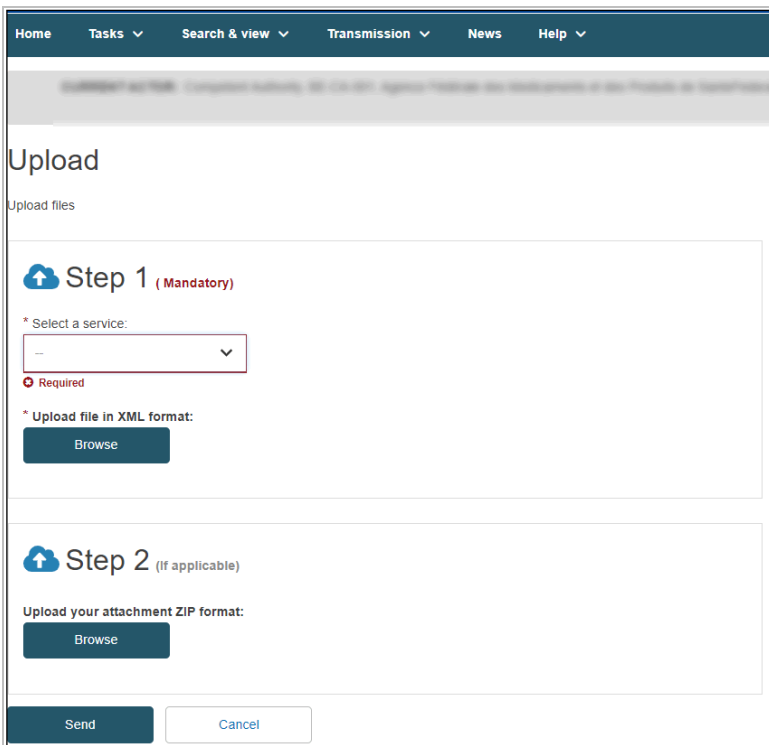
## 2.2 How to upload a file in EUDAMED

The file upload screen can be found for **all users** under Transmission > Upload menu when you are logged in with the relevant profile:



**Figure 16: “Upload” menu item in top navigation menu**

Click on “New upload” to see the file upload screen:



**Figure 17: “Upload” page – Mandatory XML file**

In this screen, you may select the desired service and attach an XML file for upload. Available services depend on which actor you are logged in as.

Once uploaded, click on “Go to upload management” to see your pending upload. When the file has completed processing, you will see the XML response download link under the “Response” column:

The screenshot shows the 'Upload management' interface. At the top right is a 'New upload' button. Below it is a 'Filter' button. The text 'Active filters: No selection' is displayed. Below that, it says 'Showing 1 to 12 of 12 entries'. On the right, there is a 'Show 20 entries per page' dropdown menu. The main content is a table with the following columns: ID, Name, Service ↑, State ↑, Request date ↑, Uploaded, Response date ↑, and Response. The table contains one row with the following data: ID (partially obscured), Name (partially obscured), Service 'Actor registration assessments upload', State 'Pending' (with a yellow dot icon), Request date '2020-09-24 [20:49]', Uploaded 'XML', Response date '-', and Response (empty).

**Figure 18: “Upload Management” page – Pending requests**

## 2.3 Uploading Devices and System or Procedure Packs

Operations described in chapter 2.2 are applicable also for processing Bulk upload of Devices. Users with the **Confimer profile for actor types Manufacturers or Producers** can access this service via the Transmission menu option for Upload.

Browse the list of services for ‘Upload Device’, and you will be able to upload an XML file containing a set of Devices or System or Procedure Packs according to the XSD schema.

As described in 2.2, you will be able to see the state of your request and download the response file in the Upload Management screen.

### 3 XML SAMPLES DESCRIPTIONS

#### 3.1 Actor Sample Description

The sample XML files outline the expected structure for upload, but **must** be adapted in order to match the details required for **your actor’s circumstances**. For example, a registration request assessment file must identify the correct actor and application IDs for a successful outcome.

Use case	XML file name	Description	Result
UC_BLK_ACT_001: Download registered actors	SAMPLE_DTX_ACT_REQ_V1.5_001.01.xml	Search for an individual manufacturer SRN (EU)	Positive
	SAMPLE_DTX_ACT_REQ_V1.5_001.02.xml	Search for an individual manufacturer SRN (non-EU)	Positive
	SAMPLE_DTX_ACT_REQ_V1.5_001.03.xml	Search for an individual importer	Positive
	SAMPLE_DTX_ACT_REQ_V1.5_001.04.xml	Search for an individual authorised representative	Positive
	SAMPLE_DTX_ACT_REQ_V1.5_001.05.xml	Search for an individual producer	Positive
	SAMPLE_DTX_ACT_REQ_V1.5_001.07.xml	Request to download a registered economic operator using the wrong attribute type in the pull request	Negative

#### 3.2 UDI/Device Sample Description

Use case	XML file name	Description	Result
UC_BLK_UDI_002 : Upload Basic UDI-DI and UDI-DI information	UDI_POST_V1.5_001.01 (POST_STANDARD_Single Device).xml	Register New MDR Device BUDI and Device (UDI-DI) information.  Class I Device (Special Device Type (Orthopedic), Substances, Direct Marking DI, Storage and Handling Conditions, Critical Warnings, Market Information, Clinical Sizes, Product Designer SRN)	Positive



Use case	XML file name	Description	Result
	UDI_POST_V1.5_001.02 (POST_STANDARD_Several Devices).xml	<p>Register New MDR Device BUDI and 2 or more UDI-DI.</p> <p>(Special Device Type (Software), Clinical Investigations- EU and NonEU, Substances, Direct Marking DI, Storage and Handling Conditions, Critical Warnings, Market Information, Clinical Sizes, Product Designer SRN)</p>	Positive
	UDI_POST_V1.5_001.03 (POST_STANDARD_CIII).xml	<p>Register New MDR Device BUDI and UDI-DI for a Risk Class III device to validate BUDI and UDI-DI will be stored in Eudamed in “Submitted” status.</p> <p>Class III (DeviceCertificateLinks, UnitofUseDI, Substances, Direct marking DI, Storage and Handling Conditions, Critical Warnings, Market Information, Clinical Sizes, Product Designer SRN)</p>	Positive
	UDI_POST_V1.5_001.04 (POST_STANDARD_CIIA - Error).xml	<p>Register New MDR Device BUDI and UDI-DI for a Risk Class II A containing false data (e.g. containing IIb implantable exceptions – sutures).</p> <p>(IIb Implantable exception, Clinical Investigations- EU and NonEU, DeviceCertificateLinks, Substances, Storage and Handling Conditions, Critical Warnings, Market Information, Clinical Sizes, Product Designer SRN)</p>	Negative

Use case	XML file name	Description	Result
	UDI_POST_V1.5_001.05 (POST_STANDARD_CIIB).xml	<p>Register New MDR Device BUDI and UDI-DI for a Risk Class II B containing certificate data and implantable and having IIb implantable exceptions - false.</p> <p>Class IIB (IIB Implantable exceptions- false, DeviceCertificateLinks, Direct marking DI, Substances, Direct marking DI, Storage and Handling Conditions, Critical Warnings, Market Information, Clinical Sizes, Product</p>	Positive
	UDI_POST_V1.5_001.12 (POST_STANDARD_Several Trade_names).xml	Register New MDR Device BUDI and UDI-DI with multiple brand/trade names; ensure the “primary” attribute.	Positive
	UDI_POST_V1.5_001.13 (POST_STANDARD_Several ContainersPacks).xml	Register New MDR Device BUDI and UDI-DI with multiple packaging hierarchies (1st , 2nd , 3rd) and different packaging items on each level	Positive
	UDI_POST_V1.5_002.01 (POST_STANDARD_IVDR).xml	<p>Register New IVDR Device BUDI and UDI-DI information</p> <p>Risk Class A (Storage and Handling Conditions, Critical Warnings, Market Information, Product Designer Organisation)</p>	Positive
	UDI_POST_V1.5_002.03 (POST_STANDARD_IVDR_Class C).xml	<p>Register New IVDR Device BUDI and UDI-DI for a Risk Class C device to see how the BUDI and UDI-DI will start in “Submitted” status and then transition to “Registered” status upon NB linking.</p> <p>Risk Class C (DeviceCertificateLinks, Storage and Handling Conditions, Critical Warnings, Market Information, Product Designer Organisation)</p>	Positive
	UDI_POST_V1.5_003.01 (POST_SPP).xml	Register New System or Procedure Pack with only one Basic UDI	Positive
	UDI_POST_V1.5_005.01 (POST_MDD_LEGACY).xml	Upload Legacy Device - Class I MDD Legacy Device	Positive
	UDI_POST_V1.5_005.02 (POST_AIMDD_LEGACY).xml	Upload Legacy Device - AIMDD Legacy Device	Positive

Use case	XML file name	Description	Result
	UDI_POST_V1.5_005.03 (POST_IVDD_LEGACY).xml	Upload Legacy Device - IVD_ANNEX_II_LIST_A Risk Class	Positive
UC_BLK_UDI_001 : Download of Basic UDI-DI, UDI-DI and device data	UDI_REQ_V1.5_004.01 (MF).xml	Request Download Device (BUDI and UDI-DI) information using a combination of the following criteria: Basic UDIDI Code, UDIDI code, MF actor code, AR actor code  MF and State Filtering Criteria	Positive
	UDI_REQ_V1.5_004.06 (MF, Country).xml	Request Download Device (BUDI and UDI-DI) information using a combination of the following criteria: Basic UDIDI Code, UDIDI code, MF actor code, AR actor code  Criteria : Manufacturer (State is automatic Registered), Country	Positive
UC_BLK_UDI_005 : Upload a new UDI under an existing B-UDI	UDI_DI_POST_V1.5_008.02 (Post UDI-DI existing BUDI).xml	Register multiple New Device UDI-DI (MDR/IVDR) information related to an already existing (MDR/IVDR) Device B-UDI	Positive
UC_BLK_UDI_003 : Update BasicUDI	BUDI_PATCH_V1.5_009.01 (Patch BUDI).xml	Update an existing MDR/IVDR Device BUDI	Positive

Use case	XML file name	Description	Result
	UDI_DI_POST_V1.5_009.02 (Patch EUDI).xml	Update an existing MDD Device BUDI	Positive
UC_BLK_UDI_004 : Update UDI-DI	UDI_PATCH_V1.5_010.01 (Patch UDI).xml	Update an existing MDR/IVDR Device UDI-DI	Positive
	UDI_PATCH_V1.5_010.02 (Patch UDI_MDD).xml	Update an existing MDD Device UDI-DI	Positive

### 3.3 SS(C)P Sample Description

Use case	XML file name	Description	Result
UC_M2M_UDI_009 : Download SSCP	SAMPLE_DTX_UDI_REQ_V2.0_009.01.xml	Download SS(C)P by Basic UDI-DI	Positive
	SAMPLE_DTX_UDI_REQ_V2.0_009.02.xml	Download SS(C)P by certificate ID	Positive

## 4 DTX EXCEPTIONS

EUDAMED data exchange involves some layers of validation before successful delivery and response. These occur via several layers of validation:

### 4.1 XSD validation

The XSD schema is the first layer of validation and further information can be found within the XSD files. These ensure that the following correctly match what is expected:

- Datatype
- Field length
- Occurrence
- Enumeration match
- XML file structure

Below you will find an example of an XSD validation error:

```
<message:report>
<message:elementReport>
<message:operationErrorCode>E-I-40000</message:operationErrorCode>
<message:operationErrorDetail>[ValidationProblem { line=32, column=44, type=ERROR, message='cvc-enumeration-valid: Value 'XX' is not
facet-valid with respect to enumeration '[AR, IM, MF, PR]'. It must be a value from the enumeration.' }, ValidationProblem { line=32,
column=44, type=ERROR, message='cvc-type.3.1.3: The value 'XX' of element 'service:type' is not valid.' }]: please fix the message validation
issues and resend it</message:operationErrorDetail>
</message:elementReport>
</message:report>
```

### 4.2 Error codes

#### **SERVER\_ERROR:**

This is a general error and most frequent error code returned. It is also returned if there is any outbound validation error or something goes wrong while processing.

#### **INVALID\_REQUEST\_OBJECTS:**

This error code is returned when the request XML contains any element that could not be mapped to known objects by the EUDAMED data exchange.

#### **SERVICE\_NOT\_FOUND:**

This error code is returned when the service requested is not available (yet) in EUDAMED data exchange.

In addition to the above codes, sub-codes are returned which are generated dynamically and accompany further details as part of an error report (see above XML sample in section 1.5.1 for example). These codes are listed in the Annex - 1 to this document.

## 5 XSD RELEASE NOTES

Note: Some of the descriptions below may not apply to your actor type and may not be accessible to you.

### 5.1 Version 2.0 (September 2021)

#### 5.1.1 XSD element changes

- Multi-language property type (optional) added for StorageHandlingConditionType, CriticalWarningType, SubstanceType, ProductDesignerOrganisationType
- SSCPDownloadServiceCriteriaType:
  - Naming: Updated naming to NBActorCode, MFACTORCode, SSCPReferenceNumber, SSCPRevisionNumber
  - Deleted certificateID item
  - Added optional Certificate field containing CertificateNumber and RevisionNumber
  - Added optional SSCPReferenceNumber, SSCPRevisionNumber
- Special Device Type enumeration updated (MDRSpecialDeviceTypeEnum)
- Updates on Enumerations for Certificate types - selectable in the Device Certificate link:
  - Certificate type enumeration (XSD) contains only the Enumeration values for Regulation Devices
  - New enumeration created: Legacy Certificate Type which will contain the Certificate types applicable for Legacy Devices (when the registration of Device is realized in EUDAMED) - details in BR- UDI-824 (replacing BR-UDI-810)
  - Enumeration for Certificate types that can be selected when providing Device Certificate information (<https://webgate.ec.europa.eu/tools/eudamed/dtx/data/Entity/Links/LinkType.xsd#DeviceCertificateLinkType>): GenericCertificateTypeEnum
- Fixed typo in special device type: EQUIPEMNT\_FOR\_ADDIPOSE\_TISSUE updated to EQUIPMENT\_FOR\_ADDIPOSE\_TISSUE
- Country TR added to EUCountryWithSpecialEnum

### 5.2 Version 1.5.1 (August 2021)

#### 5.2.1 UDI/Device services updates

- Update Basic UDIs / EUDAMED DI
- Update UDI-DIs / EUDAMED ID

#### 5.2.2 Certificates DTX updates

- Updated XSD schema on multiple sterilisers
- added otherChangeReason as LanguageSpecificTextsType
- Updated the cardinality to be zero-to-many for statusChangeReason field
- Enumeration update for certificate status change reason when providing a decision or updating a certificate

### 5.3 Version 1.5 (July 2021)

- Introduced services for Device and Certificates:
  - Add UDI-DI for existing Basic UDI (UDI\_DI.POST)
  - Update Basic UDI-DI (Basic\_UDI.PATCH)
  - SS(C)P download (SSCP.GET)
  - Certificate download
  - Refused certificate download

- Updated internal documentation, the elements point now to the updated data dictionary
- Updated XSD to version 1.5

### 5.3.1 UDI/Device XSD element changes

- Introducing a new attribute type : LanguageOptionalTextsType
- Allows for MultiLanguage fields to provide optional the Language field;
- Applicable for attributes such as Substances (CMR or Endocrine), Critical Warnings and Contra-indications, Storage and Handling Conditions;
- Updates for submitting Language information for Critical Warnings and Contra-indications, Storage and Handling Conditions Description. Language must not be provided for the Description when the selected option of Critical Warnings and Contra-indications or Storage and Handling Conditions Description is different than OTHER. When the option OTHER is selected, providing the Language is required;
- Updates for submitting Language information for Substances being CMR or Endocrine substances. If EC or CAS code is provided, then the Language must not be provided. In case no EC or CAS Code is provided, then the Name of the substance together with its Language is required to be provided;
- Updates of the Enumerations for Clinical Sizes and for Measure Units;
- Description attribute added for Clinical Size and Measure Units. Description of the Clinical Size or of the Measure Unit is a multi-language attribute(requires the Language in which it is given) and is required to be provided when the option selected for Clinical Size or Measure Unit is OTHER;

### 5.3.2 Certificates XSD element changes

- Updated attribute type for deviceType within the CECF entity. This field takes values from the RiskClassEnum enumeration;
- Updated enumeration for SterilisationMethodsEnum;
- Criterion Status become optional when searching for issued certificates;
- Updated CertificateStatusEnum enumeration

### 5.3.3 Known issues

- Download certificates service / download refused certificates service fails when bulk downloading (MDR) QMS/QA certificates that contain System or Procedure Pack.
- Adding new UDI-DIs for existing Basic UDIs and Updating Basic UDIs cause errors for Legacy Devices and System or Procedure Packs (entities: IVDEUDeviceType, MDEUDeviceType, PRDeviceType).
- Update UDI-DI (UDI\_DI.PATCH) appears as an available service via bulk upload but this service will only be completed in the next Playground release, so will generate an error if selected.

## 5.4 Version 1.4 (March 2021)

- Introduced services for Device and Certificates:
  - UC\_M2M\_UDI\_001: Download of Basic UDI-DI, UDI-DI and device data (last current version)
  - UC\_M2M\_UDI\_002: Upload information for Basic UDI-DI and UDI-DI
  - UC\_M2M\_CRF\_02: Download issued certificate (last current version)
- Updated internal documentation, the elements point now to the updated data dictionary
- Upgraded the version to V1.4.

### 5.4.1 Download Device Service - Download of Basic UDI-DI, UDI-DI and device data (last current version)

- Service for Download Devices: UC\_M2M\_UDI\_001: Download of Basic UDI-DI, UDI-DI and device data (last current version) allows the download of Regulation Devices, Legacy Devices and System or Procedure Packs;
- Service returns the list of Devices (Basic UDI-DI/EUDAMED DI and corresponding UDI-DI/EUDAMED ID) and/or System or Procedure Packs corresponding to the applied download criteria;  
*Note : The latest version of the Device (Basic UDI-DI/EUDAMED DI , UDI-DI / EUDAMED ID and associated elements) will be returned for the returned Devices;*
- Download criteria:
  - MFACTORCODE/PRACTORCODE (When the Actor calling the service is a MF or PR - the filter is required to be provided and to have the SRN of the Actor initiating the request. A MF/PR can only download their own Devices)  
(Only full SRN is taken in consideration, no wildcards);
  - ARACTORCODE (When the Actor calling the service is an AR - the filter is required to be provided and to have the SRN of the Actor initiating the request. An AR can only download the Devices to which they are associated)  
(Only full SRN is taken in consideration, no wildcards)
  - BasicUDIDICODE
  - Basic UDI-DI Version (returns all Basic UDI-DIs which have been updated after the mentioned date - together with the UDI-DIs linked to them (latest version)).
  - UDIDICODE
  - UDI-DI Version Date (returns all UDI-DIs which have been updated after the mentioned date - together with the last version of Basic UDI-DI version linked to them.)
  - RiskClass (Only in combination with MFACTORCODE or ARACTORCODE )
  - Country (returns all UDI-DIs which are placed on the market in the selected Country)
  - Applicable Legislation ( Device Applicable Legislation);
  - State (Only CAs and NBs can download Submitted Devices - can apply the state filter to SUBMITTED);
- Particularities in Download service for entity DeviceCertificateLinks (DeviceBasicUDITYPE > deviceCertificateLinks)

Entity DeviceCertificateLinks returns the Certificate Identification information provided by the Manufacturer when registering a Device.

When Downloading Regulation Devices entity will be returned only for Devices being in Submitted State. For Legacy Devices entity will returned only for Devices being in Submitted State. Entity will not be provided in case of Regulation Devices, being Registered (certificateLinks entity is provided in this case – the actual Certificates linked to the Device itself);

In the Download of Legacy Devices - entity is always returned with the information provided by the Manufacturer;

- Particularities of the certificateLinks entity

Entity returns the identification details of the Certificates linked to the Device (Basic UDI) from the Certificate module. Entity is only returned in Download (cannot be uploaded with the Device – the link between the Device and the Certificate is made by EUDAMED when the Certificate is provided in EUDAMED).

## 5.4.2 Upload Device Service - Upload information for Basic UDI-DI and UDI-DI

- Service for Upload Devices: UC\_M2M\_UDI\_002: Upload information for Basic UDI-DI and UDI-DI allows the download of Regulation Devices, Legacy Devices and System or Procedure Packs;



Note: Depending on the type of Actor the upload is restricted : Devices (Regulation and Legacy) can be uploaded by Manufacturer Actors and System or Procedure Packs by Producers;

- Validations on several entities/attributes submissions:
  - MDRBasicUDIType > specialDevice cannot be provided if the attribute MDRBasicUDIType > type has a value different of DEVICE;
  - IVDRBasicUDIType > specialDevice cannot be provided if the attribute IVDAppliablePropertiesGroup > kit is set to true;
  - DeviceBasicUDIType > ARActorCode required for Devices submitted by a NonEU Manufacturer;
  - MDRBasicUDIType > Ilb\_implantable\_exceptions property can be only provided for MDR Devices having Risk Class IIb;
  - Substances being HUMAN\_PRODUCT (MedicalHumanProductSubstanceType > type HUMAN\_PRODUCT) can be only submitted if MDRBasicUDIType > humanProductCheck has value True;
  - Substances being MEDICINAL\_PRODUCT (MedicalHumanProductSubstanceType > type MEDICINAL\_PRODUCT) can be only submitted if MDRBasicUDIType > medicinalProductCheck has value True;
  - DeviceUDIDIDataType > baseQuantity attribute cannot be provided for Legacy Devices;
  - DeviceMarkingType entity cannot be provided for Legacy Devices;
  - EndocrineSubstanceType entity cannot be provided for Legacy Devices;
  - CMRSubstanceType entity cannot be provided for Legacy Devices;
  - UDIDIDataType > productionIdentifier attribute cannot be provided for Legacy Devices;
  - MDRUDIDIDataType > annexXVINonMedicalDeviceTypes attribute cannot be provided for Legacy Devices;
  - UDIDIDataType > packages entity cannot be provided for Legacy Devices;
  - MDAppliablePropertiesGroup > implantable and MDAppliablePropertiesGroup > active properties are required to have value True when the Device has the Applicable Legislation AIMDD (MDEUDIType > applicableLegislation has value AIMDD);
  - Languages used for Multi-language properties from Device services :

The following properties in DEVICE /SPP model are multi-language properties (requiring a Language and a name when provided):

- Trade-Name;
- Comments for Storage and Handling Conditions;
- Comments for Critical Warnings and Contra-indications;
- CMR Substance;
- Endocrine Substance;
- Medicinal Substance;
- Human Product Substance;
- Additional product description;
- Intended medicinal purpose of the System or Procedure pack;

Only in case of the following properties language "ANY" can be used when uploading the Device:

- Trade-Name;
- Comments for Storage and Handling Conditions – when the selected option for Storage and Handling Conditions is any option outside option OTHER . In this case – only language ANY is accepted;

Note: In case option "Other" is selected for the type of Storage and Handling Conditions, Comments need to be provided in a language from the ones available – except language ANY;

- Comments for Critical Warnings and Contra-indications – when the selected option for Critical Warnings and Contra-indications is any option outside option OTHER. In this case – only language ANY is accepted;

Note : In case option "Other" is selected for the type of Critical Warnings and Contra-indications, Comments need to be provided in a language from the ones available – except language ANY;

- CMR Substance (SubstanceType.names) - when EC or CAS Code is provided. In this case – only language ANY is accepted;
- Endocrine Substance (SubstanceType.names) - when EC or CAS Code is provided. In this case – only language ANY is accepted;

Properties/ context that do not allow the use of Language ANY

- CMR Substance (SubstanceType.names) - when EC or CAS is not provided;
  - Endocrine Substance (SubstanceType.names) - when EC or CAS is not provided;
  - Medicinal Substance (SubstanceType.names);
  - Human Product Substance (SubstanceType.names);
  - Additional product description (UDIDIDataType.additionalDescription);
  - Intended medicinal purpose of the System or Procedure pack (PRBasicUDITYPE.medicinalPurpose);
  - Comments for Storage and Handling Conditions - when option Other is selected (StorageHandlingConditionType.comments)
  - Comments for Critical Warnings and Contra-indications - when option Other is selected (CriticalWarningType.comments)
- Particularities in Upload service for entity DeviceCertificateLinks (DeviceBasicUDITYPE > deviceCertificateLinks)

Entity DeviceCertificateLinks will store (collect) the Certificate Identification information provided by the Manufacturer when registering a Device.

When uploading a Regulation Device, the entity is required to be provided only in case of high-risk devices (Devices for which NB validation is required).

In case of Legacy Devices DeviceCertificateLinks is always required to be provided.

## 5.5 Version 1.3 (December 2020)

### Documentation

- Updated internal documentation, the elements point now to the updated data dictionary
- Updated the references to the common data dictionary
- Upgraded the version to V1.3

### Issues Fixed

- UC M2M ACT 001 : Download the registered actors
  - "LORUM IPSUM" in street and streetNum as default value if street not applicable
  - No GPS Data exported
  - No Mandate exported for a NON EU Manufacturer
  - No link with Importers exported
  - PRRC Person's firstname and lastname is not exported
  - No PRRC exported for an Authorised Representative
- UC M2M ACT 002 : Download actor registration
  - Organisation address mixed up with subcontractor address

### Known Issues

- Get all versions service does not exist in the back-end of EUDAMED

### XSD Element Changes

- Empty optional field tags should be removed
- Typos in elements fixed
  - ActorRegistrationPreviousAssesmentType
  - ActorRegistrationAssesmentType
  - ApprouvalDecisionEnum
- Became optional
  - DecisionType > DecisionType > comments
  - GeographicAddressType > Address > street
  - GeographicAddressType > Address > streetNum
  - MandateType > MandateARConfirmationDecisionType
- Became mandatory
  - RelationshipType > MandateType > startDate
- Elements removed
  - AddressType > ContactTypeEnum
  - LanguageSpecificNameType > LanguageSpecificTextType > master
- Elements added
  - RegistrationType > ActorRegistrationAssesmentType > LAA
  - RegistrationType > ActorRegistrationAssesmentType > LAASubcontractor
  - RegistrationType > ActorRegistrationAssesmentType > duplicatJustification
  - RegistrationType > ActorRegistrationAssesmentType > Role
- Elements modified
  - ActorRegistrationAssesmentType > validationChkActorOrgName
  - CountryEnum > EUCountryEnum

### Service Changes

- UC M2M ACT 001 : Download the registered actors
  - REQ : Remove CA from search criteria, no default filter
  - RESP : Remove CA Version
- UC M2M ACT 002 : Download actor registration
  - RESP : LAA & LAA-Subcontractor not in XSD for Actor Registration Request with fields

- RESP : Add duplicate Justification
- UC BLK ACT 003 : Upload actor registration assessments

REQ : Actor role added

## 6 M2M ENVIRONMENTS

Name	Purpose	Test Data Purge Timing	Version Management	Notifications
Playground	External test & Demo	May be purged based on new releases	New version or current version	No
Production	Real data	Never	Current version	Yes

## 7 SUPPORT

Domain	Contact	Service
EUDAMED Support	<a href="mailto:SANTE-EUDAMED-SUPPORT@ec.europa.eu">SANTE-EUDAMED-SUPPORT@ec.europa.eu</a>	The <b>FIRST</b> point of contact for starting onboarding Generating/regenerating the access token XSD/XML validation and error responses Data dictionary queries Bug reporting and feature suggestions
DIGIT Access Point Support	Multiple sources may contact user, but all replies should go through <a href="mailto:SANTE-EUDAMED-SUPPORT@ec.europa.eu">SANTE-EUDAMED-SUPPORT@ec.europa.eu</a>	Access point connection (once approved by EUDAMED support) Public Key Infrastructure (PKI) queries Pmode configuration Advice on AS4 conformant solutions Configurations for getting the message to EUDAMED

## 8 SUPPORTING DOCUMENTS

Documentation	Content
DTX XSD	The XML Schema Definition for the available services and entities
DTX Samples	Bulk upload samples covering the most used scenario's per service These are general samples, not containing personalized data.
DTX Service Definition	A business level view of the available services
DTX Business Rules	All constraints related to the services
Enumerations	Value lists for multiple choice fields
Data Dictionaries	Explains the Entity structure and meta data about their attributes

# ANNEXES

## 8.1 Annex - 1: Error sub-codes

GENERIC_INTERNAL_50000("50000"),
UNSUPPORTED_MESSAGE_TYPE_50001("50001"),
EDELIVERY_BRIDGE_READ_NULL_ID_50001("E-B-50001"),
INBOUND_VALIDATION_GENERIC_NULL_OBJECT_I_50001("I-50001"),
INBOUND_VALIDATION_DOWNLOAD_ACTOR_NULL_IMESSAGE_I_50002("I-50002"),
INBOUND_VALIDATION_ACTOR_DOWNLOAD_UNSUPPORTED_SRN_I_50003("I-50003"),
INBOUND_VALIDATION_DOWNLOAD_ACTOR_NULL_IMESSAGE_I_50004("I-50004"),
INBOUND_VALIDATION_CREATE_DEVICE_NULL_IMESSAGE_PAYLOAD_I_50005("I-50005"),
INBOUND_VALIDATION_WRONG_DOWNLOAD_ACTOR_PAYLOAD_TYPE_I_50006("I-50006"),
INBOUND_TRANSFORM_PULL_REQUEST_NULL_MESSAGE_I_50007("I-50007"),
INBOUND_TRANSFORM_PULL_REQUEST_ACTOR_DOWNLOAD_CRITERIA_WRONG_TYPE_MESSAGE_I_50008("I-50008"),
INBOUND_VALIDATION_DOWNLOAD_DEVICE_NULL_IMESSAGE_I_50009("I-50009"),
INBOUND_VALIDATION_DOWNLOAD_DEVICE_NULL_IMESSAGE_PAYLOAD_I_50010("I-50010"),
INBOUND_TRANSFORM_PULL_REQUEST_DEVICE_DOWNLOAD_CRITERIA_NULL_MESSAGE_I_50011("I-50011"),
INBOUND_TRANSFORM_PULL_REQUEST_ACTOR_DOWNLOAD_CRITERIA_WRONG_TYPE_MESSAGE_I_50012("I-50012"),
INBOUND_TRANSFORM_PULL_REQUEST_ACTOR_REGISTRATION__NULL_MESSAGE("I-50013"),
INBOUND_VALIDATION_INVALID_XML_PAYLOAD_I_40000("I-40000"),
INBOUND_VALIDATION_NULL_XML_PAYLOAD_I_40001("I-40001"),
INBOUND_VALIDATION_NULL_OBJECT_PAYLOAD_I_40002("I-40002"),
INBOUND_VALIDATION_SERVICE_ID_I_40003("I-40003"),
INBOUND_VALIDATION_NULL_ACTOR_DOWNLOAD_CRITERIA_PAYLOAD_I_40004("I-40004"),
INBOUND_VALIDATION_NULL_CRITERIA_PAYLOAD_I_40005("I-40005"),
INBOUND_VALIDATION_NULL_DEVICE_DOWNLOAD_CRITERIA_PAYLOAD_I_40006("I-40006"),
INBOUND_VALIDATION_NULL_INBOUND_PAYLOAD_I_40007("I-40007"),
OUTBOUND_TRANSFORM_OBJ_TO_XML_NULL_MESSAGE_O_50001("O-50001"),
OUTBOUND_TRANSFORM_OBJ_TO_XML_NULL_RESPONSE_MESSAGE_O_50002("O-50002"),
OUTBOUND_TRANSFORM_PULL_RESPONSE_ACTOR_DOWNLOAD_NULL_MESSAGE_O_50003("O-50003"),
OUTBOUND_TRANSFORM_PULL_RESPONSE_ACTOR_DOWNLOAD_WRONG_PAYLOAD_TYPE_O_50005("O-50005"),
OUTBOUND_TRANSFORM_PULL_RESPONSE_DEVICE_DOWNLOAD_NULL_MESSAGE_O_50006("O-50006"),
OUTBOUND_TRANSFORM_PULL_RESPONSE_DEVICE_DOWNLOAD_WRONG_PAYLOAD_TYPE_O_50007("O-50007"),
OUTBOUND_TRANSFORM_DOWNLOAD_DEVICE_IDENTIFIER_O_50002("E-O-50002"),
OUTBOUND_TRANSFORM_DOWNLOAD_ACTOR_ACTOR_TYPE_O_50010("O-50010"),
OUTBOUND_TRANSFORM_DOWNLOAD_ACTOR_ACTOR_TYPE_O_50011("O-50011"),
OUTBOUND_TRANSFORM_DOWNLOAD_ACTOR_ACTOR_TYPE_O_50012("O-50012"),
OUTBOUND_VALIDATION_NULL_MESSAGE_O_40000("O-40000"),
OUTBOUND_VALIDATION_NULL_MESSAGEID("O-40001"),
OUTBOUND_VALIDATION_NULL_RESPONSE_O_40002("O-40002"),
OUTBOUND_VALIDATION_NULL_RESPONSE_MESSAGEID("O-40003"),
IO_VALIDATION_NULL_IMESSAGE_50000("E-IO-50000"),
IO_VALIDATION_NULL_IMESSAGE_50001("E-IO-50001"),

E_I_VALIDATION_NULL_IMESSAGE_50000("E-I-50000"),
E_I_VALIDATION_NULL_IMESSAGE_PAYLOAD_XML_50001("E-I-50001"),
E_I_VALIDATION_INVALID_XML_PAYLOAD_40000("E-I-40000"),
E_O_VALIDATION_NULL_IMESSAGE_50000("E-O-50000"),
E_O_VALIDATION_NULL_IMESSAGE_PAYLOAD_XML_50001("E-O-50001"),
E_O_VALIDATION_INVALID_XML_PAYLOAD_O_50002("E-O-50002"),
M_VALIDATION_GENERIC_M_50000("M-50000"),
INBOUND_TRANSFORM_PUSH_REQUEST_DEVICE_UPLOAD_NULL_MESSAGE("RESERVED_X_60001"),
INBOUND_TRANSFORM_PUSH_REQUEST_UDI_ADD_NULL_MESSAGE("RESERVED_X_60002"),
INBOUND_TRANSFORM_PUSH_REQUEST_UDI_UPDATE_NULL_MESSAGE("RESERVED_X_60003"),
INBOUND_TRANSFORM_PUSH_REQUEST_BUD_UPDATE_NULL_MESSAGE("RESERVED_X_60004"),
INBOUND_TRANSFORM_PUSH_REQUEST_MARKET_UPSERT_NULL_MESSAGE("RESERVED_X_60005"),
INBOUND_TRANSFORM_PUSH_REQUEST_DEVICE_UPLOAD_WRONG_TYPE_MESSAGE("RESERVED_X_60101"),
INBOUND_TRANSFORM_PUSH_REQUEST_UDI_ADD_WRONG_TYPE_MESSAGE("RESERVED_X_60102"),
INBOUND_TRANSFORM_PUSH_REQUEST_UDI_UPDATE_WRONG_TYPE_MESSAGE("RESERVED_X_60103"),
INBOUND_TRANSFORM_PUSH_REQUEST_BUD_UPDATE_WRONG_TYPE_MESSAGE("RESERVED_X_60104"),
INBOUND_TRANSFORM_PUSH_REQUEST_MARKET_UPSERT_WRONG_TYPE_MESSAGE("RESERVED_X_60105"),
OUTBOUND_TRANSFORM_ACKNOWLEDGEMENT_UPLOAD_NULL_MESSAGE("RESERVED_X_60501"),
OUTBOUND_TRANSFORM_ACKNOWLEDGEMENT_UDI_ADD_NULL_MESSAGE("RESERVED_X_60502"),
OUTBOUND_TRANSFORM_ACKNOWLEDGEMENT_UDI_UPDATE_NULL_MESSAGE("RESERVED_X_60503"),
OUTBOUND_TRANSFORM_ACKNOWLEDGEMENT_BUD_UPDATE_NULL_MESSAGE("RESERVED_X_60504"),
OUTBOUND_TRANSFORM_ACKNOWLEDGEMENT_DEVICE_UPLOAD_WRONG_MESSAGE_TYPE("RESERVED_X_60601"),
OUTBOUND_TRANSFORM_ACKNOWLEDGEMENT_UDI_ADD_WRONG_MESSAGE_TYPE("RESERVED_X_60602"),
OUTBOUND_TRANSFORM_ACKNOWLEDGEMENT_UDI_UPDATE_WRONG_MESSAGE_TYPE("RESERVED_X_60603"),
OUTBOUND_TRANSFORM_ACKNOWLEDGEMENT_BUD_UPDATE_WRONG_MESSAGE_TYPE("RESERVED_X_60604"),
VALIDATION_MALFORMED_URI("RESERVED_X_61001"),
SERVICE_VALIDATION_INVALID_ENTITY_40000("SERVICE_VALIDATION_40000"),
INBOUND_TRANSFORM_PULL_REQUEST_ACTOR_REGISTRATION_PAYLOAD(("I-50014")),
OUTBOUND_TRANSFORM_DOWNLOAD_ACTOR_ACTOR_TYPE_O_50013("O-50013");