



**Dics v5
Cookbook
Version 5.1**

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eHealth platform

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All are free to circulate this document with reference to the URL source.

Table of contents

Table of contents	2
1. Document management	4
1.1 Document history	4
2. Introduction	5
2.1 Goal of the service	5
2.2 Goal of the document	5
2.3 eHealth platform document references	5
2.4 External document references	5
2.5 Service history	6
3. Support	8
3.1 Helpdesk eHealth platform.....	8
3.1.1 Certificates	8
3.1.2 For issues in production	8
3.1.3 For issues in acceptance.....	8
3.1.4 For business issues	8
3.2 Status.....	8
4. Global overview	9
5. Step-by-step	10
5.1 Technical requirements	10
5.1.1 Security policies to apply	10
5.1.2 WS-I Basic Profile 1.1	10
5.1.3 Tracing.....	10
5.2 Process overview	10
5.2.1 Generic attributes	11
5.2.2 Response status	14
5.3 Operations	14
5.3.1 FindAmp	14
5.3.2 FindVmp	17
5.3.3 FindCompany	18
5.3.4 FindLegislationText	19
5.3.5 FindReimbursement.....	20
5.3.6 FindReferences.....	21
5.3.7 FindVmpGroup	22
5.3.8 FindVtm	23
5.3.9 FindCommentedClassification.....	24
5.3.10 FindCompoundingIngredient	25
5.3.11 FindCompoundingFormula.....	26
5.3.12 FindAmp	27
5.3.13 FindNonMedicinalProduct	28



5.3.14	FindListOfAmp.....	28
5.3.15	ValidateSamId	28
5.3.16	ValidateProductId	29
5.4	Request Types.....	29
5.5	Response Types	29
6.	Risks and security	30
6.1	Risks & safety.....	30
6.2	Security	30
6.2.1	Business security	30
6.2.2	Web service.....	30
6.2.3	The use of username, password and token	30
7.	Test and release procedure	31
7.1	Procedure	31
7.1.1	Initiation	31
7.1.2	Development and test procedure.....	31
7.1.3	Release procedure	31
7.1.4	Operational follow-up.....	31
7.2	Test cases.....	31
8.	Error and failure messages	32
8.1	Business errors	32
8.2	Technical errors	33

To the attention of: "IT expert" willing to integrate this web service.



1. Document management

1.1 Document history

Version	Date	Author	Description of changes / remarks
5.0	15/05/2019	Smals	Update cookbook to Dics v5
5.1	08/08/2022	eHealth platform	§ 2.4 External document references (added) § 3.2 Status (added) § 5.1.2 WS-I Basic Profile (added) § 5.1.3 Tracing (added)

2. Introduction

2.1 Goal of the service

The Authentic Source of Medicines (SAM) is a system gathering information about drugs authorized on the Belgian market and their reimbursements. The information is managed by many responsible public institutions: BCPI¹, FAMHP², NIHDI³, FPS Economy,⁴ and APB⁵.

The main goal of the project is to allow the prescribers and insurance institutions to electronically communicate information and decisions in order to accelerate the reimbursement process for the patient.

The information in the SAM is public.

DICS v5 is the consultation web service for SAM v2.

2.2 Goal of the document

This document is not a development or programming guide for internal applications. Instead, it provides functional and technical information and allows an organization to integrate and use the eHealth platform service.

However, in order to interact in a smooth, homogeneous and risk controlled way with a maximum of partners, these partners must commit to comply with the requirements of specifications, data format and release processes of the eHealth platform as described in this document.

Technical and business requirements must be met in order to allow the integration and validation of the eHealth platform service in the client application.

2.3 eHealth platform document references

On the portal of the eHealth platform, you can find all the referenced documents.⁶ These versions or any following versions can be used for the eHealth platform service.

ID	Title	Version	Date	Author
1	Glossary			eHealth platform
2	Reimbursement Law - Rules and expressions	1.11	10/12/2018	RIZIV - INAMI -LIKIV

2.4 External document references

All documents can be found through the internet. They are available to the public, but not supported by the eHealth platform.

¹ <http://www.cbip.be/>.

² <http://www.fagg-afmps.be/en/famhp/>.

³ <http://www.inami.fgov.be/fr/Pages/default.aspx>.

⁴ <http://economie.fgov.be/>

⁵ <http://www.apb.be/>

⁶ www.ehealth.fgov.be/ehealthplatform



ID	Title	Source	Date	Author
1	Basic Profile Version 1.1	http://www.ws-i.org/Profiles/BasicProfile-1.1-2004-08-24.html	24/08/2004	Web Services Interoperability Organization

2.5 Service history

This chapter contains the list of changes made to the service with respect to the previous version.

Previous version	Previous release date	Changes
V1	2015-01-08	First version, based on the SAM CIVICS interface.
V2	2016-07-31	Complete rework: new backend, new interface based on consultation of 5 domains.
V3	2017-03-19	Some fields in the response moved, some fields were added. All in all minor changes, but not backwards compatible. Addition of Find Compounding operations.
V4	2017-11-26	<p>Changes:</p> <ol style="list-style-type: none"> 1) Pricing Range / Unit / Slice FindReimbursementResponse/ReimbursementContexts/PricingRange replaced by FindReimbursementResponse/ReimbursementContexts/PricingUnit FindReimbursementResponse/ReimbursementContexts/PricingSlice 2) CopaymentSupplement New field FindReimbursementResponse/ReimbursementContexts/CopaymentSupplement 3) Attachment Mandatory flag New field FindLegislationTextResponse/LegalBasis/LegalReference//FormalInterpretation/ReimbursementCondition/Attachment/Mandatory 4) New Reference Distributor in AMPP FindAmpResponse/Amp/Ampp/DistributorActorNr 5) CommentedClassification is now a ConsultTextType ConsultCommentedClassificationTreeType/Url 6) New field AdditionalInformation in SupplyProblem FindAmpResponse/Amp/Ampp/SupplyProblem/AdditionalInformation 7) DerogationImport now directly under AMPP FindAmpResponse/Amp/Ampp/SupplyProblem/DerogationImport moved to FindAmpResponse/Amp/Ampp/DerogationImport <p>New operations:</p> <ol style="list-style-type: none"> 1) ListConsultation 2) FindAmp

		3) FindNonMedicinalProduct
V5 Current	20-10- 2019	<p>Changes to all operations:</p> <ul style="list-style-type: none"> • Addition of SAM Version (proof for SAM usage) • Addition of AdditionalFields subelement in all Consult* Elements • Removal of search language: this field wasn't used • XSD Refactoring: all simpleTypes removed. • Business errors are returned as soap faults. Responses no longer extend the commons:StatusResponseType. <p>Changes to some specific operations:</p> <ul style="list-style-type: none"> • GetList operations removed – usage was very limited, other operations available that did the same but better • New operation FindListOfAmp (to reduce the load on FindAmp, clients are encouraged to filter through the FindListOfAmp response first before Finding a specific AMP) • FindAmp responses limited to 5 AMP's. If more, an error is returned. Filter the list first using the operation FindListOfAmp. • New concept in VMP: Standard Dosages • Prescribable elements gain an extra field with their SAM Unique Identifier, uniquely identifying an element on a given day (proof for SAM usage) • Several new fields in responses • New operation ValidateSamId, used to prove the consultation of SAM • New operation ValidateProductId, used to prove the consultation of SAM • FindByDmpp type no longer based on the core:DmppKeyType, now the criteria are subelements instead of attributes • FAMHP elements pointing to external documentation had *Link in their name, other providers used *Url. Changed all FAMHP *Link elements into *Url. Example: SPCLink is now SPCUrl. <p>General document changes:</p> <ul style="list-style-type: none"> • Elements are no longer fully expanded in this document. Most of this document was a copy/paste from the XSD anyway, so part of it is replaced by an export of the XSD using XML Spy.

3. Support

3.1 Helpdesk eHealth platform

3.1.1 Certificates

In order to access the secured eHealth platform environment you have to obtain an eHealth platform certificate, used to identify the initiator of the request. In case you do not have one, please consult the chapter about the eHealth Certificates on the portal of the eHealth platform

- <https://www.ehealth.fgov.be/ehealthplatform/nl/ehealth-certificaten>
- <https://www.ehealth.fgov.be/ehealthplatform/fr/certificats-ehealth>

For technical issues regarding eHealth platform certificates

- Acceptance: acceptance-certificates@ehealth.fgov.be
- Production: support@ehealth.fgov.be

3.1.2 For issues in production

eHealth platform contact centre:

- Phone: 02 788 51 55 (on working days from 7 am till 8 pm)
- Mail: support@ehealth.fgov.be
- Contact Form :
 - <https://www.ehealth.fgov.be/ehealthplatform/nl/contact> (Dutch)
 - <https://www.ehealth.fgov.be/ehealthplatform/fr/contact> (French)

3.1.3 For issues in acceptance

Integration-support@ehealth.fgov.be

3.1.4 For business issues

- regarding an existing project: the project manager in charge of the application or service
- regarding a new project or other business issues: info@ehealth.fgov.be

3.2 Status

The website <https://status.ehealth.fgov.be> is the monitoring and information tool for the ICT functioning of the eHealth services that are partners of the Belgian eHealth system.



4. Global overview

The SAM v2 database has been divided in four major domains:

Actual Medicine: information about actual drug products and the related packages authorized on the Belgian market. The FAMHP is responsible for monitoring this information. BCPI and NIHDI can register additional information on a drug product when created by the FAMHP.

Reimbursement: information about the reimbursement of a delivered drug package managed by the NIHDI.

Reimbursement Law: information about the legislation that describes the conditions and terms of the reimbursement of a drug package, i.e. Chapter IV describing the conditions for reimbursement of specialties that are refundable through a medical advisor's agreement. This part is managed by the NIHDI.

Virtual Medicine: extra information about the drug products for prescription managed by the BPCI.

Additionally, three minor domains containing simpler elements are published as well:

Company: information about the pharmaceutical company that is responsible for delivered drug packages. The FAMHP is responsible for monitoring this information;

Compounding: Contains the names, synonyms, and CNK codes for ingredients and formulae, prepared by the pharmacist. These are used as source of information for electronic prescriptions. APB publishes the information.

Non-medicinal products: information about non-medicinal products that nonetheless can be part of a prescription. APB publishes the information.

5. Step-by-step

5.1 Technical requirements

5.1.1 Security policies to apply

We expect that you use SSL one way for the transport layer.

As WS security policy, we expect:

- A timestamp (the date of the request), with a Time to live of one minute. If the message does not arrive during this minute, it shall not be treated.
- The signature with the certificate of
 - the timestamp, (the one mentioned above)
 - the body (the message itself)
 - and the binary security token: any valid eHealth certificateThis will allow the eHealth platform to verify the integrity of the message and the identity of the message author.

A document explaining how to implement this security policy can be obtained at the eHealth platform

5.1.2 WS-I Basic Profile 1.1

Your request must be WS-I compliant (See Chap 2.4 - External Document Ref).

5.1.3 Tracing

To use this service, the request SHOULD contain the following two http header values (see RFC

<https://datatracker.ietf.org/doc/html/rfc7231#section-5.5.3>):

1. User-Agent: information identifying the software product and underlying technical stack/platform. It MUST include the minimal identification information of the software such that the emergency contact (see below) can uniquely identify the component.
 - a. Pattern: {minimal software information}/{version} {minimal connector information}/{connector-package-version}
 - b. Regular expression for each subset (separated by a space) of the pattern: `[[a-zA-Z0-9-\\]]*\\[[0-9azA-Z-_.]]*`
 - c. Examples:
User-Agent: myProduct/62.310.4 Technical/3.19.0
User-Agent: Topaz-XXXX/123.23.X freeconnector/XXXXX.XXX
2. From: email-address that can be used for emergency contact in case of an operational problem.
Examples:
From: info@mycompany.be

5.2 Process overview

The DICS v5 service has the following endpoints:

- Integration environment: <https://services-int.ehealth.fgov.be/Dics/v5>
- Acceptance environment: <https://services-acpt.ehealth.fgov.be/Dics/v5>
- Production environment: <https://services.ehealth.fgov.be/Dics/v5>

Text search



Many objects have multiple searchable names. The Consultation service searches all name fields with the input of an 'Any Name Part' field in the request. Only the beginning of the name is searched for: you can provide a partial name. All objects where at least one name field matches are returned in the result.

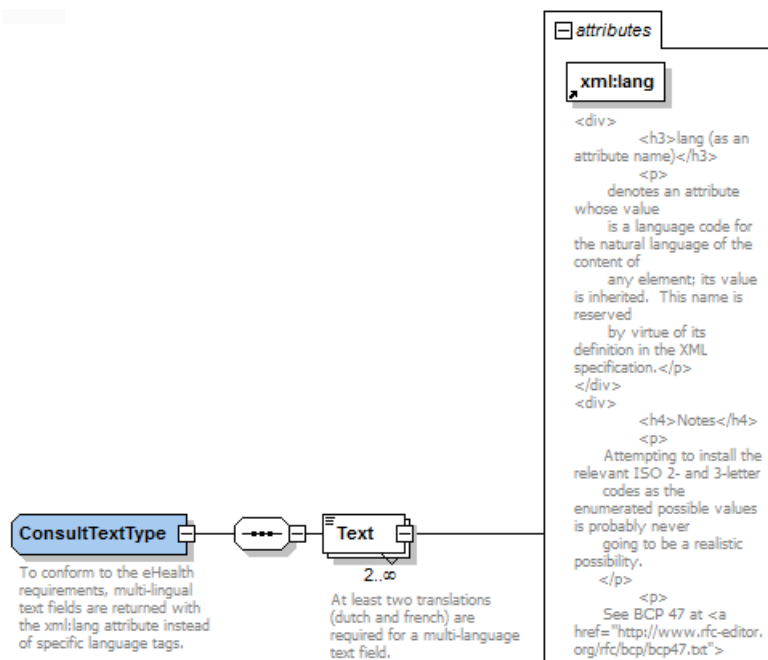
E.g.: a search string 'Par' matches 'Paracetamol' and 'Paroxetin', but not 'Heparin'.

5.2.1 Generic attributes

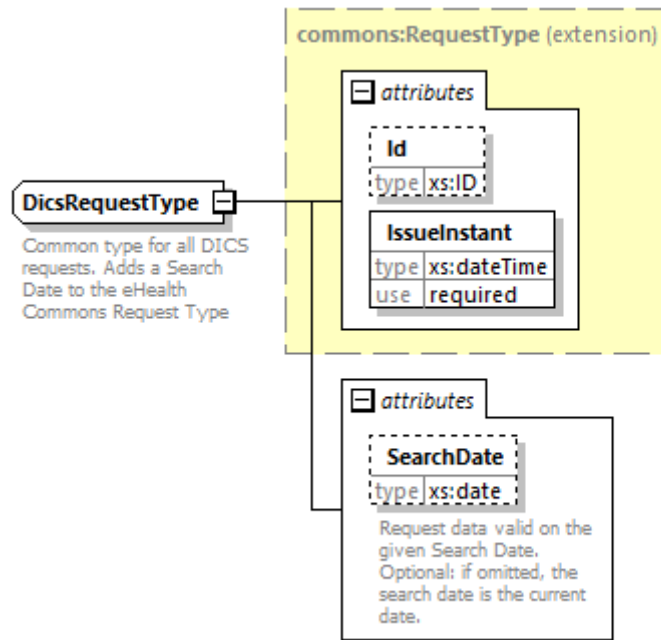
The following attributes are generic and appear in many entities. It will be indicated further when it has to be specified and what value it can contain.

Notes: to reduce redundancy in the document

- The optionality is not repeated in the description tables. The optionality can be visually determined. A dashed line means an optional field; a full line means a required field.
- For all fields that contain in separate subfields translations:
 - These fields are translated in French, Dutch, German, and English.
 - French and Dutch versions are mandatory and all others are optional.
 - The *ConsultTextType* contains at least two Text elements with a corresponding *xml:lang* attribute.

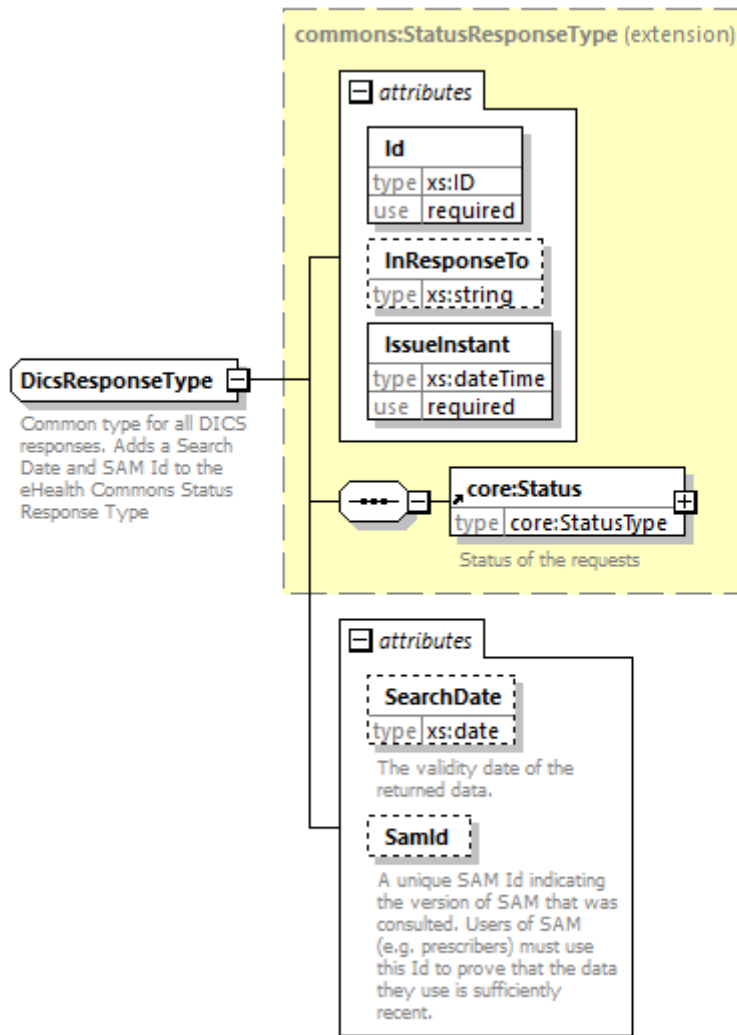


All Find*Requests define the same attributes **Id**, **IssueInstant** and **SearchDate**.



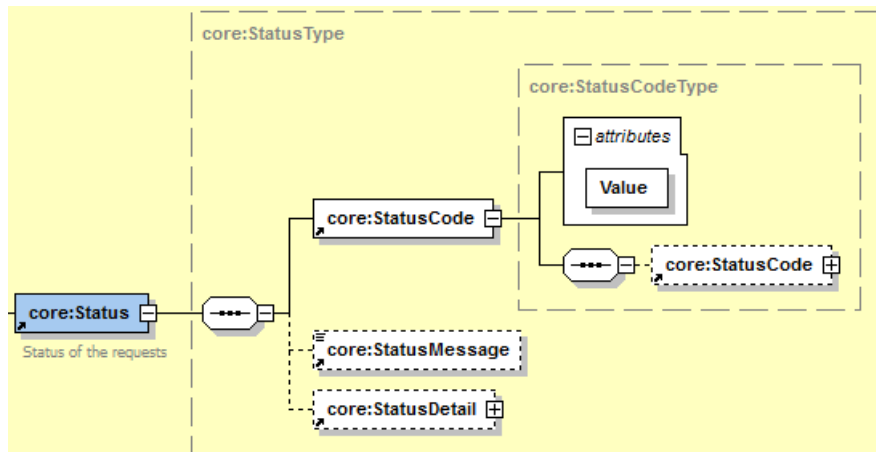
Name	Description
SearchDate	Optional. Search SAM situation on a date different from today. This search will make use of the functional history of SAM. If the data for the given period were corrected between the searched date and now, the corrected data will be returned.
Id	Optional All SOA Service Consumers SHOULD set an Id but it is not mandatory. The Id SHOULD be unique on a per request base to facilitate tracing on both client and server side.
IssueInstant	Required Time of the service call.

All responses implement the eHealth Common Status Response, and add the Search Date and SAM Id.



Name	Description
Id	Unique Identifier of the Response
InResponseTo	The unique identifier of the request
IssueInstant	Time of the service response
SearchDate	The validity date of the returned data
SamId	A unique SAM Id indicating the version of SAM that was consulted. Users of SAM (e.g. prescribers) must use this Id to prove that the data they use is sufficiently recent.

5.2.2 Response status



As part of eHealth SOA standards, all responses include an element Status.

The Status element of the Response contains a *StatusCode*.

- A *StatusCode* is recursive and can therefore contain an embedded *StatusCode* to define a sublevel *StatusCode*.
- Each *StatusCode* must have a value attribute.
- There must be at least a level 1 *StatusCode*.

Level 1 *StatusCode* MUST be one of the following values:

URI	Description
urn:be:fgov:ehhealth:2.0:status:Success	everything OK
urn:be:fgov:ehhealth:2.0:status:Requester	error caused by client (consumer)
urn:be:fgov:ehhealth:2.0:status:Responder	error caused by server (provider)

See section 8.1 Business errors for a detailed list of level 2 StatusCodes values and descriptions.

5.3 Operations

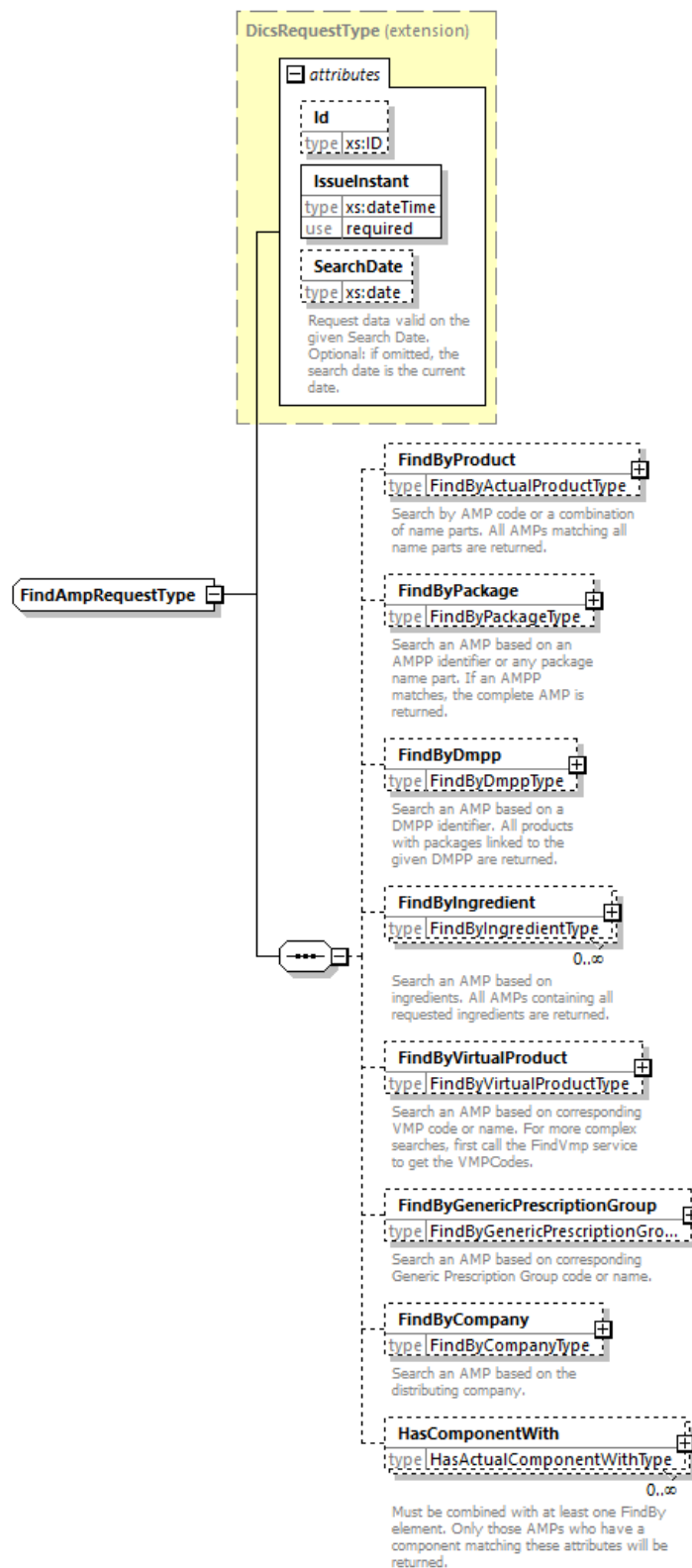
5.3.1 FindAmp

Find an AMP based on one or more criteria.

Since Dics v5, this operation no longer returns more than 5 AMPs in one response. A business error is returned if there are more than 5 AMPs matching the search criteria.

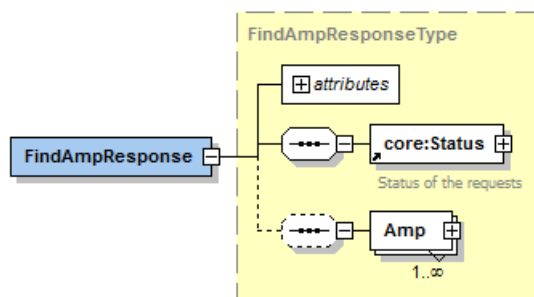
This operation should only be used to get the full information on very specific products. In order to browse through a broader range of products, use the FindListOfAmp operation.

5.3.1.1 FindAmpRequest



Field name	Description
FindByProduct	Search by AMP code or a combination of name parts. All AMPs matching all name parts are returned.
FindByPackage	Search an AMP based on an AMPP identifier or any package name part. If an AMPP matches, the complete AMP is returned.
FindByDmpp	Search an AMP based on a DMPP identifier. All products with packages linked to the given DMPP are returned.
FindByIngredient	Search an AMP based on ingredients. All AMPs containing all requested ingredients are returned.
FindByVirtualProduct	Search an AMP based on corresponding VMP code or name. For more complex searches, first call the FindVmp service to get the VMPCodes.
FindByGenericPrescriptionGroup	Search an AMP based on corresponding Generic Prescription Group code or name.
FindByCompany	Search an AMP based on the distributing company.
HasComponentWith	Must be combined with at least one FindBy element. Only those AMPs who have a component matching these attributes will be returned.

5.3.1.2 FindAmpResponse



Attribute of FindAmpResponse	
Name	Description
SearchDate	Date of the consultation

5.3.1.3 Example

Request:

```

<urn:FindAmpRequest Id="_1" IssueInstant="2017-11-28T15:44:04.902+01:00" SearchDate="2017-10-18" xml:lang="nl">
  <FindByPackage>
    <AnyNamePart>abilify</AnyNamePart>
  </FindByPackage>
</urn:FindAmpRequest>
  
```

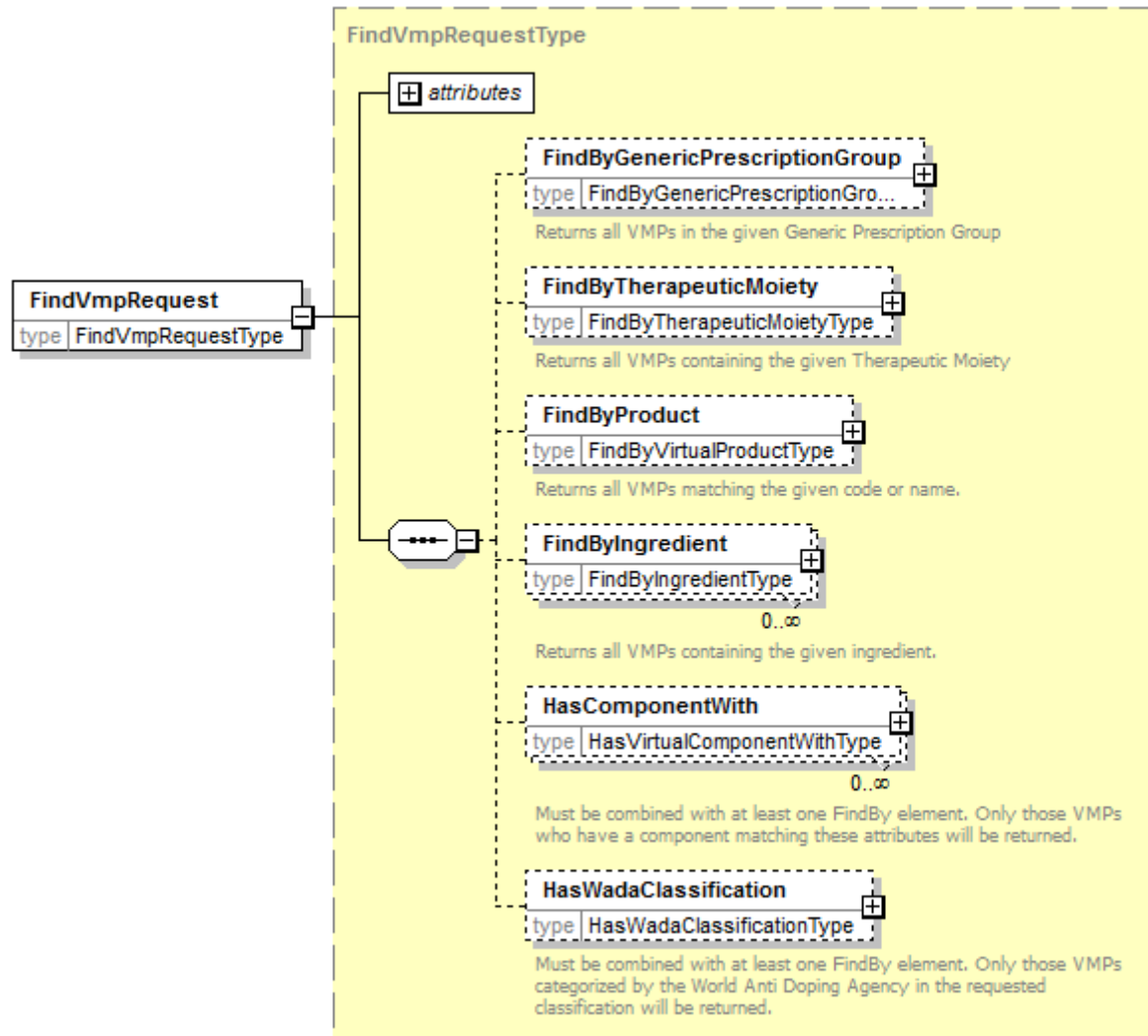

Reply:

Too long for this document.

5.3.2 FindVmp

Find a VMP based on one or more criteria

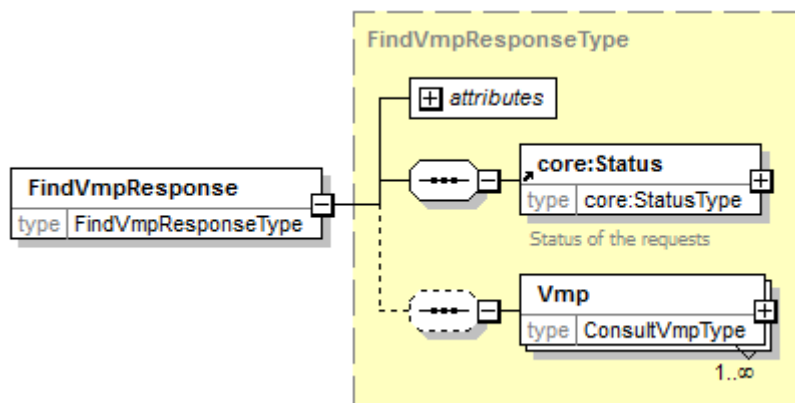
5.3.2.1 Input arguments



Field name	Description
FindByGenericPrescriptionGroup	Returns all VMPs in the given Generic Prescription Group
FindByTherapeuticMoiety	Returns all VMPs containing the given Therapeutic Moiety
FindByProduct	Returns all VMPs matching the given code or name.
FindByIngredient	Returns all VMPs containing the given ingredient.

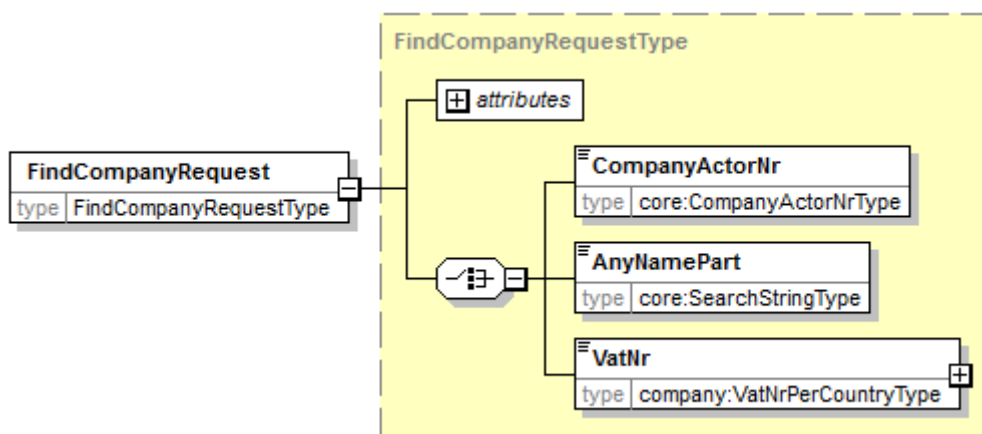
HasComponentWith	Must be combined with at least one FindBy element. Only those VMPs who have a component matching these attributes will be returned.
HasWadaClassification	Must be combined with at least one FindBy element. Only those VMPs categorized by the World Anti Doping Agency in the requested classification will be returned.

5.3.2.2 Output arguments



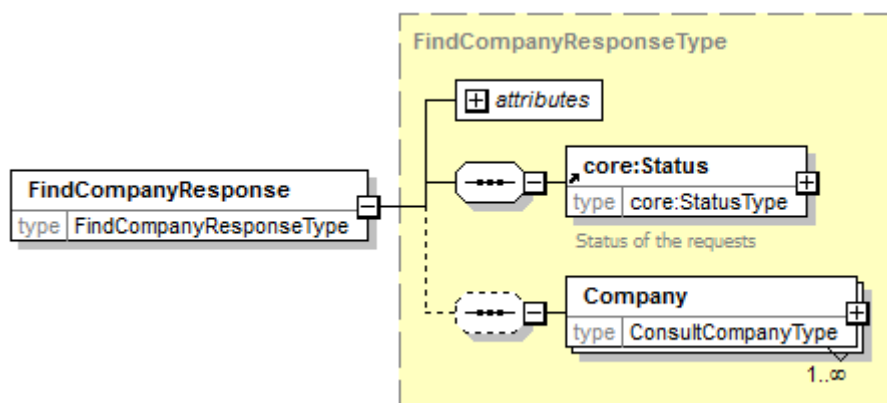
5.3.3 FindCompany

5.3.3.1 Input arguments



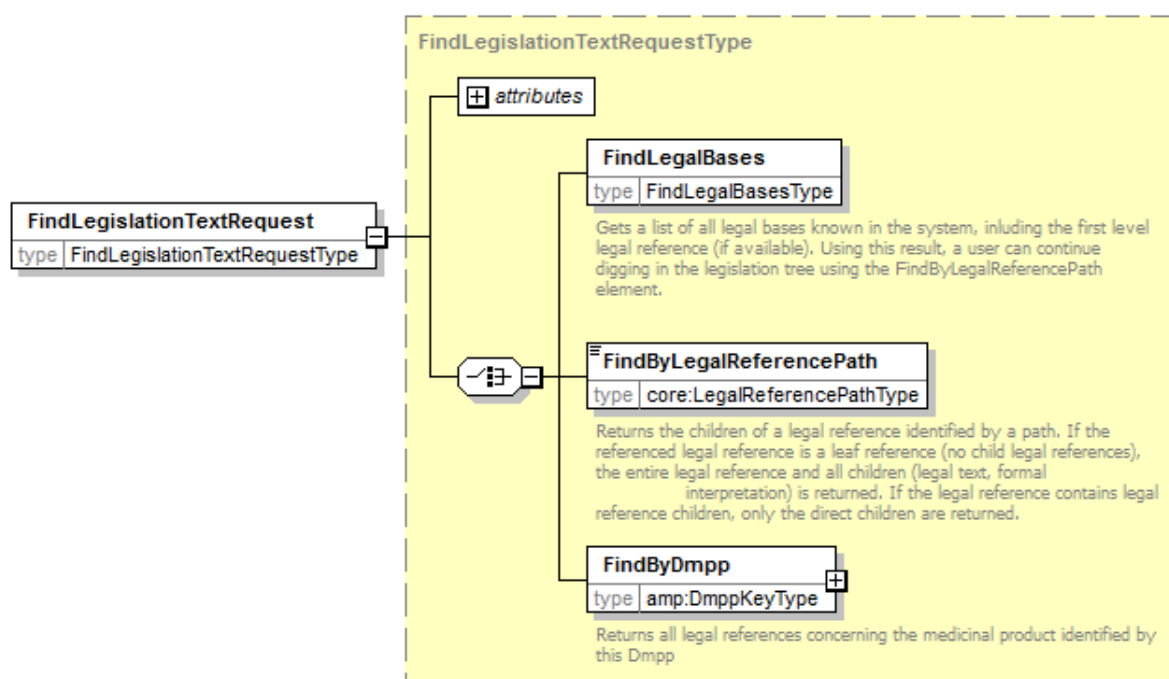
Field name	Description
CompanyActorNr	The unique identifier attributed to the company by the FAMHP
AnyNamePart	Returns the companies where any of the names starts with the given string
VatNr	Returns the company identified by the given Vat number.

5.3.3.2 Output arguments



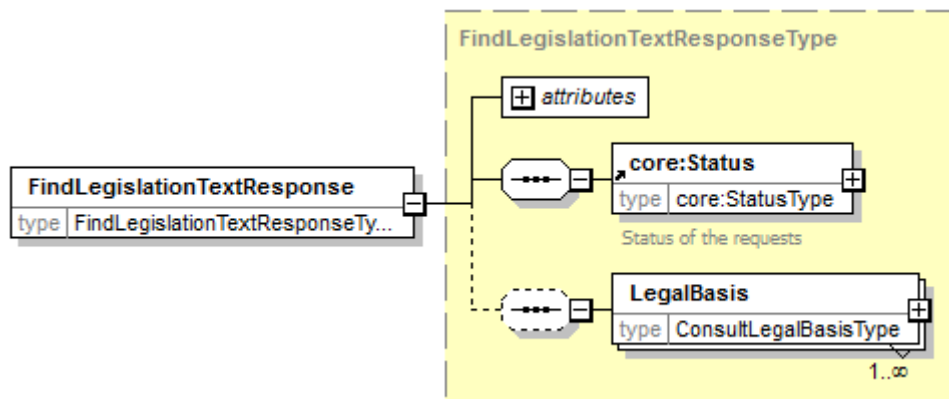
5.3.4 FindLegislationText

5.3.4.1 Input arguments



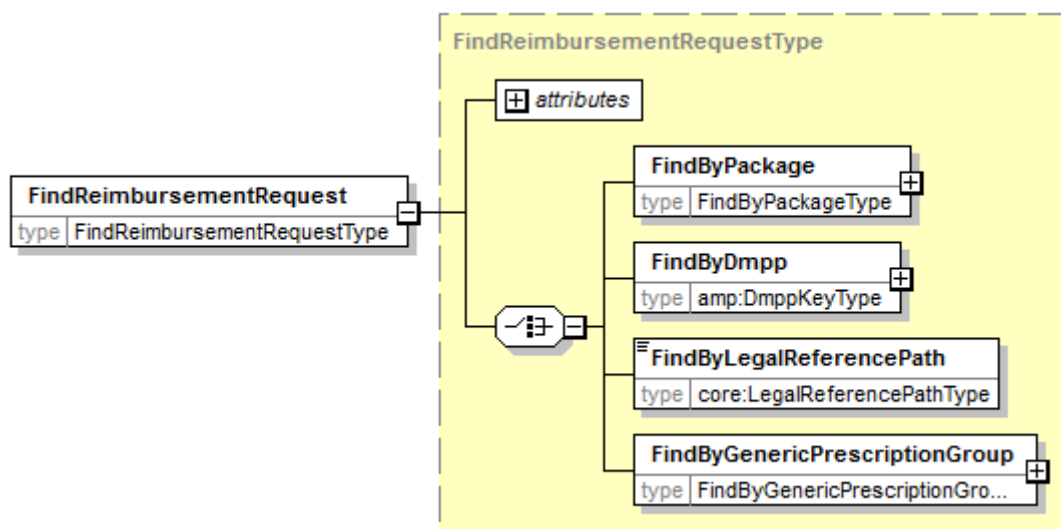
Field name	Description
FindLegalBases	Gets a list of all legal bases known in the system, including the first level legal reference (if available). Using this result, a user can continue digging in the legislation tree using the FindByLegalReferencePath element.
FindByLegalReferencePath	Returns the children of a legal reference identified by a path. If the referenced legal reference is a leaf reference (no child legal references), the entire legal reference, and all children (legal text, formal interpretation) is returned. If the legal reference contains legal reference children, only the direct children are returned.
FindByDmpp	Returns all legal references concerning the medicinal product identified by this Dmpp

5.3.4.2 Output arguments



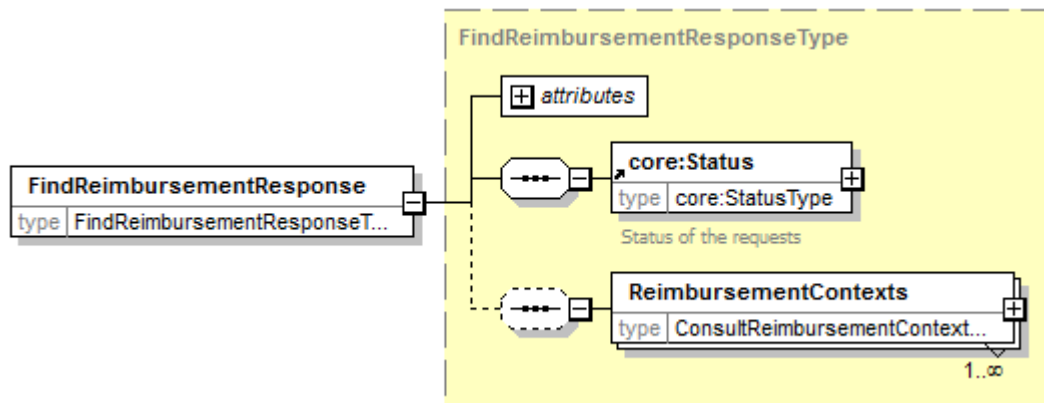
5.3.5 FindReimbursement

5.3.5.1 Input arguments



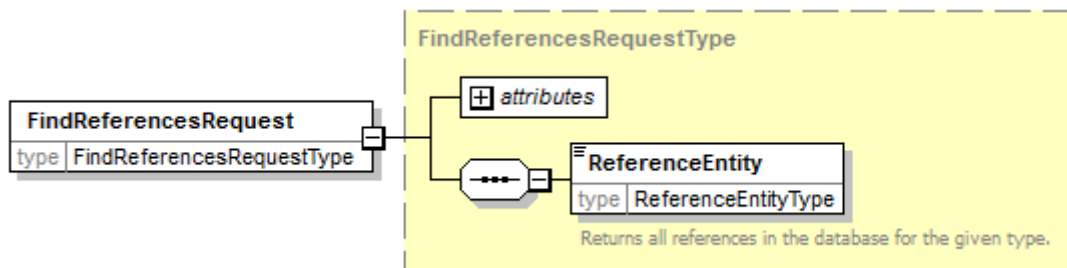
Field name	Description
FindByPackage	Find the CNK codes corresponding to the matching packages, return the reimbursement contexts associated with these CNK codes.
FindByDmpp	Find Reimbursement Contexts based on a DMPP (CNK code).
FindByLegalReferencePath	Find Reimbursement Contexts based on a Legal Reference Path.
FindByGenericPrescriptionGroup	Find the packages corresponding to the matching GenericPrescriptionGroup, get their corresponding CNK codes, return the reimbursement contexts associated with these CNK codes.

5.3.5.2 Output arguments



5.3.6 FindReferences

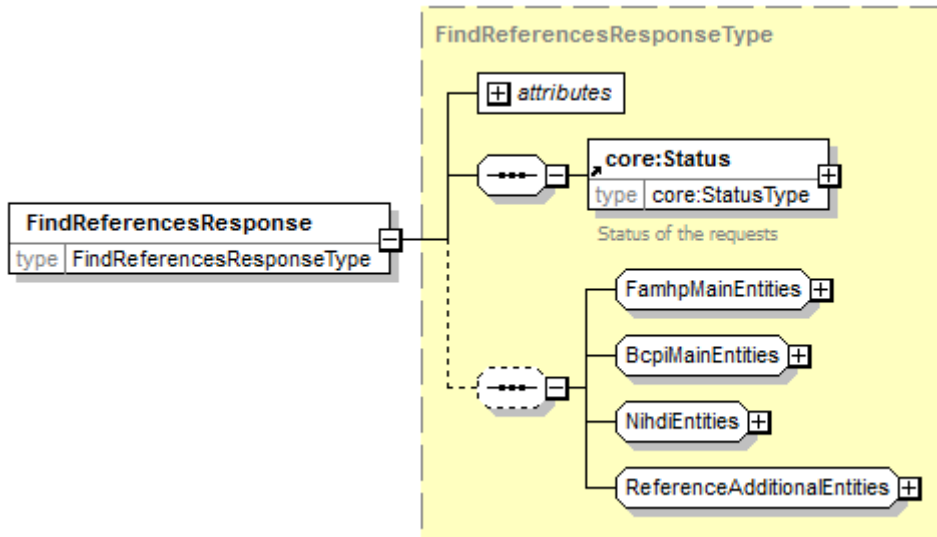
5.3.6.1 Input arguments



Field name	Description
ReferenceEntity	<p>Returns all references in the database for the given type.</p> <p>Possible types:</p> <ul style="list-style-type: none"> • AtcClassification • DeliveryModus • DeliveryModusSpecification • DeviceType • PackagingClosure • PackagingMaterial • PackagingType • PharmaceuticalForm • RouteOfAdministration • Substance • NoSwitchReason • VirtualForm • Wada • NoGenericPrescriptionReason • Appendix • FormCategory • Parameter • ReimbursementCriterion • StandardForm

	<ul style="list-style-type: none"> • StandardRoute • StandardSubstance • StandardUnit
--	--

5.3.6.2 Output arguments

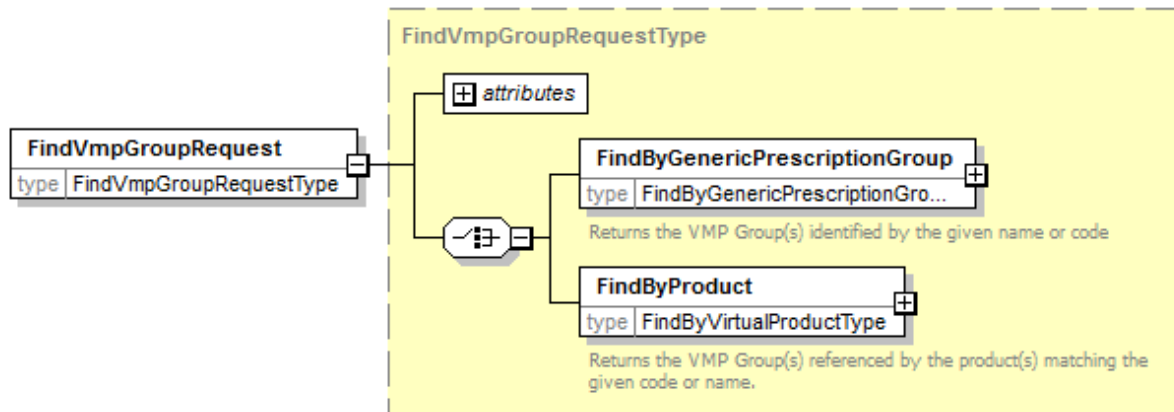


Returns only the requested fields.

5.3.7 FindVmpGroup

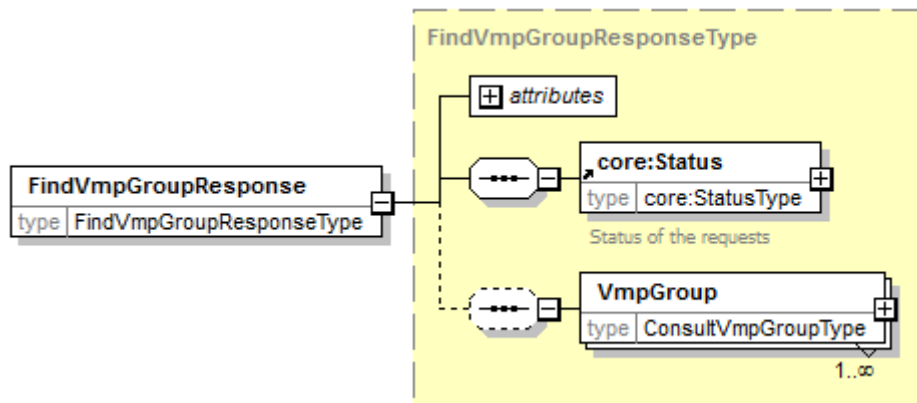
Since Dics v3

5.3.7.1 Input arguments



Field name	Description
FindByGenericPrescriptionGroup	Returns the VMP Group(s) identified by the given name or code
FindByProduct	Returns the VMP Group(s) referenced by the product(s) matching the given code or name.

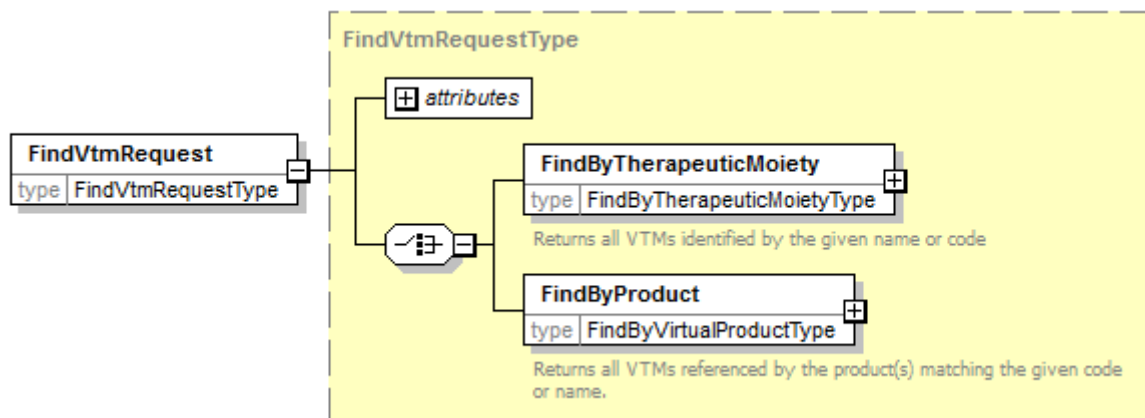
5.3.7.2 Output arguments



5.3.8 FindVtm

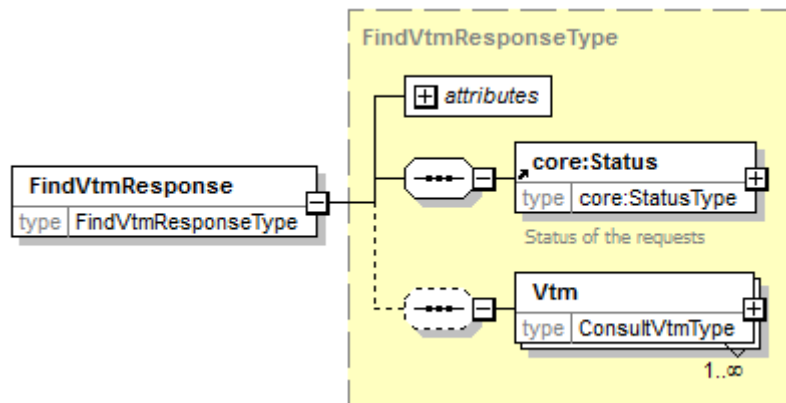
Since Dics v3

5.3.8.1 Input arguments



Field name	Description
FindByTherapeuticMoiety	Returns all VTMs identified by the given name or code
FindByProduct	Returns all VTMs referenced by the product(s) matching the given code or name.

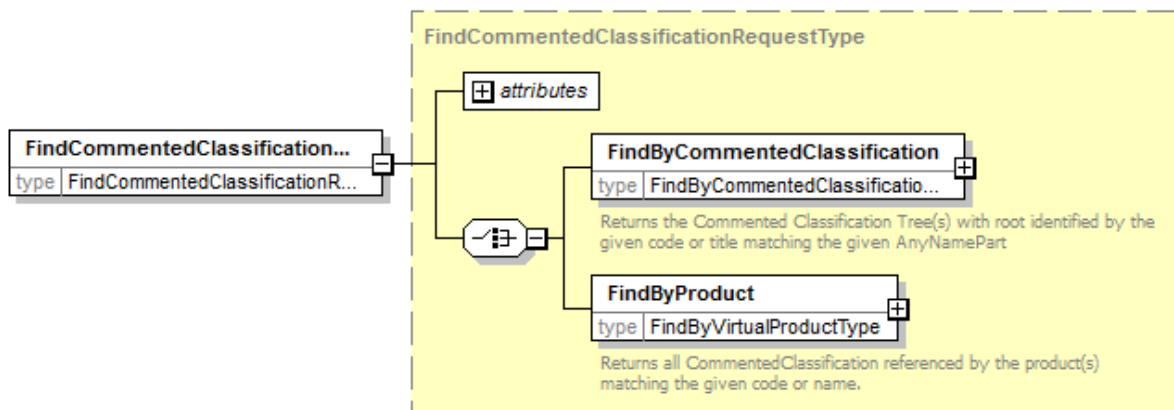
5.3.8.2 Output arguments



5.3.9 FindCommentedClassification

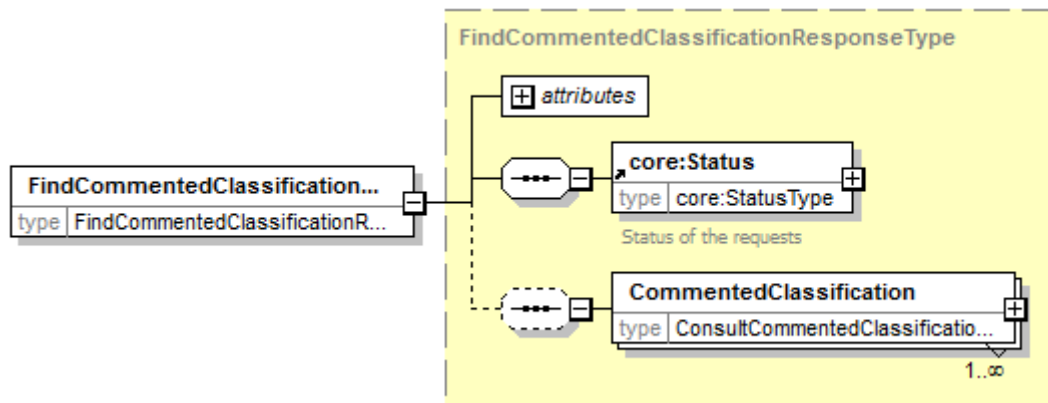
Since Dics v3

5.3.9.1 Input arguments



Field name	Description
FindByCommentedClassification	Returns the Commented Classification Tree(s) with root identified by the given code or title matching the given AnyNamePart
FindByProduct	Returns all CommentedClassification referenced by the product(s) matching the given code or name.

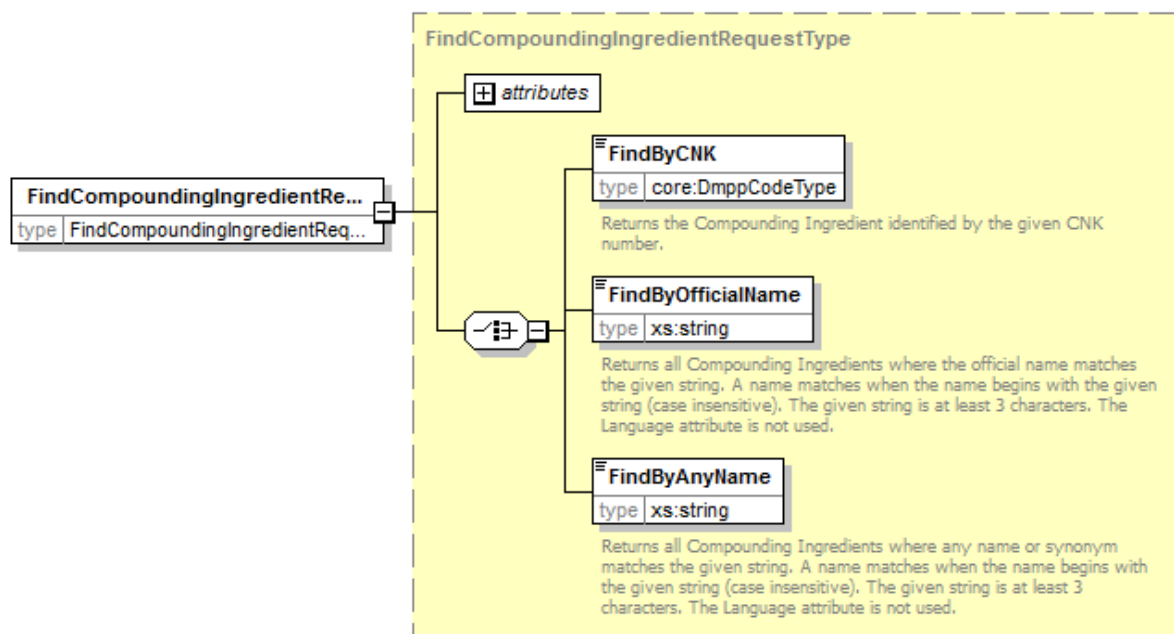
5.3.9.2 Output arguments



5.3.10 FindCompoundingIngredient

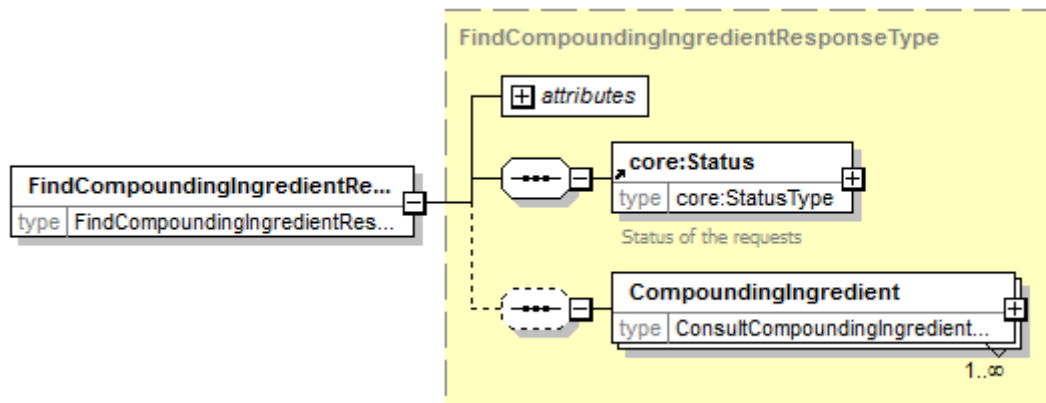
Since Dics v3

5.3.10.1 Input arguments



Field name	Description
FindByCNK	Returns the Compounding Ingredient identified by the given CNK number.
FindByOfficialName	Unused – Notion of official name no longer exists in Compounding. Returns the same result as FindByAnyName
FindByAnyName	Returns all Compounding Ingredients where any name or synonym matches the given string. A name matches when the name begins with the given string (case insensitive). The given string is at least 3 characters. The Language attribute is not used.

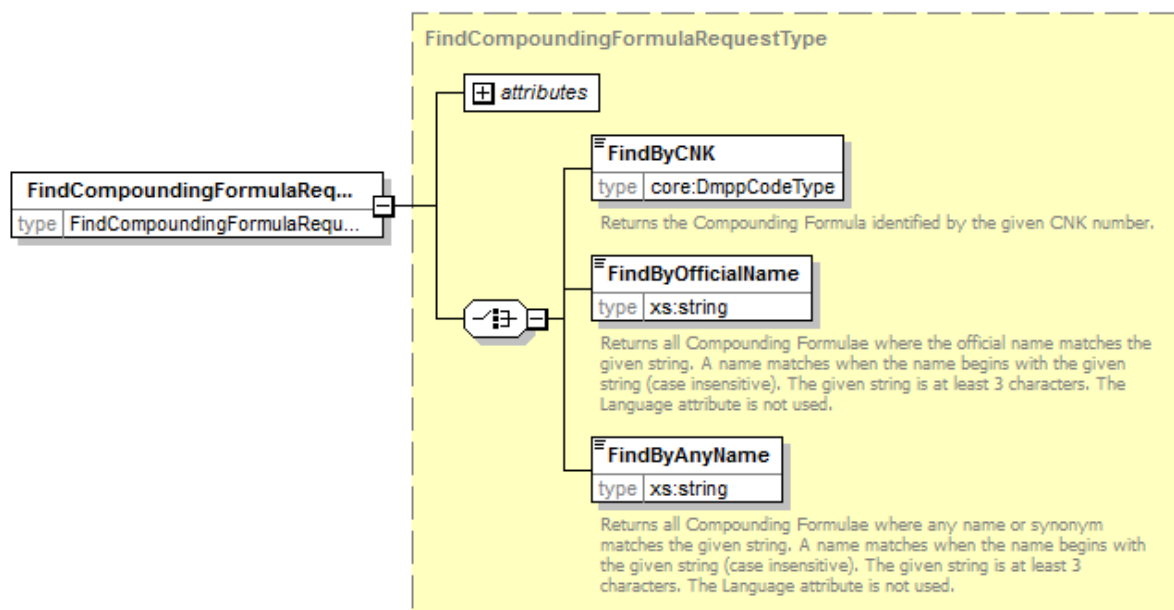
5.3.10.2 Output arguments



5.3.11 FindCompoundingFormula

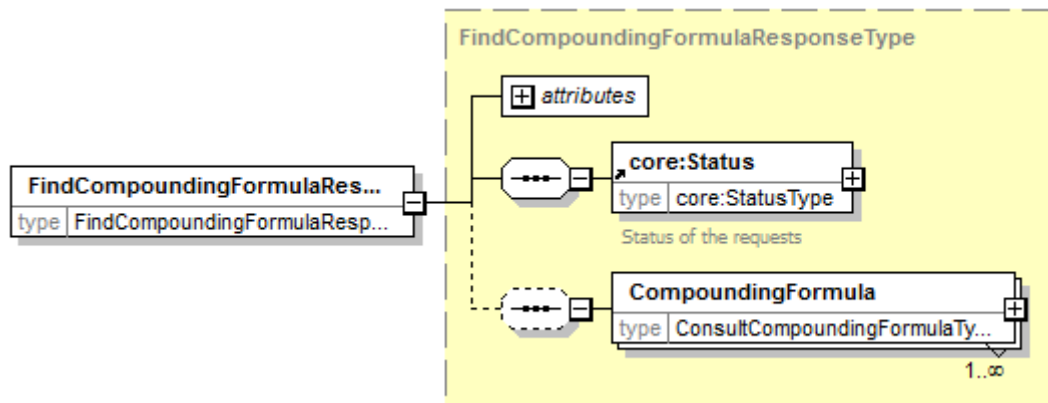
Since Dics v3

5.3.11.1 Input arguments



Field name	Description
FindByCNK	Returns the Compounding Formula identified by the given CNK number.
FindByOfficialName	Unused – Notion of official name no longer exists in Compounding. Returns the same result as FindByAnyName
FindByAnyName	Returns all Compounding Formulae where any name or synonym matches the given string. A name matches when the name begins with the given string (case insensitive). The given string is at least 3 characters. The Language attribute is not used.

5.3.11.2 Output arguments



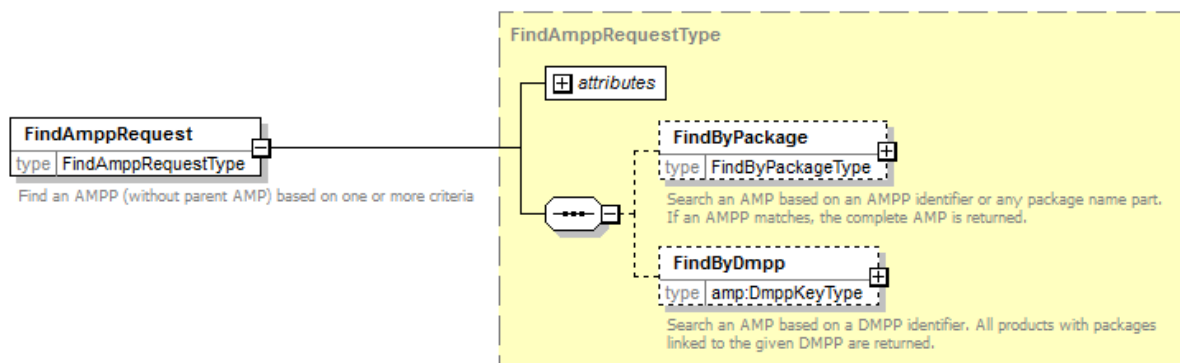
5.3.12 FindAmp

Since Dics v4

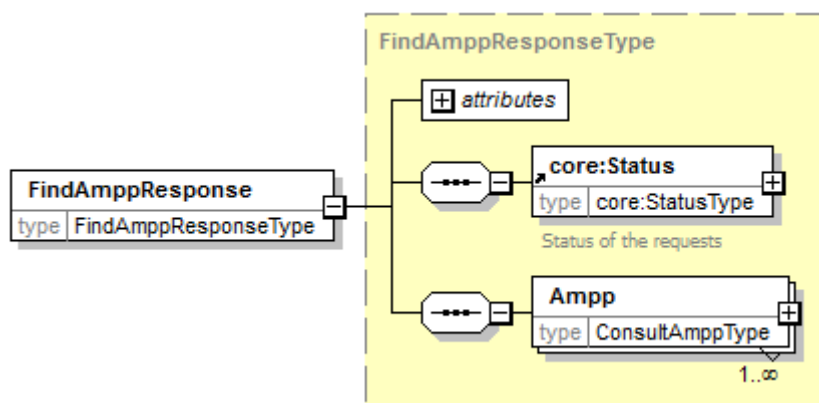
Consultation method for retrieving a single package instead of a full Product with possibly a multitude of packages.

Interface provided in Dics but currently unimplemented.

5.3.12.1 Input arguments



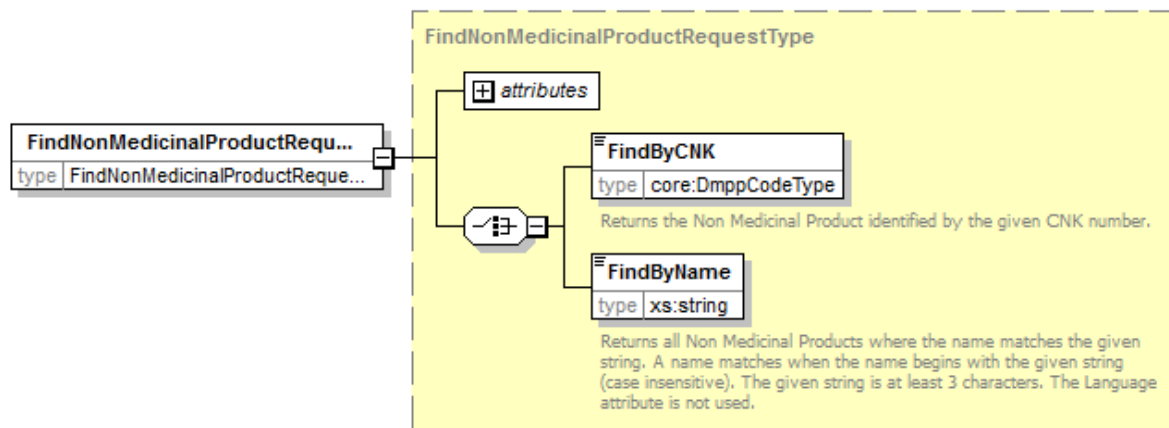
5.3.12.2 Output arguments



5.3.13 FindNonMedicinalProduct

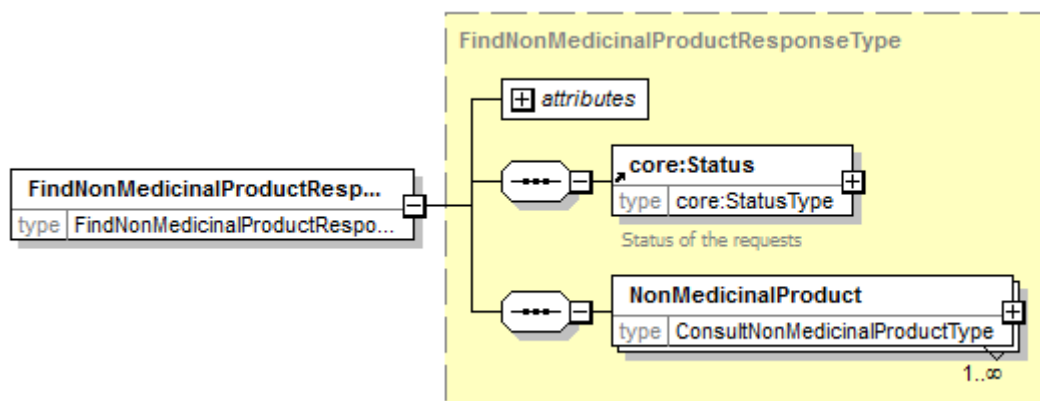
Since Dics v4

5.3.13.1 Input arguments



Field name	Description
FindByCNK	Returns the Non-Medicinal Product identified by the given CNK number.
FindByName	Returns all Non-Medicinal Products where the name matches the given string. A name matches when the name begins with the given string (case insensitive). The given string is at least 3 characters. The Language attribute is not used.

5.3.13.2 Output arguments



5.3.14 FindListOfAmp

Since Dics v5:

Using the same criteria as `FindAmp`, returns a list of Amp with only the AMP Name and Code. Because this operation does not have to build a complete AMP tree for possibly many responses, the service should respond much faster. The `FindAmp` operation can then be used to retrieve the full information for a selected AMP.

5.3.15 ValidateSamId

Since Dics v5



To prove the consultation of SAM, prescribers add a unique code to the prescription header. This code contains the SAM consultation date and the type of consultation (Web Service, Export). The Validate Sam Id operation can be used to decode the unique code, and to validate the prescription.

5.3.16 ValidateProductId

Since Dics v5:

To prove the consultation of SAM, prescribers add a unique code to the prescribed product. This code contains the SAM consultation date and the code of the prescribed product. The Validate Product Id operation can be used to decode the unique code, and to validate the prescription.

5.4 Request Types

Each request in DICS requires one or more search criteria. When multiple search criteria (FindBy* elements) are specified, the result is the intersection of the result sets of all criteria.

Some operations also provide Has*With search criteria. These function in the same way, that is, the result is still the intersection of the different result sets. However, a Has*With criterion can only be used in combination with at least one FindBy criterion. They can only be used to filter a result set further down.

For a full description of the different FindBy* types, please refer to the Dics v5 generated API documentation.

5.5 Response Types

Response types are fully documented in the XSD. For a human readable description of the elements in SAM, please refer to:

- 1) The Dics v5 generated API documentation. This documentation is generated directly from the XSD and contains all elements in a visual representation.
- 2) The SAM Platform Independent Data Model (PIM). This describes all data fields and relations in SAM, but one level of abstraction away from the actual XML representation.



6. Risks and security

6.1 Risks & safety

6.2 Security

6.2.1 Business security

In case the development adds an additional use case based on an existing integration, the eHealth platform must be informed at least one month in advance with a detailed estimate of the expected load. This will ensure an effective capacity management.

In case of technical issues on the WS, the partner may obtain support from the contact center (see Chap 3)

In case the eHealth platform finds a bug or vulnerability in its software, we advise the partner to update his application with the newest version of the software within 10 business days.

In case the partner finds a bug or vulnerability in the software or web service that the eHealth platform delivered, he is obliged to contact and inform us immediately. He is not allowed to publish this bug or vulnerability in any case.

6.2.2 Web service

WS security used in this manner is in accordance with the common standards. Your call will provide:

- SSL one way
- Time-to-live of the message: one minute.
- Signature of the timestamp, body and binary security token. This will allow the eHealth platform to verify the integrity of the message and the identity of the message author.
- No encryption on the message.

6.2.3 The use of username, password and token

The username, password and token are strictly personal. Partners and clients are not allowed to transfer them. Every user takes care of his username, password and token and he is forced to confidentiality of it. Moreover, every user is responsible of every use, which includes the use by a third party, until the inactivation.



7. Test and release procedure

7.1 Procedure

This chapter explains the procedures for testing and releasing an application in acceptance or production.

7.1.1 Initiation

If you intend to use the eHealth platform service, please contact info@ehealth.fgov.be. The project department will provide you with the necessary information and mandatory documents.

7.1.2 Development and test procedure

You have to develop a client in order to connect to our WS. Most of the required integration info to integrate is published on the portal of the eHealth platform.

Upon request, the eHealth platform can provide you with test cases in order for you to test your client before releasing it in the acceptance environment.

7.1.3 Release procedure

When development tests are successful, you can request to access the acceptance environment of the eHealth platform. From this moment, you start the integration and acceptance tests. The eHealth platform suggests testing during minimum one month.

After successful acceptance tests, the partner sends his test results and performance results with a sample of “eHealth request” and “eHealth answer” by email to his point of contact at the eHealth platform.

Then the eHealth platform and the partner agree on a release date. The eHealth platform prepares the connection to the production environment and provides the partner with the necessary information. During the release day, the partner provides the eHealth platform with feedback on the test and performance tests.

For further information and instructions, please contact: integration-support@ehealth.fgov.be.

7.1.4 Operational follow-up

Once in production, the partner using the eHealth platform service for one of his applications will always test first in the acceptance environment before releasing any adaptations of its application in production. In addition, he will inform the eHealth platform on the progress and test period.

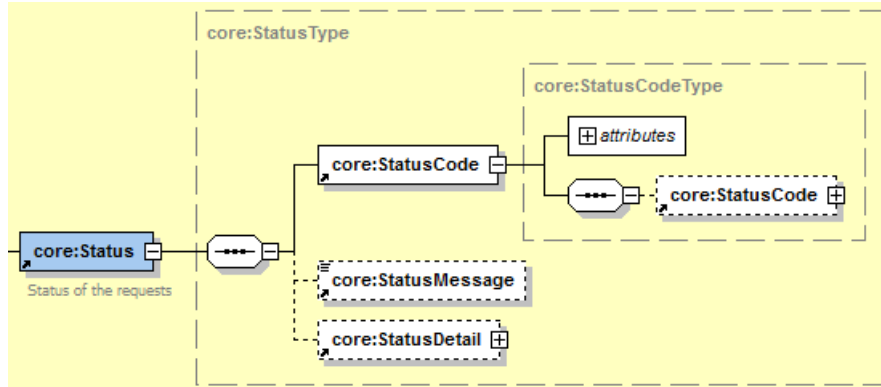
7.2 Test cases

No specific test cases have been defined. The test environments contain the same real medicine as the production environment: you can query the database with any existing (approved) medicinal product.

8. Error and failure messages

8.1 Business errors

Business errors are forwarded and mapped to eHealth standard response status.



Status codes can be the following:

Status code (lvl 1)	Status code (lvl 2)	Description
urn:be:fgov:ehealth:2.0:status:Success	urn:be:fgov:ehealth:2.0:status:DataNotFound	No data found
urn:be:fgov:ehealth:2.0:status:Requester	urn:be:fgov:ehealth:2.0:status:InvalidInput	Invalid input

Status details come from the SAM v2 services and are displayed as *Anomaly* elements:

AnomalyType

Field name	Required	Description
Code	Yes	(String) SAMv2 Error code.
Description	Yes	Textual description of the error.
TargetObject	Yes	Element of the request's structure where the error is reported.
TargetReference	Yes	Value or element name that can be used to identify on which element the error is reported.

List of codes:

Code	Value
1001	CONSULT_LANG_INCORRECT
1002	CONSULT_AMP_NO_VMP_FOUND
1003	CONSULT_AMP_NO_AMP_FOUND
1004	CONSULT_CPN_NO_CPN_FOUND
1005	CONSULT_VMP_NO_VMP_FOUND
1006	CONSULT_VMP_NO_VMP_GROUP_FOUND

1007	CONSULT_RML_NO_LGT_FOUND
1008	CONSULT_RMB_NO_RMB_FOUND
1009	CONSULT_AMP_REQUIRED_FIND_BY
1010	CONSULT_NO_SEARCH_CRITERIA
1011	CONSULT_VMP_NO_VTM_FOUND
1012	CONSULT_VMP_NO_COM_CLS_FOUND
1013	CONSULT_CMP_NO_INGREDIENT_FOUND
1014	CONSULT_CMP_NO_FORMULA_FOUND
1015	CONSULT_NONMEDICINAL_NO_PRODUCTS_FOUND

Example of a *no data found* business error:

```
<urn:FindCompanyResponse Id="_8671c80f-b769-49d7-856c-b51f54a281e8" IssueInstant="2016-07-28T15:39:35.764+02:00"
InResponseTo="baf225192-1ca1-4402-bd33-9ebb3d978f19" SearchDate="2016-06-27"
xmlns:urn="urn:be:fgov:health:dics:protocol:v2">
  <commonscore:Status xmlns:commonscore="urn:be:fgov:health:commons:core:v2"
xmlns:healthns="urn:be:fgov:health:dics:protocol:v2">
    <commonscore:StatusCode Value="urn:be:fgov:health:2.0:status:Success">
      <commonscore:StatusCode Value="urn:be:fgov:health:2.0:status:DataNotFound"/>
    </commonscore:StatusCode>
    <commonscore:StatusDetail>
      <healthns:Anomaly>
        <Code>1004</Code>
        <Description>No company found for given criteria.</Description>
        <TargetObject>Consult Company</TargetObject>
        <TargetReference>Consult Company</TargetReference>
      </healthns:Anomaly>
    </commonscore:StatusDetail>
  </commonscore:Status>
</urn:FindCompanyResponse>
```

8.2 Technical errors

Technical errors are errors inherent to the internal working of a web service. They are returned as SOAP Faults. The eHealth platform may be contacted in case of a technical error.

Description of the possible SOAP fault exceptions

Error code	Component	Description	Solution/Explanation
SOA-00001	?	Service error	This is the default error sent to the consumer in case no more details are known.
SOA-01001	Consumer	Service call not authenticated	From the security information provided, <ul style="list-style-type: none"> • or the consumer could not be identified • or the credentials provided are not correct
SOA-01002	Consumer	Service call not authorized	<ul style="list-style-type: none"> • The consumer is identified and authenticated, • but is not allowed to call the given service.



SOA-02001	Provider	Service not available. Please contact service desk	An unexpected error has occurred <ul style="list-style-type: none"> • Retries will not work • Service desk may help with root cause analysis
SOA-02002	Provider	Service temporarily not available. Please try later	An unexpected error has occurred <ul style="list-style-type: none"> • Retries should work • If the problem persists service desk may help
SOA-03001	Consumer	Malformed message	This is default error for content related errors in case no more details are known.
SOA-03002	Consumer	Message must be SOAP	Message does not respect the SOAP standard
SOA-03003	Consumer	Message must contain SOAP body	Message respects the SOAP standard, but body is missing
SOA-03004	Consumer	WS-I compliance failure	Message does not respect the WS-I standard
SOA-03005	Consumer	WSDL compliance failure	Message is not compliant with WSDL in Registry/Repository
SOA-03006	Consumer	XSD compliance failure	Message is not compliant with XSD in Registry/Repository
SOA-03007	Consumer	Message content validation failure	From the message content (conform XSD): <ul style="list-style-type: none"> • Extended checks on the element format failed • Cross-checks between fields failed