Information technology Development KLIC



KLIC-WIN Utility Network Operator API

Version

0.2

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Client

Status

Concept

Distribution

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Revision history

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1 Introduction

This is a one-time only translation of the "Netbeheerder API v1.1 document in Dutch". New versions of the API will only be published in Dutch.

1.1 Context

For orienting, planning and conducting excavation work in a particular area excavators need information about the nature and location of subterranean cables and pipes.

This information is available at de-central Utility Network Operators or in a centralized cables and pipes registry. The system KLIC provides centralized access to this information.

Excavators send a map request to the KLIC system by drawing an area of interest on a map. The KLIC system collects the cable and pipe information from the de-central network operators and combines this information with the information available in the central registry for cables and pipes and makes this information available to the map requester.

For the aggregation of information from different parties a common conceptual framework is required. The Information Model Cables and Pipes (IMKL) describes how cable and pipe information can be exchanged unambiguously.

The Web API that is presented in this document, describes the communication between network operators and the KLIC system with the exception of the delivery of data for the central registry.

The purpose of this Web API is to be an extensible, reliable and easy to use interface for all parties involved. APIs can be easily integrated in B2B (business-to-business) or mobile applications. The KLIC Web API is written in Dutch.

1.2 Scope

INSPIRE.

This document describes the Web API for central and de-central Utility Network Operators. The API is the exchange of information on the area information requests and the exchange of network information. This document does not describe the delivery of information to the central cable and pipe registry by central network operators nor does it describe the exchange of information for users in the context of KLIC or

This document provides a technical description of the Web API, but does not contain any procedural arrangements such as statutory time limits.

1.3 Summary

Chapter 2 describes the outline of this API, gives an overview of the available REST methods, the objects exchanged, and describes the method used to secure the services.

Chapters 3 and 4 describe the available REST methods for "map request" and "network operator information" in more detail.

Chapter 5 provides an overview of the code lists used in the API



1.4 References

Number	Title
1	IMKL 2015 (https://register.geostandaarden.nl/imkl2015/index.html)
2	AGIV - KLIP Web API documentation - Utility Network Authority (https://klip.agiv.be/api/una)
3	Launching of a national strategy for Linked Data URI from the Dutch government –
	(http://www.pilod.nl/wiki/Boek/URI-strategie)
4	Wikipedia description of a Web API (http://en.wikipedia.org/wiki/Web_API)

1.5 Technical glossary

Term	Definition
API	Application Programming Interface
BAG	Addresses and Buildings Key Register
BGT	Large-scale Topography Key Register
BMKL	Messaging model for the exchange of information about Cables an Pipes
GML	Geography Markup Language
IMKL	Information model for the exchange of information about Cables an Pipes
INSPIRE	Infrastructure for Spatial Information in the European Community
INSPIRE US	INSPIRE Utility Services
KLIC	Cables an Pipes Information Center
NAP	Amsterdam Ordnance Datum
OIN	Organization Identification Number, used in PKI-Overheid
PKI-O	Dutch Government Public Key Infrastructure
PMKL	Presentation model for the exchange of information about Cables an Pipes
REST	Representational state transfer
UML	Unified Modeling Language
URI	Uniform Resource Identifier
URL	Uniform Resource Locator
XML	eXtensible Markup Language



2 KLIC-WIN Utility Network Operator API

The description of the Web API consists of the following main parts: a description of the communication between a Utility Network Operator and KLIC (section 2.2), a definition of the information exchanged (section 2.3) and the method used to secure the information exchange (section 2.6).

The Web API specification for the KLIC Web API is based on REST. The reason for this is that this web service style is simple, efficient, widely used and compatible with many different platforms.

2.1 Outline

The objects that can be exchanged between Utility Network Operators and the KLIC system are the objects 'Map request' (GebiedsInformatieAanvraag), 'Utility Network Operator information' (BeheerdersInformatie) and 'Network information' (netinformatie).

Because some Utility Network Operators use a Service Provider to exchange information with the KLIC system the API provides additional functionality to facilitate this. When a services provider accesses the API on behalf of a network operator, the Service Provider is required to specify for which network operator the request is made.

2.2 Communication

All communication between Utility Network Operators and or Service Providers and KLIC are independently of each other using the following REST methods.

2.2.1 Map request

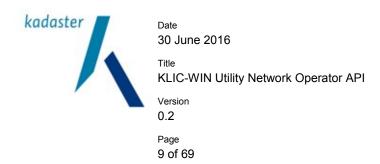
An excavator registers a map request in the KLIC system.

The KLIC system will inform all Utility Network Operators and or Service Providers, that have registered an interest (belang) in the area of the map request, when a new map request is available.

Utility Network Operators and or Service Providers can retrieve their yet to be confirmed map requests, and register them in their own system for processing. They can acknowledge unconfirmed map requests to inform the KLIC system. Confirmed map requests will no longer be visible when searching for unconfirmed map requests.

In the high-level sequence-diagram below, the data exchange between the KLIC-system and the Utility Network Operator and or service provide is modeled. In particular:

- {id} identification of the map request
- {bc} identification (bronhoudercode) of the Utility Network Operator (in case a Service Provider exchanges information on behalf of a Utility Network Operator)



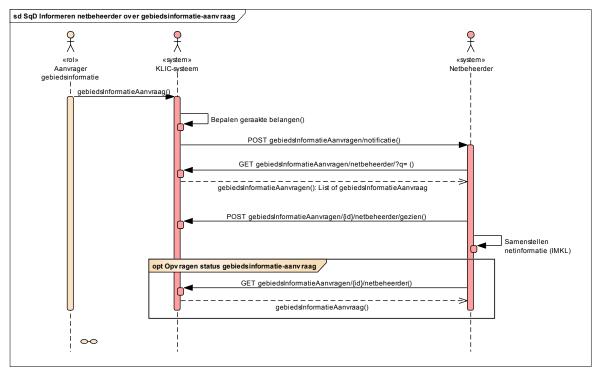


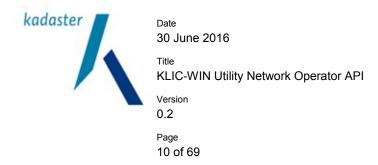
Figure 1: Map Requests

Map request:

Resource	GET	PUT	POST	DELETE
/gebiedsInformatieAanvragen/netbeheerder	get list of map	Х	х	х
/gebiedsInformatieAanvragen/{id}/netbeheerder	get map request with id {id}	Х	Х	Х
/gebiedsInformatieAanvragen/{id}/netbeheerder/{bc}	get map request with id {id} for utility network operator with id {bc}	×	х	х
/gebiedsInformatieAanvragen/{id}/netbeheerder/gezien	X	Х	post confirmation of map request with id {id}	Х
/gebiedsInformatieAanvragen/{id}/netbeheerder/{bc}/gez ien	х	Х	post confirmation of map request with id {id} for utility network operator with id {bc}	X

2.2.2 Utility Network Operator information

A de-central Utility Network Operator/Service Provider must reply each map request within 24 hours with detailed network information. The KLIC system checks the supplied network information within 1 hour and



records the status and any validation messages in the Utility Network Operator information. The Utility Network Operator/Service Provider can retrieve the validation status and the validation messages using the API. In case the network information is invalid, the Utility Network Operator/Service Provider will additionally receive an error message by e-mail about the rejection of this delivery.

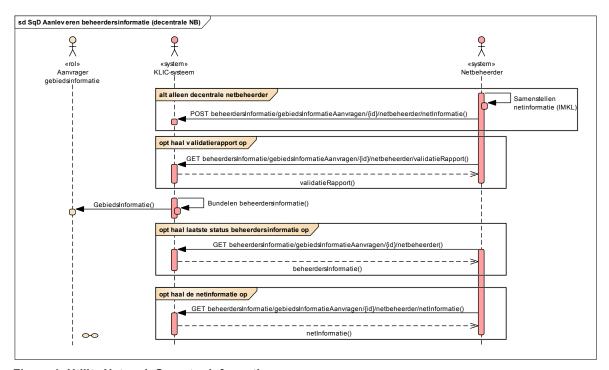


Figure 1: Utility Network Operator information

A central Utility Network Operator/Service Provider has already provided his utility network information beforehand so KLIC will respond on behalf of the central Utility Network Operator with the requested information within 24 hours.

Using the API all Utility Network Operators/Service Providers have access for a period of 20 working days to Map Requests they are involved in, related Utility network Operator information and their own network information

Each Utility Network Operator/Service Provider is solely responsible for safe keeping this information in the context of the public records Act.

kadaster_{Date} 30 June 2016

Utility Network Operator information:

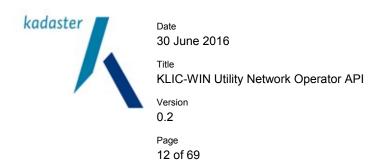
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Resource	GET	PUT	POST	DELETE
/beheerdersInformatie/gebiedsInformatieAanvragen/{id}/netbeheerder	get Utility Network Operator	Х	X	Х
	information related to map request			
	{id}			
/beheerdersInformatie/gebiedsInformatieAanvragen/{id}/netbeheerder/{bc}	get Utility Network Operator	Х	X	Х
	information related to map request			
	{id} for Utility Network Operator {bc}			
/beheerdersInformatie/gebiedsInformatieAanvragen/{id}/netbeheerder/netInformatie	get network information related to	Х	post network information	Х
	map request {id}		related to map request {id}	
/beheerdersInformatie/gebiedsInformatieAanvragen/{id}/netbeheerder/{bc}/netInformatie	get network information related to	Х	post network information	Х
	map request {id} for Utility Network		related to map request {id} for	
	Operator {bc}		Utility Network Operator {bc}	



2.2.3 Technical

The communication is synchronous, which means that request and response occur within the same session. The processing of a POST request occurs asynchronously.

The communication uses the default HTTP protocol where POST and GET methods are used to send or retrieve KLIC objects, respectively.

Information is exchanged using the JSON format.

A non-supported format in the Accept header results in a HTTP status code 406; Not Acceptable

GET request example:

GET http://petstore-api.herokuapp.com/pet/?limit=11 HTTP/1.1

Host: petstore-api.herokuapp.com

Accept: application/json

Accept-Encoding: gzip,deflate,sdch

Accept-Language: en-US,en;q=0.8,fa;q=0.6,sv;q=0.4

Cache-Control: no-cache
Connection: keep-alive
Origin: http://editor.swagger.io
Referer: http://editor.swagger.io/

User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:43.0) Gecko/20100101 Firefox/43.0

POST request example:

POST http://petstore-api.herokuapp.com/pet/ HTTP/1.1

Host: petstore-api.herokuapp.com

Accept: application/json

Accept-Encoding: gzip,deflate,sdch

Accept-Language: en-US,en;q=0.8,fa;q=0.6,sv;q=0.4

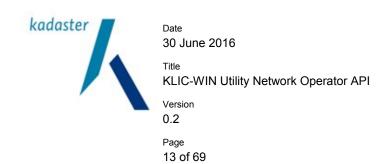
Cache-Control: no-cache Connection: keep-alive Origin: http://editor.swagger.io Referer: http://editor.swagger.io/

User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:43.0) Gecko/20100101 Firefox/43.0

Content-Length: 39

```
Content-Type: application/json {
```

```
"name": "ape",
"birthday": 1972
```



To upload files using a REST API HTTP POST method, the information is transmitted in multiple parts using (RFC2048) multipart MIME encoded Form-data (see RFC2388: Returning values from Forms: multipart/form-data).

In the annex is a code example showing how to create a Multipart/Form-data post..

2.3 Message definitions

In the KLIC process (see Figure 1) there are two information objects: the map request and the Utility Network Operators information. The following sections describe these objects.

For each attribute the following information is provided:

- data type
- indication whether the attribute is required (R), conditional (C) or optional (O)
- description.

2.3.1 Parameters map request

Attribute	Туре	R/C/O	Description
aanvraagld	UUID	R	Unique identification of the map request
ordernummer	String	R	The sales order number of the map request.
klicMeldnummer	String	R	The KLIC request number, as YYTNNNNNNNN, where: YY the last two digits of the year of the map request T the first letter of the map request type in Dutch NNNNNNNN a sequential number within the map request year and the map request type
bronhoudercode	String	R	The id of the Utility Network Operator where the map request is intended for
aanvrager		R	Information about the map request initiator
bedrijfsNaam	String	R	Company name of the map request initiator
naam	String	R	Name of the map request initiator



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Attribute	Туре	R/C/O	Description
kvkNummer	String	0	Chamber of Commerce registration
			number of the map request
			initiator.
bezoekAdres		С	
openbareRuimteNaam	String	С	Street name of the Office address
			of the map request initiator.
			Mandatory if no mailbox is
			specified
huisnummer	String	С	House number of the Office
			address of the map request
			initiator.
			Mandatory if no mailbox is
			specified.
huisletter	String	С	House letter of the Office address
			of the map request initiator.
			Mandatory if no mailbox is
			specified.
huisnummertoevoeging	String	С	House number addition of the
			Office address of the map request
			initiator.
			Mandatory if no mailbox is
			specified.
postcode	String	С	Postcode of the Office address of
			the map request initiator.
woonplaatsNaam	String	С	City of the Office address of the
			map request initiator.
landcode	String	0	Country code of the Office address
			of the map request initiator. (see
			code list)
identificatieBAG	String	0	Unique identification of the Office
			address in BAG
postbusAdres		С	
postbusnummer	String	С	Mailbox number of the mailbox
			address of the map request
			initiator.
			Mandatory if no street name and
			house number are specified.
postcode	String	С	Postcode of the mailbox address of
			the map request initiator.



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Attribute	Туре	R/C/O	Description
landcode	String	0	Country code of the mailbox address of the map request initiator. (see code list)
telefoon	String	С	Phone number of the map request initiator. Mandatory if no mobile number is specified.
mobiel	String	С	Mobile number of the map request initiator. Mandatory if no phone number is specified.
fax	String	0	Fax number of the map request initiator.
email	String	R	Email address of the map request initiator.
referentie	String	0	Map request initiator reference.
opdrachtgever	String	0	
bedrijfsNaam	String	R	Company name of the client of the map request initiator.
naam	String	R	Name of the client of the map request initiator.
kvkNummer	String	0	Chamber of Commerce registration number of the client of the map request initiator.
bezoekAdres	String	R	
openbareRuimteNaam	String	С	Street name of the Office address of the client of the map request initiator. Mandatory if no mailbox is specified
huisnummer	String	С	House number of the Office address of the client of the map request initiator. Mandatory if no mailbox is specified.
huisletter	String	С	House letter of the Office address of the client of the map request initiator. Mandatory if no mailbox is specified.



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Attribute	Туре	R/C/O	Description
huisnummertoevoeging	String	С	House number addition of the Office address of the client of the
			map request initiator.
			Mandatory if no mailbox is
			specified.
postcode	String	С	Postcode of the Office address of the client of the map request initiator.
woonplaatsNaam	String	С	City of the Office address of the client of the map request initiator.
landcode	String	0	Country code of the Office address of the client of the map request initiator. (see code list)
identificatieBAG	String	0	Unique identification of the Office address in BAG
postbusAdres		С	
postbusnummer	String	С	Mailbox number of the mailbox address of the client of the map request initiator. Mandatory if no street name and house number are specified.
postcode	String	С	Postcode of the mailbox address of the client of the map request initiator.
landcode	String	0	Country code of the mailbox address of the client of the map request initiator. (see code list)
telefoon	String	С	Phone number of the client of the map request initiator. Mandatory if no mobile number is specified.
mobiel	String	С	Mobile number of the client of the map request initiator. Mandatory if no phone number is specified.
email	String	R	Email address of the client of the map request initiator.
fax	String	0	Fax number of the client of the map request initiator.
aanvraagSoort	URI	R	Map request type (see code list).



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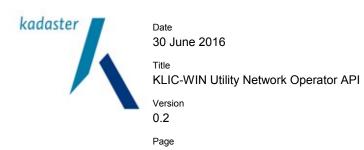
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Attribute	Туре	R/C/O	Description
aanvraagDatum	Datumtijd	С	The date time the map request has been received.
giAanvraagStatus	URI	С	The status of the map request (see code list).
soortWerkzaamheden	List of URIs	С	Kind of excavation work (see code list).
omschrijvingWerkzaamheden	String	0	Description of the excavation work.
locatieWerkzaamheden	String	R	Location of the excavation work. (For example the nearest address)
verzoekCoordinatieCivieleWerken	Boolean	0	Request for coordination of civil works in the context of EC61
verzoekMedegebruikFysiekeInfrastructuur	Boolean	0	Request for shared use of physical infrastructure in the context of EC61
startDatum	Datum	С	The planed start date of the excavation work. Only required in the case "aanvraagSoort" = "graafmelding".
eindDatum	Datum	С	The planned end date of the excavation work. Only required in the case "aanvraagSoort" = "graafmelding".
graafGebied	Geometrie	R	The area (polygon) of the excavation work
informatieGebied	Geometrie	0	The area (polygon) over which additional utility network information is requested.
huisaansluitingAdressen	List of huisaansluitingAdressen	0	List of addresses where house connection diagrams are requested for.



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2.3.1.1 HuisaansluitingAdres

Attribute	Туре	R/C/O	Description
openbareRuimteNaam	String	С	Street name of the house connection address.
			When available in BAG
huisnummer	String	С	House number of the House connection address.
			When available in BAG.
huisletter	String	С	House letter of the House connection address.
			When available in BAG.
huisnummertoevoeging	String	С	House number addition of the House connection address.
			When available in BAG
postcode	String	С	Postcode of the House connection address.
			When available in BAG.
woonplaatsNaam	String	С	City of the House connection address.
			When available in BAG.
identificatieBAG	String	R	Unique identification of the House connection address in BAG

A house connection address will always contain the information available in associated BAG object.

2.3.2 Parameters Utility Network Operator information

Attribute	Туре	R/C/O	Description
giAanvraagId	UUID	R	Unique identification of the map request.
biNotificatieStatus	String	С	Status of the Utility Network Operator notification regarding a
			new map request (see code list).
			Only in a response message.
biProductieStatus	String	С	Status of the network information (see code list).
			Only in a response message.
datumGenotificeerd	DateTime	С	The date-time the Utility Network Operator was notified of a
			new map request.
			Only in a response message.
datumBevestigingOntvangen	DateTime	С	The date-time the Utility Network Operator confirmed the map
			request.
			Only in a response message.
datumNetInformatieOntvangen	DateTime	С	The data-time valid utility network information was received
			from a de-central Utility Network Operator or the data-time
			utility network information was retrieved from the central Utility
			Network registry.
netInformatie	URI	С	Link to the utility network information
validatieStappen	List	С	The list of ValidationSteps with their status and type and
			ValidationMessages.



2.3.2.1 ValidationStep

Attribute	Туре	R/C/O	Description
aantalMeldingen	int	С	The number of messages is this validation step.
			Only available when validationStep was executed.
validatieStapMeldingen	List	R	List of validationStepMessages.
validatieStapStatus	URI	R	The status of the validationStep (see code list)
validatieStapAanduiding	URI	R	The designation of the validationStep (see code list)
validatieStapVolgorde	int	R	The execution order of the validationStep

2.3.2.2 ValidationStepMessage

Attribute	Туре	R/C/O	Description
code	String	R	The code of the validationStepMessage
element	String	R	The element in the xml involved
level	URI	R	The severity of the validationStepMessage (see code list)
omschrijving	String	R	The description of the validationStepMessage

2.4 ZIP Attachments

The utility network information is exchanged in a zip file.

The root directory of this zip file contains a utility network information.xml in accordance with the IMKL2015-wion.xsd. The name of this file must end with .xml.

When the utility network information xml refers to pdf files then these pdf files should be in the same zip file in the location based on the given URI.

The required zip format is documented in the Info-ZIP Application Note 970311 (ZIP).

Characters used in file names in the zip file should be in compliance with standard ASCII or utf-8 as described in APPENDIX D of the PKWARE ZIP File Format Specification (<u>TXT</u>) - Language Encoding (EFS).

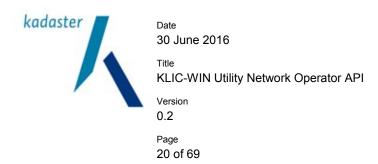
The implementation used by the Kadaster is java.util.zip and is part of Oracle Java.

2.5 Error responses

If possible, an error response will not only contain a http status code, but also a json body with an extended error report.

2.5.1 Error response parameters

Attribute	Туре	R/C/O	Description
status	Nummer	R	http status code.
meldingCode	Nummer	R	Application message code
attribuut	String	С	Attribute concerned
gebruikerMelding	String	R	Message for end-user.
ontwikkelaarMelding	String	R	Message for application developer.
meerInformatie	URI	С	API documentation URI with extra information for
			the developer.



Error response example

application/json, text/json

```
"status": 401,
"meldingCode": 12345,
"gebruikerMelding": "Message for end-user",
"ontwikkelaarMelding": "Message for developer",
"meerInformatie": "http://developer.kadaster.nl/klic/foutCode/12345"
}
```

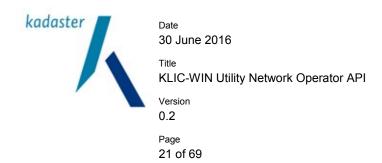
2.6 Security

For security we use Digikoppeling Standard two-sided TLS (https with client certificate) using PKI-Overheid certificates.

The PKI-Overheid certificates used for identification contain an Organization Identification Number (OIN) in the subject serial number. This id uniquely identifies the Utility Network Operator or Service Provider. Authorization is provided based on the OIN.

An identity with the role Utility Network Operator is only authorized to retrieve information specifically intended for him.

A Utility Network Operator or Service Provider is not able to access information intended for other Utility Network Operators using this API.



3 Map Request

3.1 Notify Utility Network Operator with a registered interest zone in the map request area POST

gebiedsInformatieAanvragen/notificatie

This is not part of the API for Utility Network Operators. It is presented here because it is a fundamental part of the communication with the Utility Network Operators. As described in the technical addendum to the WION legislation a map request should be communicated to all involved Utility Network Operators without delay. With this notification KLIC informs the Utility Network Operator that one or more of his interest zones are involved in a map request.

The notification does not contain information.

3.1.1 Response Information

No special action will be taken when the response is not a http 200 status code.

http status

- 200 (OK)

3.2 Search for map requests

GET

klic/v1/ws/gebiedsInformatieAanvragen/netbeheerder/?aanvraagSoort={aanvraagSoort}&bronhoudercode={bronhoudercode}&klicMeldnummer={klicMeldnummer}&datumType={datumType}&aanvragerBedrijfsNaam={aanvragerBedrijfsNaam}&referentie={referentie}&opdrachtgeverBedrijfsNaam}&opdrachtgeverEmail={opdrachtgeverEmail}&datumVanaf}&datumVanaf}&datumTm={datumTm}&soortWerkzaamheden[]={soortWerkzaamheden}&biNotificatieStatus={biNotificatieStatus}&biProductieStatus={biProductieStatus}&biProductieStatus={

Search as Utility Network Operator or Service Provider for map requests.

The result-set is sorted by request date (oldest first).

All Utility network Operators and Service Providers are allowed to perform this request.

Only map requests that intersect with one or more of the Utility Network Operators interest zones will be returned.



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3.2.1 Request Information

Request Parameters

Parameter	Туре	R/C/O	Description
aanvraagSoort	String	0	Map request type (key in code list)
bronhoudercode	String	0	The unique id of the Utility Network Operator where the map
			request is intended for.
			If no bronhoudercode was specified, only map requests, intended
			for a Utility Network Operator the requesting Utility Network
			Operator / Service Provider was authorized by, will be returned.
			Searching for map request intended for a Utility Network Operator
			the requestor in not authorize for will result in an empty list.
klicMeldnummer	String	0	The KLIC request number.
datumType	String	С	The type specified can either be "aanvraagDatum" or
			"graafPeriode",
			In case of "graafPeriode" all map requests with a period, specified
			by startDatum and eindDatum, overlapping the period specified by
			datumVanaf and datumTm wil be returned.
			In case of "aanvraagDatum" all map requests with an
			aanvraagDatum within the period specified by datumVanaf and
			datumTM will be returned.
aanvragerBedrijfsnaam	String	0	Company name of the map request initiator.
referentie	String	0	Map request initiator reference.
opdrachtgeverBedrijfsnaam	String	0	Company name of the client of the map request initiator.
opdrachtgeverEmail	String	0	Email address of the client of the map request initiator.
datumVanaf	DateTime	С	The start date of the period to search for map requests.
			The date format is ISO 8601, for example 2013-07-
			16T19:20:30+01:00.
			If you search for 2013-07-16, this will be interpreted as search for
			2013-07-16T00:00:00Z where 'Z' stands for UTC time zone.
			This parameter can only be used when a valid dateType is
			provided in the search request.
datumTm	DateTime	С	The end date of the period to search for map requests.
			The date format is ISO 8601, for example 2013-07-
			16T19:20:30+01:00.
			If you search for 2013-07-16, this will be interpreted as search for
			2013-07-16T00:00:00Z where 'Z' stands for UTC time zone.
			This parameter can only be used when a valid dateType is
			provided in the search request.
soortWerkzaamheden	String	0	Kind of excavation work (Key in code list)



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Parameter	Туре	R/C/O	Description
biNotificatieStatus	String	0	Status of the Utility Network Operator notification regarding a new
			map request (see code list).
biProductieStatus	String	0	Status of the utility network information (see code list).
offset	String	0	This is where the query begins pulling map requests. For example,
			if you're on page one, the offset will be zero. If you are on any
			other page, the offset will be equal to the number of map requests
			you have already pulled. For example if you are on page two and
			you limit the number of map requests in the response to 10, the
			offset is equal to 10. If you are on page three, the offset is equal to
			20. If you omit the offset parameter, the offset will be 0
limiet	String	0	This is the maximum number of map requests to be returned. If
			you omit the limit parameter, 50 map requests are returned. If you
			specify a limit that exceeds 50, HTTP status code 400 (Bad
			Request) is returned.

Request example

GET https://service30.kadaster.nl/klic/v1/ws/gebiedsInformatieAanvragen/netbeheerder/?biNotificatieStatus=open HTTP/1.1

Host: service30.kadaster.nl **Accept**: application/json

Accept-Encoding: gzip,deflate,sdch

Accept-Language: nl-NL,en;q=0.8,fa;q=0.6,sv;q=0.4

Cache-Control: no-cache
Connection: keep-alive
Origin: http://editor.swagger.io
Referer: http://editor.swagger.io/

User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:43.0) Gecko/20100101 Firefox/43.0

3.2.2 Response information

The response will be a list of map requests.

Response Parameters

Parameter	Туре	Description
gebiedsInformatieAanvragen	List of map	As a result of the map request query, a list of map requests is
	requests	returned.

Response example

application/json, text/json



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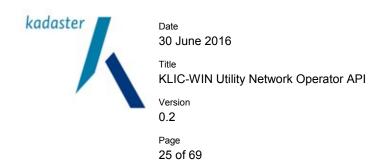
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```
"aanvraagId": "5c25ee09-a2f4-4b94-a2a4-03b2617aaf9f",
         "aanvrager": {
            "bedrijfsNaam": "sample string",
            "kvkNummer": "sample string",
            "naam": "sample string",
            "postbusAdres": {
               "postbusnummer": "sample string",
               "postcode": "sample string"
            "mobiel": "06-12345678",
            "email": "mail@mail.nl"
         },
         "referentie": "sample string",
         "aanvraagDatum": "2015-06-16T08:47:58.85+01:00",
         "ordernummer": "sample string",
         "klicMeldnummer": "sample string",
         "bronhoudercode": "sample string",
         "giAanvraagStatus": "https://api.kadaster.nl/klic/v1/cl/giAanvraagStatus/open"
   },
   {
      "gebiedsInformatieAanvraag": {
         "aanvraagId": "cea8546d-fea9-48f7-9915-e382b0f22670",
]
```

http status

- 200 OK
- 401 Unauthorized: Requester is not identified
- 403 Forbidden: Requester has no permission to execute the request
- 404 Not Found: No information found



3.3 Get map request by id

GET klic/v1/ws/gebiedsInformatieAanvragen/{giAanvraagId}/netbeheerder

Get as Utility network Operator a map request by map request id.

Only Utility network Operators are allowed to perform this request.

A Utility Network Operator can only request information about map requests in case he is involved.

3.3.1 Request information

Request Parameters

Parameter	Туре	Description
giAanvraagId	UUID	Identification of the map request

Request example

GET https://service30.kadaster.nl/klic/v1/ws/gebiedsInformatieAanvragen/5c25ee09-a2f4-4b94-a2a4-03b2617aaf9f/netbeheerder HTTP/1.1

Host: service30.kadaster.nl **Accept**: application/json

Accept-Encoding: gzip,deflate,sdch

Accept-Language: nl-NL,en;q=0.8,fa;q=0.6,sv;q=0.4

Cache-Control: no-cache
Connection: keep-alive
Origin: http://editor.swagger.io
Referer: http://editor.swagger.io/

User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:43.0) Gecko/20100101 Firefox/43.0

3.3.2 Response information

Response Parameters

Attribute	Туре	R/C/O	Description
aanvraagld	UUID	R	Unique identification of the map
			request
ordernummer	String	R	The sales order number of the map
			request.



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Attribute	Туре	R/C/O	Description
klicMeldnummer	String	R	The KLIC request number, as YYTNNNNNNNN, where: YY the last two digits of the year of the map request T the first letter of the map request type in Dutch NNNNNNNN a sequential number within the map request year and the map request type
bronhoudercode	String	R	The id of the Utility Network Operator where the map request is intended for
aanvrager		R	Information about the map request initiator
bedrijfsNaam	String	R	Company name of the map request initiator
naam	String	R	Name of the map request initiator
kvkNummer	String	0	Chamber of Commerce registration number of the map request initiator.
bezoekAdres		С	
openbareRuimteNaam	String	С	Street name of the Office address of the map request initiator. Mandatory if no mailbox is specified
huisnummer	String	С	House number of the Office address of the map request initiator. Mandatory if no mailbox is specified.
huisletter	String	С	House letter of the Office address of the map request initiator. Mandatory if no mailbox is specified.



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Attribute	Туре	R/C/O	Description
huisnummertoevoeging	String	С	House number addition of the Office address of the map request initiator. Mandatory if no mailbox is specified.
postcode	String	С	Postcode of the Office address of the map request initiator.
woonplaatsNaam	String	С	City of the Office address of the map request initiator.
landcode	String	0	Country code of the Office address of the map request initiator. (see code list)
identificatieBAG	String	0	Unique identification of the Office address in BAG
postbusAdres		С	
postbusnummer	String	С	Mailbox number of the mailbox address of the map request initiator. Mandatory if no street name and house number are specified.
postcode	String	С	Postcode of the mailbox address of the map request initiator.
landcode	String	0	Country code of the mailbox address of the map request initiator. (see code list)
telefoon	String	С	Phone number of the map request initiator. Mandatory if no mobile number is specified.
mobiel	String	С	Mobile number of the map request initiator. Mandatory if no phone number is specified.
fax	String	0	Fax number of the map request initiator.
email	String	R	Email address of the map request initiator.
referentie	String	0	Map request initiator reference.
opdrachtgever	String	0	



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Attribute	Туре	R/C/O	Description
bedrijfsNaam	String	R	Company name of the client of the map request initiator.
naam	String	R	Name of the client of the map request initiator.
kvkNummer	String	0	Chamber of Commerce registration number of the client of the map request initiator.
bezoekAdres	String	R	
openbareRuimteNaam	String	С	Street name of the Office address of the client of the map request initiator. Mandatory if no mailbox is specified
huisnummer	String	С	House number of the Office address of the client of the map request initiator. Mandatory if no mailbox is specified.
huisletter	String	С	House letter of the Office address of the client of the map request initiator. Mandatory if no mailbox is specified.
huisnummertoevoeging	String	С	House number addition of the Office address of the client of the map request initiator. Mandatory if no mailbox is specified.
postcode	String	С	Postcode of the Office address of the client of the map request initiator.
woonplaatsNaam	String	С	City of the Office address of the client of the map request initiator.
landcode	String	0	Country code of the Office address of the client of the map request initiator. (see code list)
identificatieBAG	String	0	Unique identification of the Office address in BAG
postbusAdres		С	



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Attribute	Туре	R/C/O	Description
postbusnummer	String	С	Mailbox number of the mailbox
			address of the client of the map
			request initiator.
			Mandatory if no street name and
			house number are specified.
postcode	String	С	Postcode of the mailbox address of
			the client of the map request
			initiator.
landcode	String	0	Country code of the mailbox
			address of the client of the map
			request initiator. (see code list)
telefoon	String	С	Phone number of the client of the
			map request initiator.
			Mandatory if no mobile number is
			specified.
mobiel	String	С	Mobile number of the client of the
			map request initiator.
			Mandatory if no phone number is
			specified.
email	String	R	Email address of the client of the
			map request initiator.
fax	String	0	Fax number of the client of the
			map request initiator.
aanvraagSoort	URI	R	Map request type (see code list).
aanvraagDatum	Datumtijd	С	The date time the map request has
			been received.
giAanvraagStatus	URI	С	The status of the map request (see
			code list).
soortWerkzaamheden	List of URIs	С	Kind of excavation work (see code
			list).
omschrijvingWerkzaamheden	String	0	Description of the excavation work.
locatieWerkzaamheden	String	R	Location of the excavation work.
			(For example the nearest address)
verzoekCoordinatieCivieleWerken	Boolean	0	Request for coordination of civil
			works in the context of EC61
verzoekMedegebruikFysiekeInfrastructuur	Boolean	0	Request for shared use of physical
-			infrastructure in the context of
			EC61



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Attribute	Туре	R/C/O	Description
startDatum	Datum	С	The planed start date of the
			excavation work.
			Only required in the case
			"aanvraagSoort" = "graafmelding".
eindDatum	Datum	С	The planned end date of the
			excavation work.
			Only required in the case
			"aanvraagSoort" = "graafmelding".
graafGebied	Geometrie	R	The area (polygon) of the
			excavation work
informatieGebied	Geometrie	0	The area (polygon) over which
			additional utility network
			information is requested.
huisaansluitingAdressen	List of	0	List of addresses where house
	huisaansluitingAdressen		connection diagrams are
			requested for.

Response example

application/json, text/json

```
"aanvraagId": "5c25ee09-a2f4-4b94-a2a4-03b2617aaf9f",
"aanvrager": {
   "bedrijfsNaam": "sample string",
   "kvkNummer": "sample string",
   "naam": "sample string",
   "postbusAdres": {
      "postbusnummer": "sample string",
      "postcode": "sample string"
   },
   "mobiel": "06-12345678",
   "email": "mail@mail.nl"
},
"referentie": "sample string",
"opdrachtgever": {
   "bedrijfsNaam": "sample string",
   "naam": "sample string",
   "bezoekAdres": {
      "openbareRuimteNaam": "sample string",
      "huisnummer": "sample string",
      "postcode": "sample string",
      "woonplaatsNaam": "sample string",
```



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```
"identificatieBAG": "sample string"
       },
      "mobiel": "06-12345678",
      "email": "mail@mail.nl"
  },
  "aanvraagSoort": "https://api.kadaster.nl/klic/v1/cl/aanvraagSoorten/orientatieverzoek",
   "omschrijvingWerkzaamheden": "sample string",
  "soortWerkzaamheden": [
"https://api.kadaster.nl/klic/v1/cl/soortWerkzaamheden/hovenierswerkzaamheden"
   "locatieWerkzaamheden": "sample string",
  "startDatum": "2015-06-20",
  "eindDatum": "2015-06-20",
   "graafGebied": {
    "type": "Polygon",
    "crs": {
       "type": "name",
       "properties": {
         "name": "urn:ogc:def:crs:EPSG::28992"
    },
    "coordinates": [
       [ [194137, 465803], [194136, 465921], [194314, 465923], [194315, 465804], [194137,
465803]]
    ]
  },
   "huisaansluitingAdressen": [
     {
         "openbareRuimteNaam": "sample string",
        "huisnummer": "sample string",
        "postcode": "sample string",
        "woonplaatsNaam": "sample string",
        "identificatieBAG": "sample string"
     },
      {
        "openbareRuimteNaam": "sample string",
         "huisnummer": "sample string",
        "postcode": "sample string",
         "woonplaatsNaam": "sample string",
        "identificatieBAG": "sample string"
  ],
```



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```
"aanvraagDatum": "2015-06-16T08:47:58.85+01:00",

"ordernummer": "sample string",

"klicMeldnummer": "sample string",

"bronhoudercode": "sample string",

"giAanvraagStatus": "https://api.kadaster.nl/klic/v1/c1/giAanvraagStatus/open"
}
```

http status

- 200 OK
- 400 Bad Request: See reason attribute in the response
- 401 Unauthorized: Requester is not identified
- 403 Forbidden: Requester has no permission to execute the request
- 404 Not Found: No map request found for id

3.4 Get map request by id for a specified Utility Network Operator

GET klic/v1/ws/gebiedsInformatieAanvragen/{giAanvraagId}/netbeheerder/{bronhoudercode}

Get as Service Provider a map request by id for the specified Utility Network Operator.

Only Service Providers are allowed to perform this request.

Only map requests in an interest area of the specified Utility Network Operator can be requested.

A Service Provider needs to be authorized by a Utility Network Operator to be able to get map requests intended for the specified Utility Network Operator.

3.4.1 Request information

Request Parameters

Parameter	Туре	Description			
giAanvraagld	UUID	Identification of the map request			
bronhoudercode	string	Identification of the Utility Network Operator			

Request example

GET https://service30.kadaster.nl/klic/v1/ws/gebiedsInformatieAanvragen/5c25ee09-a2f4-4b94-a2a4-03b2617aaf9f/netbeheerder/G0736 HTTP/1.1

Host: service30.kadaster.nl **Accept**: application/json

Accept-Encoding: gzip,deflate,sdch

Accept-Language: nl-NL,en;q=0.8,fa;q=0.6,sv;q=0.4

Cache-Control: no-cache
Connection: keep-alive
Origin: http://editor.swagger.io
Referer: http://editor.swagger.io/

User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:43.0) Gecko/20100101 Firefox/43.0



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3.4.2 Response information

Response Parameters

Attribute	Туре	R/C/O	Description
aanvraagld	UUID	R	Unique identification of the map request
ordernummer	String	R	The sales order number of the map request.
klicMeldnummer	String	R	The KLIC request number, as YYTNNNNNNNN, where: YY the last two digits of the year of the map request T the first letter of the map request type in Dutch NNNNNNNN a sequential number within the map request year and the map request type
bronhoudercode	String	R	The id of the Utility Network Operator where the map request is intended for
aanvrager		R	Information about the map request initiator
bedrijfsNaam	String	R	Company name of the map request initiator
naam	String	R	Name of the map request initiator
kvkNummer	String	0	Chamber of Commerce registration number of the map request initiator.
bezoekAdres		С	
openbareRuimteNaam	String	С	Street name of the Office address of the map request initiator. Mandatory if no mailbox is specified



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Attribute	Туре	R/C/O	Description
huisnummer	String	С	House number of the Office
			address of the map request
			initiator.
			Mandatory if no mailbox is
			specified.
huisletter	String	С	House letter of the Office address
			of the map request initiator.
			Mandatory if no mailbox is
			specified.
huisnummertoevoeging	String	С	House number addition of the
			Office address of the map request
			initiator.
			Mandatory if no mailbox is
			specified.
postcode	String	С	Postcode of the Office address of
			the map request initiator.
woonplaatsNaam	String	С	City of the Office address of the
			map request initiator.
landcode	String	0	Country code of the Office address
			of the map request initiator. (see
			code list)
identificatieBAG	String	0	Unique identification of the Office
			address in BAG
postbusAdres		С	
postbusnummer	String	С	Mailbox number of the mailbox
·	•		address of the map request
			initiator.
			Mandatory if no street name and
			house number are specified.
postcode	String	С	Postcode of the mailbox address of
·			the map request initiator.
landcode	String	0	Country code of the mailbox
			· ·
			initiator. (see code list)
telefoon	String	С	, , , ,
			initiator.
			-
postbusnummer postcode landcode	String	C C	address of the map request initiator. Mandatory if no street name and house number are specified. Postcode of the mailbox address of the map request initiator. Country code of the mailbox address of the map request initiator. (see code list) Phone number of the map request



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Attribute	Туре	R/C/O	Description
mobiel	String	С	Mobile number of the map request initiator. Mandatory if no phone number is specified.
fax	String	0	Fax number of the map request initiator.
email	String	R	Email address of the map request initiator.
referentie	String	0	Map request initiator reference.
opdrachtgever	String	0	
bedrijfsNaam	String	R	Company name of the client of the map request initiator.
naam	String	R	Name of the client of the map request initiator.
kvkNummer	String	0	Chamber of Commerce registration number of the client of the map request initiator.
bezoekAdres	String	R	
openbareRuimteNaam	String	С	Street name of the Office address of the client of the map request initiator. Mandatory if no mailbox is specified
huisnummer	String	С	House number of the Office address of the client of the map request initiator. Mandatory if no mailbox is specified.
huisletter	String	С	House letter of the Office address of the client of the map request initiator. Mandatory if no mailbox is specified.
huisnummertoevoeging	String	С	House number addition of the Office address of the client of the map request initiator. Mandatory if no mailbox is specified.
postcode	String	С	Postcode of the Office address of the client of the map request initiator.



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Attribute	Туре	R/C/O	Description
woonplaatsNaam	String	С	City of the Office address of the
			client of the map request initiator.
landcode	String	0	Country code of the Office address
			of the client of the map request
			initiator. (see code list)
identificatieBAG	String	0	Unique identification of the Office
			address in BAG
postbusAdres		С	
postbusnummer	String	С	Mailbox number of the mailbox
			address of the client of the map
			request initiator.
			Mandatory if no street name and
			house number are specified.
postcode	String	С	Postcode of the mailbox address of
			the client of the map request
			initiator.
landcode	String	0	Country code of the mailbox
			address of the client of the map
			request initiator. (see code list)
telefoon	String	С	Phone number of the client of the
			map request initiator.
			Mandatory if no mobile number is
	0.1		specified.
mobiel	String	С	Mobile number of the client of the
			map request initiator.
			Mandatory if no phone number is specified.
email	String	R	Email address of the client of the
Citiali	Ouring	'`	map request initiator.
fax	String	0	Fax number of the client of the
io.	Sumg		map request initiator.
aanvraagSoort	URI	R	Map request type (see code list).
aanvraagDatum	Datumtijd	С	The date time the map request has
· ·	,		been received.
giAanvraagStatus	URI	С	The status of the map request (see
			code list).
soortWerkzaamheden	List of URIs	С	Kind of excavation work (see code
			list).
omschrijvingWerkzaamheden	String	0	Description of the excavation work



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Attribute	Туре	R/C/O	Description
locatieWerkzaamheden	String	R	Location of the excavation work.
			(For example the nearest address)
verzoekCoordinatieCivieleWerken	Boolean	0	Request for coordination of civil
			works in the context of EC61
verzoekMedegebruikFysiekeInfrastructuur	Boolean	0	Request for shared use of physical
			infrastructure in the context of
			EC61
startDatum	Datum	С	The planned start date of the
			excavation work.
			Only required in the case
			"aanvraagSoort" = "graafmelding".
eindDatum	Datum	С	The planned end date of the
			excavation work.
			Only required in the case
			"aanvraagSoort" = "graafmelding".
graafGebied	Geometrie	R	The area (polygon) of the
			excavation work
informatieGebied	Geometrie	0	The area (polygon) over which
			additional utility network
			information is requested.
huisaansluitingAdressen	List of	0	List of addresses where house
	huisaansluitingAdressen		connection diagrams are
			requested for.

Response example

```
"aanvraagId": "5c25ee09-a2f4-4b94-a2a4-03b2617aaf9f",
"aanvrager": {
    "bedrijfsNaam": "sample string",
    "kvkNummer": "sample string",
    "naam": "sample string",
    "postbusAdres": {
        "postbusnummer": "sample string",
        "postcode": "sample string"
    },
    "mobiel": "06-12345678",
    "email": "mail@mail.nl"
},
"referentie": "sample string",
```



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```
"opdrachtgever": {
      "bedrijfsNaam": "sample string",
      "naam": "sample string",
      "bezoekAdres": {
        "openbareRuimteNaam": "sample string",
        "huisnummer": "sample string",
        "postcode": "sample string",
        "woonplaatsNaam": "sample string",
        "identificatieBAG": "sample string"
      "mobiel": "06-12345678",
      "email": "mail@mail.nl"
  },
  "aanvraagSoort": "https://api.kadaster.nl/klic/v1/cl/aanvraagSoorten/orientatieverzoek",
   "omschrijvingWerkzaamheden": "sample string",
  "soortWerkzaamheden": [
"https://api.kadaster.nl/klic/v1/c1/soortWerkzaamheden/hovenierswerkzaamheden"
   "locatieWerkzaamheden": "sample string",
  "startDatum": "2015-06-20",
   "eindDatum": "2015-06-20",
   "graafGebied": {
    "type": "Polygon",
    "crs": {
       "type": "name",
       "properties": {
         "name": "urn:ogc:def:crs:EPSG::28992"
    },
    "coordinates": [
       [[194137, 465803], [194136, 465921], [194314, 465923], [194315, 465804], [194137,
465803]]
    ]
  },
   "huisaansluitingAdressen": [
     {
         "openbareRuimteNaam": "sample string",
        "huisnummer": "sample string",
        "postcode": "sample string",
        "woonplaatsNaam": "sample string",
        "identificatieBAG": "sample string"
     },
```



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```
"openbareRuimteNaam": "sample string",
    "huisnummer": "sample string",
    "postcode": "sample string",
    "woonplaatsNaam": "sample string",
    "identificatieBAG": "sample string"
}

],
    "aanvraagDatum": "2015-06-16T08:47:58.85+01:00",
    "ordernummer": "sample string",
    "klicMeldnummer": "sample string",
    "bronhoudercode": "sample string",
    "giAanvraagStatus": "https://api.kadaster.nl/klic/v1/cl/giAanvraagStatus/open"
}
```

http status

- 200 OK
- 400 Bad Request: See reason attribute in the response
- 401 Unauthorized: Requester is not identified
- 403 Forbidden: Requester has no permission to execute the request
- 404 Not Found: No map request found for id

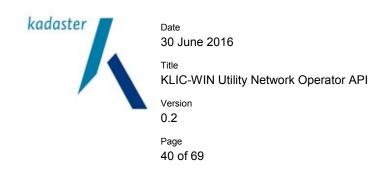
3.5 Notify map request

POST klic/v1/ws/gebiedsInformatieAanvragen/{giAanvraagId}/netbeheerder/gezien
With this request a Utility Network Operator confirms a map request.
Only centralize an de-central Utility Network Operators are allowed to perform this request.
A Utility Network Operator can only confirm map requests he is involved in.

3.5.1 Request Information

Request Parameters

Parameter	Type	Description
giAanvraagld	UUID	Identification of the map request



Request example

POST https://service30.kadaster.nl/klic/v1/ws/gebiedsInformatieAanvragen/5c25ee09-a2f4-4b94-a2a4-03b2617aaf9f/netbeheerder/gezien HTTP/1.1

Host: service30.kadaster.nl **Accept**: application/json

Accept-Encoding: gzip,deflate,sdch

Accept-Language: nl-NL,en;q=0.8,fa;q=0.6,sv;q=0.4

Cache-Control: no-cache
Connection: keep-alive
Origin: http://editor.swagger.io
Referer: http://editor.swagger.io/

User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:43.0) Gecko/20100101 Firefox/43.0

3.5.2 Response Information

http status

- 200 OK
- 202 Accepted: The request has been accepted for processing, but the processing has not been completed
- 400 Bad Request: See reason attribute in the response
- 401 Unauthorized: Requester is not identified
- 403 Forbidden: Requester has no permission to execute the request
- 404 Not Found: No map request found for id
- 405 Method Not Allowed: The map request doesn't have a status that can be confirmed

3.6 Notify map request for a specific Utility Network Operator

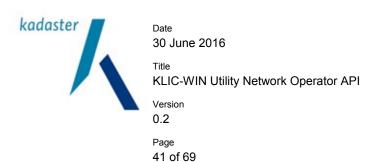
POST klic/v1/ws/gebiedsInformatieAanvragen/{giAanvraagld}/netbeheerder/{bronhoudercode}/gezien With this request a Service Provider confirms a map request for the specified Utility Network Operator. Only Service Providers are allowed to perform this request.

A Service Provider needs to be authorized by a Utility Network Operator to be able to confirm map requests intended for the specified Utility Network Operator.

3.6.1 Request Information

Request Parameters

Parameter	Type	Description	
giAanvraagId	UUID	Identification of the map request	
bronhoudercode	String	Identification of the Utility Network Operator	



Request example

POST https://service30.kadaster.nl/klic/v1/ws/gebiedsInformatieAanvragen/5c25ee09-a2f4-4b94-a2a4-03b2617aaf9f/netbeheerder/G0736/gezien HTTP/1.1

Host: service30.kadaster.nl **Accept**: application/json

Accept-Encoding: gzip,deflate,sdch

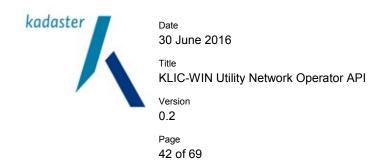
Accept-Language: nl-NL,en;q=0.8,fa;q=0.6,sv;q=0.4

Cache-Control: no-cache
Connection: keep-alive
Origin: http://editor.swagger.io
Referer: http://editor.swagger.io/

User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:43.0) Gecko/20100101 Firefox/43.0

3.6.2 Response Information

- 200 OK
- 202 Accepted: The request has been accepted for processing, but the processing has not been completed
- 400 Bad Request: See reason attribute in the response
- 401 Unauthorized: Requester is not identified
- 403 Forbidden: Requester has no permission to execute the request
- 404 Not Found: No map request found for id
- 405 Method Not Allowed: The map request doesn't have a status that can be confirmed



4 Utility Network Operator information

This chapter describes the REST requests concerning Utility Network Operetor information referred to in Chapter 2 in more detail.

4.1 Upload network information

POST

*klic/v1/ws/beheerdersInformatie/gebiedsInformatieAanvragen/{giAanvraagId}/netbeheerder/netInformatie*As involved Utility Network Operator upload network information for a map request.

Only de-central Utility Network Operators involved in the map request are allowed to upload network information.

Network information is packaged in a ZIP file.

Uploading a network information package is done by executing a MIME Multipart Form Data POST request

4.1.1 Request Information

Request Parameters

Parameter	Туре	Description
giAanvraagld	UUID	Identification of the map request

Request example

POST http://service30.kadaster.nl/klic/v1/ws/beheerdersInformatie/gebiedsInformatieAanvragen/5c25ee09-a2f4-4b94-a2a4-03b2617aaf9f/netbeheerder/netInformatie HTTP/1.1

Content-Type: multipart/form-data; boundary="01ead4a5-7a67-4703-ad02-589886e00923"

Host: service30.kadaster.nl:443 **Content-Length:** 707419

--01ead4a5-7a67-4703-ad02-589886e00923

Content-Type: application/zip

Content-Disposition: form-data; name=netinformation; filename=netinformation-01ead4a5-7a67-4703-ad02-

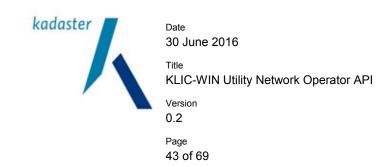
589886e00923.zip

...zip...

--01ead4a5-7a67-4703-ad02-589886e00923--

See annex 1 for a code example for the delivery of network information.

See ZIP Attachments for a detailed description of the ZIP Attachment.



4.1.2 Response Information

http status

- 200 OK
- 202 Accepted: The request has been accepted for processing, but the processing has not been completed
- 400 Bad Request: See reason attribute in the response
- 401 Unauthorized: Requester is not identified
- 403 Forbidden: Requester has no permission to execute the request
- 404 Not Found: No map request found for id
- 405 Method Not Allowed: The map request doesn't have a status that allows uploading of network information
- 415 Unsupported Media Type: The request entity has a media type which the server or resource does not support

4.2 Upload network information for a specific Utility Network Operator

POST

klic/v1/ws/beheerdersInformatie/gebiedsInformatieAanvragen/{giAanvraagId}/netbeheerder/{bronhoudercode}/netInformatie

As Service provider upload network information for a map request for the specified Utility Network Operator. Only Service Providers authorized by the specified Utility Network Operator are allowed to perform this request.

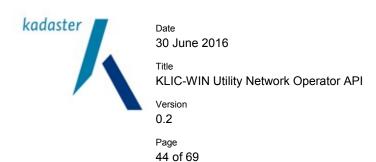
Network information is packaged in a ZIP file.

Uploading a network information package is done by executing a MIME Multipart Form Data POST request

4.2.1 Request Information

Request Parameters

Parameter	Туре	Description	
giAanvraagld	UUID	Identification of the map request	
bronhoudercode	String	Identification of the Utility Network Operator	



Request example

POST http://service30.kadaster.nl/klic/v1/ws/beheerdersInformatie/gebiedsInformatieAanvragen/5c25ee09-a2f4-4b94-a2a4-03b2617aaf9f/netbeheerder/G0736/netInformatie HTTP/1.1

Content-Type: multipart/form-data; boundary="01ead4a5-7a67-4703-ad02-589886e00923"

Host: service30.kadaster.nl:443 **Content-Length:** 707419

--01ead4a5-7a67-4703-ad02-589886e00923

Content-Type: application/zip

Content-Disposition: form-data; name=netinformation; filename=netinformation-01ead4a5-7a67-4703-ad02-

589886e00923.zip

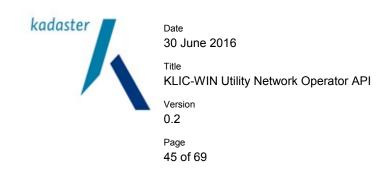
...zip contents...

--01ead4a5-7a67-4703-ad02-589886e00923--

See annex 1 for a code example for the delivery of network information. See <u>ZIP Attachments</u> for a detailed description of the ZIP Attachment.

4.2.2 Response Information

- 200 OK
- 202 Accepted: The request has been accepted for processing, but the processing has not been completed
- 400 Bad Request: See reason attribute in the response
- 401 Unauthorized: Requester is not identified
- 403 Forbidden: Requester has no permission to execute the request
- 404 Not Found: No map request found for id
- 405 Method Not Allowed: The map request doesn't have a status that allows uploading of network information
- 415 Unsupported Media Type: The request entity has a media type which the server or resource does not support



4.3 Get Utility Network Operator Information

GET klic/v1/ws/beheerdersInformatie/gebiedsInformatieAanvragen/{giAanvraagId}/netbeheerder

As Utility Network Operator get the Utility Network Operator Information by map request id.

Only Utility network Operators are allowed to perform this request.

A Utility Network Operator can only request Utility Network Operator Information in case he is involved in the map request.

4.3.1 Request Information

Request Parameters

Parameter	Туре	Description
giAanvraagId	UUID	Identification of the map request

Request example

GET https://service30.kadaster.nl/klic/v1/ws/beheerdersInformatie/gebiedsInformatieAanvragen/5c25ee09-a2f4-4b94-a2a4-03b2617aaf9f/netbeheerder HTTP/1.1

Host: service30.kadaster.nl **Accept**: application/json

Accept-Encoding: gzip,deflate,sdch

Accept-Language: nl-NL,en;q=0.8,fa;q=0.6,sv;q=0.4

Cache-Control: no-cache Connection: keep-alive Origin: http://editor.swagger.io Referer: http://editor.swagger.io/

User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:43.0) Gecko/20100101 Firefox/43.0

4.3.2 Response Information

Response Parameters

Attribute	Туре	R/C/O	Description
giAanvraagld	UUID	R	Unique identification of the map request.
biNotificatieStatus	String	С	Status of the Utility Network Operator notification regarding a new map request (see code list). Only in a response message.
biProductieStatus	String	С	Status of the network information (zee code list). Only in a response message.
datumGenotificeerd	DateTime	С	The date-time the Utility Network Operator was notified of a new map request. Only in a response message.
datumBevestigingOntvangen	DateTime	С	The date-time the Utility Network Operator confirmed the map request. Only in a response message.



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Attribute	Туре	R/C/O	Description
datumNetInformatieOntvangen	DateTime	С	The data-time valid utility network information was received
			from a de-central Utility Network Operator or the data-time
			utility network information was retrieved from the central Utility
			Network registry.
netInformatie	URI	С	Link to the utility network information
validatieStappen	List	С	The list of ValidationSteps with their status and type and
			ValidationMessages.

Response example

application/json, text/json

```
"giAanvraagId": "510d8e74-72f4-4784-b0af-b386d2f9d6f2",
   "biNotificatieStatus":
"https://api.kadaster.nl/klic/v1/cl/biNotificatieStatussen/bevestigingOntvangen",
   "biProductieStatus":
"https://api.kadaster.nl/klic/v1/cl/biProductieStatussen/afgekeurd",
   "datumGenotificeerd": "2015-06-17T15:33:12.18+01:00",
   "datumBevestigingOntvangen": "2015-06-17T15:42:47.17+01:00",
   "datumNetInformatieOntvangen": "2015-06-17T16:03:47.23+01:00",
   "netInformatie":
"https://api.kadaster.nl/klic/v1/ws/beheerdersInformatie/gebiedsInformatieAanvragen/771e2d4
2-edbc-489e-ae6a-08d3bde55629",
   "validatieStappen": [
     {
       "aantalMeldingen": 2,
       "validatieStapMeldingen": [
           "level": "fout",
           "code": "ongeldigeCodelijstWaarde",
           "omschrijving":
"http://inspire.ec.europa.eu/codelist/WaterTypeValue/ongeldigecode is geen geldige
codelijst waarde",
           "element": "{http://www.geostandaarden.nl/imkl/2015/wion/1.1}Waterleiding ->
{http://inspire.ec.europa.eu/schemas/us-net-wa/4.0}waterType"
         },
         {
           "level": "waarschuwing",
           "code": "ontbrekendElement",
           "omschrijving":
"{http://www.geostandaarden.nl/imkl/2015/wion/1.1}heeftExtraInformatie is optioneel maar
```

"{http://www.geostandaarden.nl/imkl/2015/wion/1.1}heeftExtraInformatie is optioneel maar het is sterk aanbevolen om dit element toe te voegen indien de informatie beschikbaar is",



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```
"element": "{http://www.geostandaarden.nl/imkl/2015/wion/1.1}Waterleiding ->
{http://www.geostandaarden.nl/imkl/2015/wion/1.1}heeftExtraInformatie"
        }
      ],
      "validatieStapStatus": "foutGevonden",
      "validatieStapAanduiding": "regelValidatie",
       "validatieStapVolgorde": 3
    },
      "aantalMeldingen": 0,
      "validatieStapMeldingen": [],
      "validatieStapStatus": "success",
      "validatieStapAanduiding": "archiefValidatie",
      "validatieStapVolgorde": 1
    },
    {
      "aantalMeldingen": 0,
      "validatieStapMeldingen": [],
      "validatieStapStatus": "success",
      "validatieStapAanduiding": "schemaValidatie",
       "validatieStapVolgorde": 2
    },
    {
      "validatieStapMeldingen": [],
      "validatieStapStatus": "nietUitgevoerd",
      "validatieStapAanduiding": "linkValidatie",
      "validatieStapVolgorde": 4
    },
  ]
```

http status

}

- 200 OK
- 401 Unauthorized: Requester is not identified
- 403 Forbidden: Requester has no permission to execute the request
- 404 Not Found: No map request found for id



4.4 Get Utility Network Operator Information for a specific Utility Network Operator

GET

klic/v1/ws/beheerdersInformatie/gebiedsInformatieAanvragen/{giAanvraagId}/netbeheerder/{bronhoudercode} As a Service Provider get the Utility Network Operator Information by map request id for the specified Utility Network Operator.

Only Service Providers authorized by the specified Utility Network Operator are allowed to perform this request.

4.4.1 Request Information

Request Parameters

Parameter	Туре	Description		
giAanvraagld	UUID	Identification of the map request		
bronhoudercode	String	Identification of the Utility Network Operator		

Request example

GET https://service30.kadaster.nl/klic/v1/ws/beheerdersInformatie/gebiedsInformatieAanvragen/5c25ee09-a2f4-4b94-a2a4-03b2617aaf9f/netbeheerder/G0736 HTTP/1.1

Host: service30.kadaster.nl **Accept**: application/json

Accept-Encoding: gzip,deflate,sdch

Accept-Language: nl-NL,en;q=0.8,fa;q=0.6,sv;q=0.4

Cache-Control: no-cache
Connection: keep-alive
Origin: http://editor.swagger.io
Referer: http://editor.swagger.io/

User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:43.0) Gecko/20100101 Firefox/43.0

4.4.2 Response Information

Response Parameters

response i arameters			
Attribute	Type	R/C/O	Description
giAanvraagld	UUID	R	Unique identification of the map request.
biNotificatieStatus	String	С	Status of the Utility Network Operator notification regarding a new map request (see code list). Only in a response message.
biProductieStatus	String	С	Status of the network information (zee code list). Only in a response message.
datumGenotificeerd	DateTime	С	The date-time the Utility Network Operator was notified of a new map request. Only in a response message.



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Attribute	Туре	R/C/O	Description
datumBevestigingOntvangen	DateTime	С	The date-time the Utility Network Operator confirmed the map
			request.
			Only in a response message.
datumNetInformatieOntvangen	DateTime	С	The data-time valid utility network information was received
			from a de-central Utility Network Operator or the data-time
			utility network information was retrieved from the central Utility
			Network registry.
netInformatie	URI	С	Link to the utility network information
validatieStappen	List	С	The list of ValidationSteps with their status and type and
			ValidationMessages.

Response example

```
"giAanvraagId": "510d8e74-72f4-4784-b0af-b386d2f9d6f2",
   "biNotificatieStatus":
"https://api.kadaster.nl/klic/v1/cl/biNotificatieStatussen/bevestigingOntvangen",
   "biProductieStatus":
"https://api.kadaster.nl/klic/v1/cl/biProductieStatussen/afgekeurd",
   "datumGenotificeerd": "2015-06-17T15:33:12.18+01:00",
   "datumBevestigingOntvangen": "2015-06-17T15:42:47.17+01:00",
   "datumNetInformatieOntvangen": "2015-06-17T16:03:47.23+01:00",
   "netInformatie":
"https://api.kadaster.nl/klic/v1/ws/beheerdersInformatie/gebiedsInformatieAanvragen/771e2d4
2-edbc-489e-ae6a-08d3bde55629",
   "validatieStappen": [
       "aantalMeldingen": 2,
       "validatieStapMeldingen": [
           "level": "fout",
           "code": "ongeldigeCodelijstWaarde",
           "omschrijving":
"http://inspire.ec.europa.eu/codelist/WaterTypeValue/ongeldigecode is geen geldige
codelijst waarde",
           "element": "{http://www.geostandaarden.nl/imkl/2015/wion/1.1}Waterleiding ->
{http://inspire.ec.europa.eu/schemas/us-net-wa/4.0}waterType"
         },
           "level": "waarschuwing",
           "code": "ontbrekendElement",
```



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```
"omschrijving":
"{http://www.geostandaarden.nl/imkl/2015/wion/1.1}heeftExtraInformatie is optioneel maar
het is sterk aanbevolen om dit element toe te voegen indien de informatie beschikbaar is",
           "element": "{http://www.geostandaarden.nl/imkl/2015/wion/1.1}Waterleiding ->
{http://www.geostandaarden.nl/imkl/2015/wion/1.1}heeftExtraInformatie"
        }
       ],
       "validatieStapStatus": "foutGevonden",
       "validatieStapAanduiding": "regelValidatie",
       "validatieStapVolgorde": 3
     },
     {
       "aantalMeldingen": 0,
       "validatieStapMeldingen": [],
       "validatieStapStatus": "success",
       "validatieStapAanduiding": "archiefValidatie",
       "validatieStapVolgorde": 1
     },
     {
       "aantalMeldingen": 0,
       "validatieStapMeldingen": [],
       "validatieStapStatus": "success",
       "validatieStapAanduiding": "schemaValidatie",
       "validatieStapVolgorde": 2
     },
       "validatieStapMeldingen": [],
       "validatieStapStatus": "nietUitgevoerd",
       "validatieStapAanduiding": "linkValidatie",
```

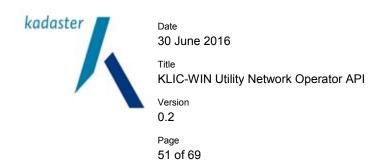
http status

},] }

- 200 OK
- 401 Unauthorized: Requester is not identified

"validatieStapVolgorde": 4

- 403 Forbidden: Requester has no permission to execute the request
- 404 Not Found: No map request found for id



4.5 Download network information

GET klic/v1/ws/beheerdersInformatie/gebiedsInformatieAanvraag/{giAanvraagId}/netbeheerder/netInformatie As Utility Network Operator download the network information by map request id.

Only Utility network Operators are allowed to perform this request.

A Utility Network Operator can only request network information in case he is involved in the map request.

4.5.1 Request Information

Request Parameters

Parameter	Туре	Description
giAanvraagId	UUID	Identification of the map request

Request example

GET https://service30.kadaster.nl/klic/v1/ws/beheerdersInformatie/gebiedsInformatieAanvragen/5c25ee09-a2f4-4b94-a2a4-03b2617aaf9f/netbeheerder/netInformatie HTTP/1.1

Host: service30.kadaster.nl **Accept**: application/zip

Accept-Encoding: gzip,deflate,sdch

Accept-Language: nl-NL,en;q=0.8,fa;q=0.6,sv;q=0.4

Cache-Control: no-cache
Connection: keep-alive
Origin: http://editor.swagger.io
Referer: http://editor.swagger.io/

User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:43.0) Gecko/20100101 Firefox/43.0

4.5.2 Response Information

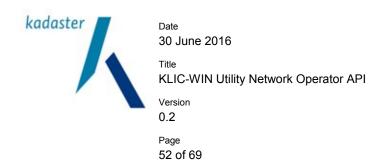
The response in a ZIP file with network information from the identified Utility Network Operator.

The ZIP file contains at least one XML file in IMKL2015-wion format.

Other files that may be in the ZIP file are:

- Attachments in PDF format
- BGT background map in PNG format.

- 200 OK
- 400 Bad Request: See reason attribute in the response
- 401 Unauthorized: Requester is not identified
- 403 Forbidden: Requester has no permission to execute the request
- 404 Not Found: No map request found for id
- 405 Method Not Allowed: The map request doesn't have a status that allows uploading of network information



4.6 Download network information for a specific Utility Network Operator

GET

klic/v1/ws/beheerdersInformatie/gebiedsInformatieAanvraag/{giAanvraagId}/netbeheerder/{bronhoudercode}/netInformatie

As a Service Provider download the network information by map request id for the specified Utility Network Operator.

Only Service Providers authorized by the specified Utility Network Operator are allowed to perform this request.

4.6.1 Request Information

Request Parameters

Parameter	Туре	Description
giAanvraagld	UUID	Identification of the map request
bronhoudercode	String	Identification of the Utility Network Operator

Request example

GET https://service30.kadaster.nl/klic/v1/ws/beheerdersInformatie/gebiedsInformatieAanvragen/5c25ee09-a2f4-4b94-a2a4-03b2617aaf9f/netbeheerder/G0736/netInformatie HTTP/1.1

Host: service30.kadaster.nl **Accept**: application/zip

Accept-Encoding: gzip,deflate,sdch

Accept-Language: nl-NL,en;q=0.8,fa;q=0.6,sv;q=0.4

Cache-Control: no-cache Connection: keep-alive Origin: http://editor.swagger.io Referer: http://editor.swagger.io/

User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64; rv:43.0) Gecko/20100101 Firefox/43.0

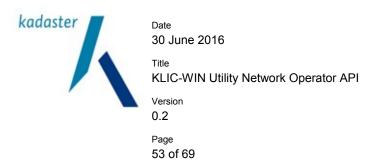
4.6.2 Response Information

The response in a ZIP file with network information from the identified Utility Network Operator.

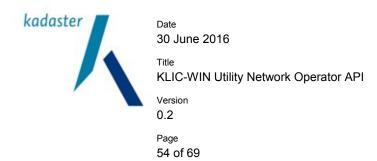
The ZIP file contains at least one XML file in IMKL2015-wion format.

Other files that may be in the ZIP file are:

- Attachments in PDF format
- BGT background map in PNG format.



- 200 OK
- 400 Bad Request: See reason attribute in the response
- 401 Unauthorized: Requester is not identified
- 403 Forbidden: Requester has no permission to execute the request
- 404 Not Found: No map request found for id
- 405 Method Not Allowed: The map request doesn't have a status that allows uploading of network information



5 Code lists

The code lists detailed below contain examples of request and response messages as in the previous chapters. The examples in the content shown in these examples is for illustration only and is not intended to be complete.

These are public services.

5.1 klic/v1/cl/aanvraagSoorten

Gets all the map request type codes. The types are orientation, excavation and calamities.

5.1.1 Response Information

Response Parameters

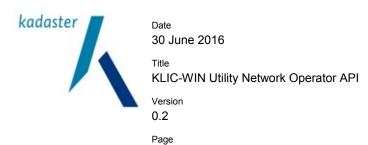
Parameter	Туре	Description
key	URI	Unique id of the map request type
value	String	Description of the map request type in Dutch

Response example

application/json, text/json

http status

- 200 OK



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5.2 klic/v1/cl/aanvraagSoorten/{aanvraagSoortId}

Gets the translated value of the map request type code.

5.2.1 Request Information

Request Parameters

Parameter	Туре	Description
aanvraagSoortId	String	Unique id of the map request type

5.2.2 Response Information

Response Parameters

Parameter	Туре	Description
Key	URI	Unique id of the map request type
value	String	Description of the map request type in Dutch

Response example

application/json, text/json

```
{
  "key": "https://api.kadaster.nl/klic/v1/cl/aanvraagSoorten/graafmelding",
  "value": "Graafmelding"
}
```

http status

- 200 OK
- 404 Not Found

5.3 klic/v1/cl/biNotificatieStatussen

Gets all the Utility Network Operator notification status codes.

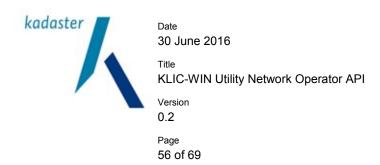
5.3.1 Response Information

Response Parameters

Parameter	Туре	Description
Key	URI	Unique id of the Utility Network Operator notification status code
value	String	Description of the Utility Network Operator notification status code in Dutch

Response example

```
. {
```



```
"key": "https://api.kadaster.nl/klic/v1/cl/biNotificatieStatussen/open",
    "value": "Er is een openstaande gebiedsinformatie-aanvraag"
},
{
    "key":
"https://api.kadaster.nl/klic/v1/cl/biNotificatieStatussen/bevestigingOntvangen",
    "value": "De netbeheerder heeft de gebiedsinformatie-aanvraag bevestigd"
}
```

http status

- 200 OK

5.4 klic/v1/cl/biNotificatieStatussen/{biNotificatieStatusId}

Gets the translated value of the Utility Network Operator notification status code.

5.4.1 Request Information

Request Parameters

Parameter	Type	Description
biNotificatieStatusId	String	Unique id of the Utility Network Operator notification status code

5.4.2 Response Information

Response Parameters

Parameter	Туре	Description
Key	URI	Unique id of the Utility Network Operator notification status code
Value	String	Description of the Utility Network Operator notification status code in Dutch

Response example

application/json, text/json

```
{
  "key": "https://api.kadaster.nl/klic/v1/c1/biNotificatieStatussen/open",
  "value": "Dit is een openstaande gebiedsinformatie-aanvraag"
}
```

- 200 OK
- 404 Not Found



5.5 klic/v1/cl/biProductieStatussen

Gets all the network information production status codes.

5.5.1 Response Information

Response Parameters

Parameter	Туре	Description
key	URI	Unique id of the Network information production status code
value	String	Description of the Network information production status code in Dutch

Response example

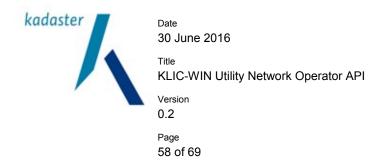
application/json, text/json

```
{
  "key": "https://api.kadaster.nl/klic/v1/cl/biProductieStatussen/open",
  "value": "Voor de netbeheerder moet beheerdersinformatie worden verzameld"
},
{
  "key": "https://api.kadaster.nl/klic/v1/cl/biProductieStatussen/wachtOpAntwoord",
  "value": "Er is nog geen beheerdersinformatie aangeleverd"
},
  "key": "https://api.kadaster.nl/klic/v1/cl/biProductieStatussen/aangeleverd",
  "value": "Er is beheerdersinformatie aangeleverd"
},
{
  "key": "https://api.kadaster.nl/klic/v1/cl/biProductieStatussen/afgekeurd",
  "value": "De aangeleverde beheerdersinformatie is niet correct"
},
{
  "key": "https://api.kadaster.nl/klic/v1/cl/biProductieStatussen/ok",
  "value": "De beheerdersinformatie is correct"
},
{
  "key": "https://api.kadaster.nl/klic/v1/cl/biProductieStatussen/ophalenUitCV",
  "value": "De beheerdersinformatie wordt opgehaald uit de centrale voorziening"
}
```

http status

]

- 200 OK



5.6 klic/v1/cl/biProductieStatussen/{biProductieStatusId}

Gets the translated value of the network information production status code.

5.6.1 Request Information

Request Parameters

Parameter	Туре	Description
biProductieStatusId	String	Unique id of the network information production status code

5.6.2 Response Information

Response Parameters

Parameter	Туре	Description
key	URI	Unique id of the Network information production status code
value	String	Description of the Network information production status code in Dutch

Response example

application/json, text/json

```
{
  "key": "https://api.kadaster.nl/klic/v1/cl/biProductieStatussen/ok",
  "value": "De beheerdersinformatie is correct"
}
```

http status

- 200 OK
- 404 Not Found

5.7 klic/v1/cl/giAanvraagStatussen

Gets all the map request status codes.

5.7.1 Response Information

Response Parameters

Parameter	Туре	Description
key	URI	Unique id of the map request status code
value	String	Description of the map request status code in Dutch

Response example

```
. {
```



```
"key": "https://api.kadaster.nl/klic/v1/cl/giAanvraagStatussen/open",
    "value": "Er is een nieuwe gebiedsinformatie-aanvraag ingediend"
  },
    "key": "https://api.kadaster.nl/klic/v1/cl/giAanvraagStatussen/inProductie",
    "value": "De gebiedsinformatie-aanvraag is in productie genomen"
    "kev":
"https://api.kadaster.nl/klic/v1/c1/giAanvraagStatussen/productSamengesteldIncompleet",
    "value": "De aangevraagde gebiedsinformatie is samengesteld met incomplete
beheerdersinformatie"
    "key":
"https://api.kadaster.nl/klic/v1/cl/giAanvraagStatussen/productSamengesteldCompleet",
    "value": "De aangevraagde gebiedsinformatie is samengesteld met complete
beheerdersinformatie"
    "key":
"https://api.kadaster.nl/klic/v1/cl/giAanvraagStatussen/leveringSamengesteldIncompleet",
    "value": "De levering van gebiedsinformatie is samengesteld met incomplete
beheerdersinformatie"
  }
    "key":
"https://api.kadaster.nl/klic/v1/cl/giAanvraagStatussen/leveringSamengesteldCompleet",
    "value": "De levering van gebiedsinformatie is samengesteld met complete
beheerdersinformatie"
]
```

http status

- 200 OK

5.8 klic/v1/cl/giAanvraagStatussen/{giAanvraagStatusId}

Gets the translated value of the map request status code.

5.8.1 Request Information

Request Parameters



Parameter	Туре	Description
giAanvraagStatusId	String	Unique id of the map request status code

5.8.2 Response Information

Response Parameters

Parameter	Туре	Description
key	URI	Unique id of the map request status code
value	String	Description of the map request status code in Dutch

Response example

application/json, text/json

```
{
  "key": "https://api.kadaster.nl/klic/v1/cl/giAanvraagStatussen/open",
  "value": "Er is een nieuwe gebiedsinformatie-aanvraag ingediend"
}
```

http status

- 200 OK
- 404 Not Found

5.9 klic/v1/cl/landcodes

Get a list of known ISO 3166-1 two letter country codes.

5.9.1 Response Information

Response Parameters

Parameter	Туре	Description
key	URI	The ISO 3166-1 two letter country code
value	String	The description of the ISO 3166-1 two letter country code in Dutch

Response example

```
{
  "key": "https://api.kadaster.nl/klic/v1/cl/landcodes/BE",
  "value": "België"
},
{
  "key": "https://api.kadaster.nl/klic/v1/cl/landcodes/BZ",
  "value": "Belize"
```



```
},
{
  "key": "https://api.kadaster.nl/klic/v1/cl/landcodes/BJ",
  "value": "Benin"
},
{
  "key": "https://api.kadaster.nl/klic/v1/cl/landcodes/BM",
  "value": "Bermuda"
},
{
  "key": "https://api.kadaster.nl/klic/v1/cl/landcodes/BT",
  "value": "Bhutan"
},
  "key": "https://api.kadaster.nl/klic/v1/cl/landcodes/BO",
  "value": "Bolivia"
},
{
  "key": "https://api.kadaster.nl/klic/v1/cl/landcodes/BA",
  "value": "Bosnië en Herzegovina"
}
```

http status

]

- 200 OK

5.10 klic/cl/vi/landcodes/{landcodeld}

Gets the translated value of a known ISO 3166-1 two letter country code

5.10.1 Request Information

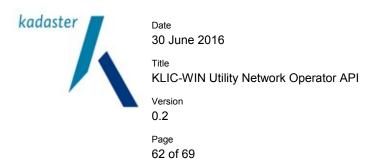
Request Parameters

Parameter	Туре	Description
landcodeld	String	The ISO 3166-1 two letter country code

5.10.2 Response Information

Response Parameters

Parameter	Туре	Description
key	URI	The ISO 3166-1 two letter country code
value	String	The description of the ISO 3166-1 two letter country code in Dutch



Response example

```
application/json, text/json
```

```
{
  "key": "https://api.kadaster.nl/klic/v1/cl/landcodes/NL",
  "value": "Nederland"
}
```

http status

- 200 OK
- 404 Not Found

5.11 klic/v1/cl/soortWerkzaamheden

Gets all the excavation work codes.

5.11.1 Response Information

Response Parameters

Parameter	Туре	Description	
key	URI	The excavation work code	
value	String	The description of the excavation work code in Dutch	

Response example



```
"value": "Zinker maken"
}
```

http status

- 200 OK

5.12 klic/v1/cl/soortWerkzaamheden/{soortWerkzaamhedenId}

Gets the translated value of the excavation work code

5.12.1 Request Information

Request Parameters

Parameter	Туре	Description
soortWerkzaamhedenId	String	The excavation work code

5.12.2 Response Information

Response Parameters

Parameter	Туре	Description	
key	URI	The excavation work code	
value	String	The description of the excavation work code in Dutch	

Response example

application/json, text/json

```
{
  "key": "https://api.kadaster.nl/klic/v1/cl/soortWerkzaamheden/persingBoring",
  "value": "Persing/boring"
}
```

- 200 OK
- 404 Not Found



5.13 klic/v1/cl/validatieStapAanduidingen

Gets all the validation step type codes.

5.13.1 Response Information

Response Parameters

Parameter	Туре	Description
key	URI	The validation step type code
value	String	The description of the validation step type code in Dutch

Response example

application/json, text/json

```
{
   "key":
"https://api.kadaster.nl/klic/v1/cl/validatieStapAanduidingen/archiefValidatie",
   "value": "Validatie van het ZIP bestand"
 },
 {
   "value": "XML schema validatie"
 },
   "key": "https://api.kadaster.nl/klic/v1/cl/validatieStapAanduidingen/regelValidatie",
   "value": "Extra regel validatie"
 },
 {
   "key": "https://api.kadaster.nl/klic/v1/cl/validatieStapAanduidingen/linkValidatie",
   "value": "Validatie van de link relaties van objecten"
 }
]
```

http status

- 200 OK



5.14 klic/v1/cl/validatieStapAanduidingen/{validatieStapAanduidingld}

Gets the translated value of the validation step type code

5.14.1 Request Information

Request Parameters

Parameter	Туре	Description
validatieStapAanduidingId	String	The validation step type code

5.14.2 Response Information

Response Parameters

Parameter	Туре	Description
key	URI	The validation step type code
value	String	The description of the validation step type code in Dutch

Response example

application/json, text/json

```
"key": "https://api.kadaster.nl/klic/v1/cl/validatieStapAanduidingen/schemaValidatie",
    "value": "XML schema validatie"
}
```

http status

- 200 OK
- 404 Not Found

5.15 klic/v1/cl/validatieStapMeldingLevels

Gets all the validation step message level codes.

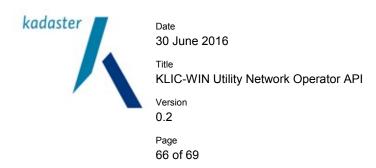
5.15.1 Response Information

Response Parameters

Parameter	Туре	Description
key	URI	The validation step message level code
value	String	The description of the validation step message level code in Dutch

Response example

```
{
```



```
"key": "https://api.kadaster.nl/klic/v1/cl/validatieStapMeldingLevels/fout",
    "value": "Dit is fout"
},
{
    "key": "https://api.kadaster.nl/klic/v1/cl/validatieStapMeldingLevels/waarschuwing",
    "value": "Dit is een waarschuwing"
}
```

http status

]

- 200 OK

5.16 klic/v1/cl/validatieStapMeldingLevels/{validatieStapMeldingLevelId}

Gets the translated value of the validation step message level code

5.16.1 Request Information

Request Parameters

Parameter	Туре	Description
validatieStapMeldingLevelId	String	Uniek identificatie van een validatieStapMeldingLevel

5.16.2 Response Information

Response Parameters

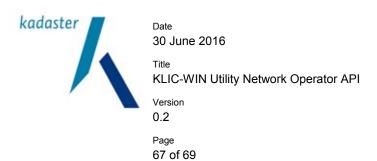
Parameter	Туре	Description
key	URI	The validation step message level code
value	String	The description of the validation step message level code in Dutch

Response example

application/json, text/json

```
{
  "key": "https://api.kadaster.nl/klic/v1/cl/validatieStapMeldingLevels/fout",
  "value": "Dit is fout"
}
```

- 200 OK
- 404 Not Found



5.17 klic/v1/cl/validatieStapStatussen

Gets all the validation step status codes.

5.17.1 Response Information

Response Parameters

Parameter	Туре	Description
key	URI	The validation step status code
value	String	The description of the validation step status code in Dutch

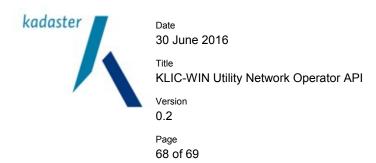
Response example

application/json, text/json

```
{
    "key": "https://api.kadaster.nl/klic/v1/cl/validatieStapStatussen/succes",
    "value": "De validatie stap is succesvol uitgevoerd"
},
    {
        "key": "https://api.kadaster.nl/klic/v1/cl/validatieStapStatussen/foutenGevonden",
        "value": "Er is een fout gevonden in deze validatie stap"
},
    {
        "key": "https://api.kadaster.nl/klic/v1/cl/validatieStapStatussen/nietUitgevoerd",
        "value": "De validatie stap is (nog) niet uitgevoerd"
}
```

http status

- 200 OK



5.18 klic/v1/cl/validatieStapStatussen/{validatieStapStatusId}

Gets the translated value of the validation step status code

5.18.1 Request Information

Request Parameters

Parameter	Туре	Description
validatieStapStatusId	String	The validation step status code

5.18.2 Response Information

Response Parameters

Paran	neter	Туре	Description	
key		URI	The validation step status code	
value		String	The description of the validation step status code in Dutch	

Response example

application/json, text/json

```
{
  "key": "https://api.kadaster.nl/klic/v1/cl/validatieStapStatussen/succes",
  "value": "De validatie stap is succesvol uitgevoerd"
}
```

- 200 OK
- 404 Not Found



Annex 1 - Code example to upload a network information package

In .NET the file upload can be done by using an HttpClient object.

```
//Create new HTTP request
using (var httpRequestMessage = new HttpRequestMessage(HttpMethod.Post, new Uri(new
Uri(ConfigurationManager.AppSettings["PublicApiBaseUrl"]),
string. Format("beheerders Informatie/gebieds Informatie Aanvragen/\{0\}/net Informatie", and the string of the st
"AEB65085-40DE-4A67-8608-913189D883B9"))))
         //Add body content
         using (var content = new MultipartFormDataContent())
                  //{\rm Open} stream to file and set content disposition
                  var fileContent = new StreamContent(File.OpenRead("pathToFile"));
                  fileContent.Headers.ContentDisposition = new
ContentDispositionHeadervalue("attachment") { FileName = "nameOfFile" };
                  content.Add(fileContent);
                  httpRequestMessage.Content = content;
                  using (var httpClient = new HttpClient())
                            //Set timeout according to line speed and maximum file upload size
                           httpClient.Timeout = TimeSpan.FromSeconds(600);
                           //Start upload request and wait until it is finished
                           HttpResponseMessage httpResponseMessage = await
httpClient.SendAsync(httpRequestMessage);
                           //Check if everything went right
                           if (!httpResponseMessage.IsSuccessStatusCode)
                            {
                                    Console.Error.WriteLine(httpResponseMessage.ToString());
                  }
         }
}
POST /klic/v1/ws/beheerdersInformatie/gebiedsInformatieAanvragen/.../netInformatie HTTP/1.1
Content-Type: multipart/form-data; boundary="01ead4a5-7a67-4703-ad02-589886e00923"
Host: service30.kadaster.nl:443
Content-Length: 707419
--01ead4a5-7a67-4703-ad02-589886e00923
Content-Type: application/zip
Content-Disposition: form-data; name=netinformatie; filename=netinformatie-01ead4a5-7a67-
4703-ad02-589886e00923.zip
...zip inhoud...
--01ead4a5-7a67-4703-ad02-589886e00923--
```