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# GS1 Sweden GEPIR 4.0 Web Services

SOAP API Reference documentation

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# 1 Introduction

## 1.1 Purpose and Scope

This document describes the instructions and technical information aspects needed for consuming GS1 GEPIR 4 Web Services API.

GS1 GEPIR Web Service API endpoint is provided by the GEPIR router node, where the node is exposed as a public Web Service. The GEPIR router node for Sweden is hosted and maintained by GS1 Sweden AB in compliance with the GS1 GEPIR (Global Electronic Party Information Registry) network framework. GEPIR services offer read-only access to data related to all GS1 keys based on a GS1 Company Prefix.

## 1.2 About the GEPIR 4 API Web Service API

The GEPIR router node for GS1 Sweden AB has recently been upgraded to the latest version, 4.0, where backbone server implementation logic complies with the basic standards and rules defined by the GS1 GEPIR framework. However, some exceptions may exist in the logic how routers are representing the information on lookup results. For example, the logic behind how GEPIR Return Code (RC) gets calculated on Response Header level, might be different across GS1 MOs routers. This document will describe how this logic is implemented in GS1 Sweden AB's router.

GEPIR API service consumers (clients) can use different ways to enquiry business information about subscribers to GS1 keys. This information is exposed through the set of Web Service (WS) methods (operations or actions), which will be addressed as functions in further sections of this document.

The following lookup functions are provided generally by GS1 Router Web Service API:

- **Search Party By Name (GetPartyByName)**. Lookup the Party information by its company name and country, and if necessary, also by other details, like Street Address, Postal Code and City
- **Get Prefix Licensee (GetPrefixLicensee)**. Lookup the GS1 Company Prefix Licensee information about any GS1 Key that is requested.

Some lookup functions may have common parts in the request and response message format and a common set of input and output parameters, but some are unique in their implementation and require special usage. For detailed usage instructions, please see section "**Consuming GEPIR 4.0 API Services**".

Because the GS1 Sweden router is connected to the global network, some queries can also be routed to external data providers (such as other GS1 MOs), where result information can be distinguished as a set of output parameters received within the SOAP response message.

In order to start consuming the GS1 GEPIR service, parties must first agree on contractual terms of service usage and exchange the technical details needed to establish the connection; for example, the URL of the web service and the IP address. It is also mandatory to define and agree on the service authorization details required to fulfil the basic authorization protocol the GS1 Sweden GEPIR Router uses today.

The GS1 Sweden GEPIR Web Service API provides immediate access to both the staging and production environments, although to access the staging environment the consuming party must request access from GS1 Sweden. GEPIR API service environments (STAGING, PRODUCTION) are accessible in accordance with endpoint definitions defined in [1.2.1](#).

Instructions to set up a connection to the GS1 Sweden GEPIR service are provided in the section [1.2.2.1](#).

### 1.2.1 GEPIR API Endpoints

The following tables list the endpoints for GS1 Sweden GEPIR Web Service API environments available for use.

- PRODUCTION

Endpoint	Endpoint
WSDL endpoint	<a href="http://GEPIR.gs1.se/api/router.svc?wsdl">http://GEPIR.gs1.se/api/router.svc?wsdl</a>
Service connection entry point	<a href="http://GEPIR.gs1.se/api/router.svc">http://GEPIR.gs1.se/api/router.svc</a>
IP Address	168.63.27.68

■ STAGING

Endpoint	Endpoint
WSDL endpoint	<a href="http://gs1GEPIR4routerpreprod.cloudapp.net/api/Router.svc?WsdI">http://gs1GEPIR4routerpreprod.cloudapp.net/api/Router.svc?WsdI</a>
Service connection entry point	<a href="http://gs1GEPIR4routerpreprod.cloudapp.net/api/Router.svc">http://gs1GEPIR4routerpreprod.cloudapp.net/api/Router.svc</a>
IP Address	23.101.77.174

## 1.2.2 Security Principles

The web service is exposed generally as a public service and users of GEPIR service are treated publicly too, although user access is categorized into different levels.

This section describes the security aspects enforced when consuming GEPIR 4 Web Service API provided by locally hosted GS1 Sweden Router.

### 1.2.2.1 Service Authorization

The GS1 Sweden AB GEPIR router implements a simple authorization protocol to protect from abuse of the GEPIR database or denial of service attacks, while at the same time ensuring quality of service for trusted users which are predefined in the system. On the server side, trusted users are identified by using a combination of the client's (service consumer or caller) requester GLN and IP address. Further the user identification process passes the authorization filter which determines the required service access level and grants it to the identified user. Access levels are described in the next section.

The following parameters must be resolved and agreed on between parties before starting using GEPIR API services:

Parameter	Value	Description
RequesterGLN	73XXXXXXXXXX	Requester GLN (Global Location Number) parameter is a 13-digit number, which identifies the company subscribed to the GS1 Company Prefix issued by GS1 Sweden organization. This number is used in service requests as a mandatory input parameter in order to identify and validate the service client.
IP	217.14.120.23	A valid IP address which the client will be using when accessing GEPIR API services.

### 1.2.2.2 Service Access Levels

There are three access levels defined by the GS1 Sweden GEPIR Web Service API. These levels are applicable for direct exposed machine-to-machine service communication, e.g. by using SoapUI or another custom-built .NET application.

GEPIR service access levels:

1. **Unidentified or Blocked Access:** The service client cannot be identified either because it is using a fake IP address or the requester GLN is missing or invalid. Blocked or disabled users (even previously premium) belong to this category too. User can be blocked due to abuse of the service.

All requests for this access level shall be rejected immediately with an "Access Denied" error, using RC-98.

2. **Anonymous Access:** The service client is using a valid requestor GLN or IP address, but the client not registered as a GEPIR Premium user.

A user with this anonymous access level is permitted to perform GEPIR API functions and to get basic business information about companies subscribed to GS1. However, the user can execute only 30 queries per 24h period at this access level.

In the case of batch request mode, anonymous users can only request and receive max 20 GS1 keys per each message.

3. **Premium Access:** Both client's GLN and IP is known and registered as Premium user. In the batch request, premium users are limited to 100 GS1 keys per message both in the requests and responses.

### 1.2.3 Support for Batch Request

The Web Service API service allows users to request multiple requests within a single message, which is called a batch request (up to 100 per message). A batch request is an inquiry of multiple GS1 identification keys in a single SOAP request call.

Batch request is not supported for the "**Search Party By Name**" function.

### 1.2.4 Transport Protocols

GEPIR 4 API accepts requests both in HTTP/1.0 as specified in RFC 1945, and HTTP/1.1 as specified in RFC 2616.

GEPIR 4 Web Service API supports SOAP 1.2 only, using HTTP binding.

### 1.2.5 Character set and encoding

The API SOAP request and response is encoded using the UTF-8 character set.

## 2 Consuming GEPIR 4.0 API services

The next subsections describe the necessary information about usage of each GEPIR Web Service API service functions. This information includes details about SOAP request mandatory and optional arguments, argument types and usage, batch support and example messages.

### 2.1 Common properties

This section describes the common properties and parameters what are for generic use or are shared between different service function requests and responses.

#### 2.1.1 GEPIR return codes

Each GEPIR API request responds with the GEPIR Response Codes (RC). Return code is an integer return parameter value which describes both how successful the service call was in general and how complete the returned business information is. Some return codes define the general service call status result OK, NOK, or INFO condition, some describe business-specific conditions about data returned.

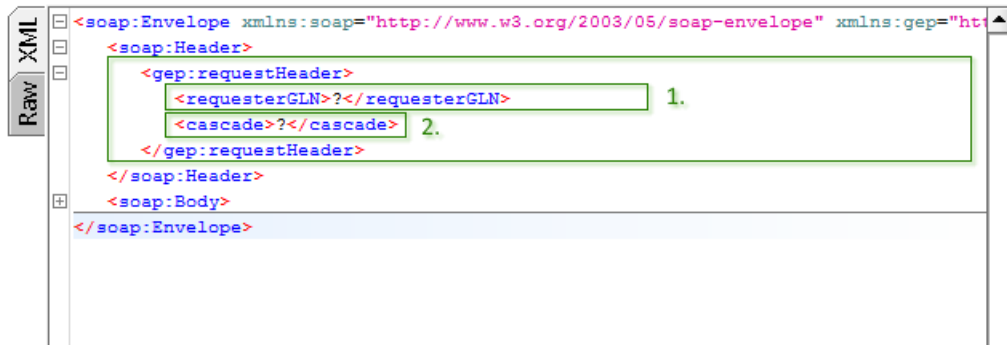
The following table explains the return codes relevant for GS1 Sweden Router Web Service API functions:

Return Code	Explanation
0	Query Successful. The request has been successfully completed and the response is in the body of the SOAP message.
1	Missing or invalid parameters. One or more parameters is missing or incorrect. This might be wrong length, invalid GS1 check digit, non-numeric characters in a number, etc. No data is returned.
2	Record not found. No record exists in the MO database for this key or these search parameters. No data is returned.
3	No exact match on Requested Key. No record was found for this Requested Key. The data held in the MO database for company prefix is returned instead.
4	Too many hits. Over twenty records match the search criteria. Only twenty are returned.
5	Unknown GS1 Prefix. The GS1 prefix (3-digit country code) does not exist.
7	Request timed out. There was a timeout somewhere in the server chain. No data is returned.
8	No catalogue exists. A request has been made for GTIN information, but there is no server for this company. No data is returned.
9	Company information withheld. The company prefix in the request exists, but the company has not released its information for publication. The name and address of the responsible MO is returned.
10	Prefix no longer subscribed. The company prefix in the request exists, but the company is no longer a member of GS1 under this prefix. The name and address of the responsible MO is returned.
11	Country not on the GEPIR network. There is no GEPIR MO server for this country. This should only be used with Get Party by Name.
14	Daily request limit exceeded. The user has exceeded the number of 'free' requests permitted (30) and the request is rejected. No data is returned. The 'responderGln' element is set by the node refusing the request.
16	Prefix 020-029 or 040-049 for internal use only. Prefix 020-029 or 040-049 are for company internal use. In case of GEPIR router of GS1 Sweden, search for the prefix information is still performed in local MO database. If request is performed against GEPIR router belonging to other MO, only name and address of the MO is returned.
17	Prefix 200-299 for internal use only. Prefix 200-299 is for company internal use. In case of GEPIR router of GS1 Sweden, search for the prefix information is still performed in local MO database. If request is performed against GEPIR router belonging to other MO, only name and address of the MO is returned.
18	Prefix 977 (ISSN). Prefix 977 is used for serial publications (ISSN). No information can be returned. The name and address of the MO inquired is returned.
19	Prefix 978-979 (ISBN). Prefix 978-979 is used for books. (ISBN). No information can be returned. The name and address of the MO inquired is returned.
20	Coupon Prefix. For example Prefixes 050-059 and 990-999 are used for coupons. No information can be returned. The name and address of the MO inquired is returned.
97	Unsupported request for this version. The request contains elements which cannot be processed by a GEPIR Router on this version.

98	Authorization failed. The Authorization process has failed and access is not granted
99	Server error. Router is functional, but there is no access to the data. The 'responderGln' element is set by the node detecting the error.

### 2.1.2 GEPIR request header

GEPIR Web Service API request messages have generic SOAP header named **RequestHeader**, which must be reused in all request messages.



The following are mandatory attributes:

#	Attribute	Definition
1	requesterGln	Constant numeric value. The GLN of the party designated as being responsible for the message at any point in the communication exchange. Always specify client GLN assigned by GS1 Sweden.
2	cascade	Integer between 0 and 9 indicating the number of times a request may be cascaded to another server. This element is decremented each time the request is forwarded. A request with a cascade count of zero must not be cascaded further.

Code sample:

```
<soap:Header>
  <ges:requestHeader>
    <requesterGln>7310000000003</requesterGln>
    <cascade>9</cascade>
  </ges:requestHeader>
</soap:Header>
```

### 2.1.3 GEPIR response header

All GEPIR Web Service API response messages have generic SOAP header element block named **ResponseHeader**. Response header attributes indicate the status of the last GEPIR API function execution and describe the control information about body part.



```

Raw XML
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:ns1="http://gepir4.ws.gs1.org/"
  xmlns:oas="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secex
  <soapenv:Header>
    <ns1:responseHeader>
      <responderGLN?></responderGLN> 1.
      <numberOfHits?></numberOfHits> 2.
      <gepirReturnCode codeListVersion=?></gepirReturnCode> 3.
    </ns1:responseHeader>
  </soapenv:Header>
  <soapenv:Body>
</soapenv:Envelope>
  
```

Mandatory attributes:

#	Attribute	Definition
1	responderGLN	GLN of the originator of the response
2	GepirReturnCode	Indicates the success or other GEPIR API service status value. Return codes are described in section <a href="#">2.1.1</a> .
3	numberOfHits	The number of records meeting the GEPIR API function lookup criteria. Not all requests can generate multi-line responses, but this element is always used.

Code sample:

```

<soapenv:Header>
  <ns1:responseHeader>
    <responderGLN>7300010001008</responderGLN>
    <numberOfHits>1</numberOfHits>
    <GEPIRReturnCode codeListVersion="1.0">0</GEPIRReturnCode>
  </ns1:responseHeader>
</soapenv:Header>
  
```

## 2.1.4 GEPIR Response data definition

Each GEPIR API function results with the SOAP response message consisting of two main parts, SOAP Header and SOAP Body part. If the lookup function is successful in its execution and the requested party business data successfully matched, then SOAP Body part of response message shall contain the GEPIR Party root element. These root elements enwrap all necessary child elements to represent the detailed information about GS1 companies (e.g. company info, contacts, prefixes, etc..) or GS1 individual keys (e.g. name, code).

The GEPIR Response data structure is unique for each response type depending on the calling function signature, however some embedded data part types are always common. This section describes these common individual data part types (sections) re-used for all GEPIR API function response types.

### 2.1.4.1 GEPIR Party

GEPIR Party data element in the SOAP response message enwraps all child data elements describing the GEPIR Party Information.

```

Raw XML
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:gep="http://gepir4.ws.gs1.org/"
  <soap:Header>
    <gep:responseHeader>
  </soap:Header>
  <soap:Body>
    <gep:getPartyByNameResponse>
      <gepirParty>
        <partyDataLine> 1.
      </gepirParty>
    </gep:getPartyByNameResponse>
  </soap:Body>
</soap:Envelope>

```

This table describes attributes for GEPIR Party data element:

#	Attribute	Definition
1	partyDataLine	Optional. Detailed party information returned by GEPIR on a party search method. Please refer to section <a href="#">2.1.4.2</a> for attribute details

### 2.1.4.2 GEPIR Party: Party Data Line

```

Raw XML
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ns1="http://gepir4.ws.gs1.org" x
  <soapenv:Header>
    <ns1:responseHeader>
  </soapenv:Header>
  <soapenv:Body>
    <ns1:getKeyLicenseeResponse>
      <gepirParty>
        <partyDataLine>
          1. <gS1CompanyPrefix?></gS1CompanyPrefix>
          2. <lastChangeDate?></lastChangeDate>
          3. <partyDataLanguage codeListVersion=?></partyDataLanguage>
          4. <returnCode codeListVersion=?></returnCode>
          5. <address>
          6. <gepirRequestedKey>
          7. <responderSpecificData>
          8. <gepirItemExternalFileLink>
          9. <gS1CompanyPrefixLicensee>
          10. <informationProvider>
          11. <contact>
        </partyDataLine>
      </gepirParty>
    </ns1:getKeyLicenseeResponse>
  </soapenv:Body>
</soapenv:Envelope>

```

This table describes attributes for Party Data Line element.

#	Attribute	Definition
1	gS1CompanyPrefix	Optional. A company prefix is a combination of digits that is unique to company subscribed to GS1 organization. Example: 735005385. The gS1CompanyPrefix is empty in response for getPartyByName or when information about One-Off Keys (GTIN-8, UPC-E) was requested.

2	lastChangeDate	Optional. A UTC date indicating the last time the information was changed
3	partyDataLanguage	Mandatory. Language used to represent the data on the requested item.
4	returnCode	Mandatory. Indicates the success or otherwise of the request, see section <a href="#">2.1.1</a> for return code explanation
5	address	Optional. The location at which a particular organization or person may be found or reached. Please refer to section <a href="#">2.1.4.4</a> for attribute details
6	gepirRequestedKey	Optional. Details on the key used to retrieve information on the related entity. Please refer to section <a href="#">2.1.4.3</a> for attribute details
7	responderSpecificData	A user defined field for Information for use in additional value-add services (for example the cascading of additional item-related data.)
9	gS1CompanyPrefixLicensee	Optional. A party information to which a GS1 Company Prefix is licensed. Please refer to section <a href="#">2.1.4.8</a> for attribute details
9	gS1KeyLicensee	Optional. A party information to which a GS1 Identification Key is licensed. Please refer to section <a href="#">2.1.4.8</a> for attribute details
10	informationProvider	Mandatory. The party information for the originator of the response line. Please refer to section <a href="#">2.1.4.8</a> for attribute details
11	contact	Optional. Information on an individual or department acting as point of contact for an organization Please refer to section <a href="#">2.1.4.5</a> for attribute details

### 2.1.4.3 GEPIR Party: Requested Key

```

<gepirRequestedKey>
  1. <requestedKeyCode codeListVersion="?">?</requestedKeyCode>
  2. <requestedKeyValue?</requestedKeyValue>
  3. <requestedLanguage codeListVersion="?"/>
</gepirRequestedKey>
  
```

This table describes attributes for the Requested Key element. This element is not applicable for the GetPartyByName function.

#	Attribute	Definition
1	requestedKeyCode	Mandatory. The type of the key used for the request for example GLN. Examples: GLN, GTIN, SSCC ...

2	requestedKeyValue	Mandatory. The value of the GS1 key used for the request. Examples: 7300010001008, 412340, 998001122334455 ...
3	requestedLanguage	Optional. Specifies the language of the request text fields if other than provided by default by the information provider.  In case of GS1 Sweden, the parameter does not affect returned data, as backend systems does not support data in multiple languages. If request is cascaded to another MO, the language parameter is preserved.  Examples: SV, EN, DE ...

#### 2.1.4.4 GEPIR Party: Address

```

<address>
  1. <city>?</city>
  2. <cityCode>?</cityCode>
  3. <countryCode codeListVersion="?"?</countryCode>
  4. <countyCode>?</countyCode>
  5. <crossStreet>?</crossStreet>
  6. <currencyOfPartyCode codeListVersion="?"?</currencyOfPartyCode>
  7. <languageOfThePartyCode codeListVersion="?"?</languageOfThePartyCode>
  8. <name>?</name>
  9. <pOBoxNumber>?</pOBoxNumber>
  10. <postalCode>?</postalCode>
  11. <provinceCode>?</provinceCode>
  12. <state>?</state>
  13. <streetAddressOne>?</streetAddressOne>
  14. <streetAddressTwo>?</streetAddressTwo>
  15. <streetAddressThree>?</streetAddressThree>
</address>

```

This table describes attributes for Address element. All attributes are optional and may be empty or not present in the response at all.

#	Attribute	Definition
1	city	Text specifying the name of the city. Examples: Stockholm, Rīga ...
2	cityCode	Identifier for a city, expressed as a short code rather than the full name. Examples: RIX, BKK ...
3	countryCode	Code specifying the country for the address. Examples: SE, US, LV ...
4	countyCode	A code that identifies a county. A county is a territorial division in some countries, forming the chief unit of local administration. In the US, a county is a political and administrative division of a state. Examples: 002, 842 ...
5	crossStreet	A street intersecting a main street (usually at right angles) and continuing both sides of it. Examples: 1234 Main Street

6	currencyOfPartyCode	Code specifying the currency of an addressed party. Examples: USD, EUR ...
7	languageOfThePartyCode	Code specifying the language of an addressed party. Examples: SV, EN, DE ...
8	name	The name of the party expressed in text. Examples: Google, GS1 Sweden ...
9	pOBoxNumber	The number that identifies a PO box. A PO box is a box in a post office or other postal service location assigned to an organization where postal items may be kept. Examples: 940123, EN1111 ...
10	postalCode	Text specifying the postal code for an address. Examples: 111 11, DQ1234 ...
11	provinceCode	Text specifying a province in abbreviated format. Examples: Lappland, Maryland ...
12	state	One of the constituent units of a nation having a federal government. Examples: Ohio, California ...
13	streetAddressOne	The first free form line of an address. For example, the name of the street and the number in the street or the name of a building.  In case, address is used for mailing purposes, this first part should be printed on the envelope as the first line below the recipient's name. If present in the response data, all three address lines (see below) should be used to specify full address.  Examples: Hagagatan 1, Main Street 123 – A14 ...
14	streetAddressTwo	The second free form line of an address. The second free form line complements the first free form line to locate the party e.g. floor number, name of a building, suite number.
15	streetAddressThree	The third free form line of an address. The third free form line complements the first and second free form lines where necessary.

#### 2.1.4.5 GEPIR Party: Contact

```

<contact>
  1. <communicationChannel>
  2. <afterHoursCommunicationChannel >
  3. <contactTypeCode?</contactTypeCode>
  4. <personName?</personName>
  5. <departmentName?</departmentName>
  6. <jobTitle?</jobTitle>
  7. <responsibility?</responsibility>
</contact>
  
```

This table describes attributes for Contact element.

#	Attribute	Definition
---	-----------	------------

1	communicationChannel	The channel or manner in which a communication can be made, such as telephone or email. Please refer to section “ <b>GEPIR Party: Communication Channel</b> ” for attribute details
2	afterHoursCommunicationChannel	The channel or manner in which a communication can be made, such as telephone or email. Please refer to section “ <b>GEPIR Party: Communication Channel</b> ” for attribute details
3	contactTypeCode	Code specifying the function or role of a contact.
4	personName	The name of the individual that can be contacted to provide additional information Example: John Smith, Erik Olson ...
5	departmentName	The name of the department that can be contacted to provide additional information
6	jobTitle	The job title of the person that can be contacted.
7	responsibility	Text further specifying the area of responsibility of the trade contact.

#### 2.1.4.6 GEPIR Party: Communication Channel

```

<communicationChannel>
  1.<communicationChannelName codeListVersion="?">?</communicationChannelCode>
  2.<communicationChannelCode codeListVersion="?">?</communicationChannelCode>
  3.<communicationValue>?</communicationValue>
</communicationChannel>
  
```

This table describes attributes for the Communication Channel element.

#	Attribute	Definition
1	communicationChannelName	The name of a specific communication channel. Examples: Email, Facebook, Twitter ...
2	communicationChannelCode	Code specifying the type of communication channel. Examples: EMAIL, TELEPHONE ...
3	communicationValue	Text identifying the endpoint for the communication channel. Examples: +46 771793336, <a href="mailto:john@smith.com">john@smith.com</a> ...

#### 2.1.4.7 GEPIR Party: Party Containment

GEPIR Party information for a sub-entity of an information provider.

Please refer to section “**Common: GEPIR Party Information**” for attribute details.

#### 2.1.4.8 Common: GEPIR Party Information

This table describes attributes for GEPIR Party Information element.

Attribute	Definition
-----------	------------

gln	Optional. Global Location Number (GLN), the GS1 key used for the identification of parties and locations
partyName	Optional. The name of the referenced party.
partyRole	Optional. A code that identifies the role of a party in a business transaction.
partyContainment	Optional. GEPIR Party Information for a subentity of an information provider.

## 2.2 Service Functions Explained

### 2.2.1 Search Party By Name (GetPartyByName)

This function is used to discover the GEPIR Party information based on company search criteria specification.

#### 2.2.1.1 Request message

```

<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:gep="http://gepir4.ws.gs1.org">
  <soap:Header>
    <gep:requestHeader>
      1. <requesterGLN?></requesterGLN>
        <cascade?></cascade>
    </gep:requestHeader>
  </soap:Header>
  <soap:Body>
    <gep:getPartyByName>
      <getPartyByName>
        <gepirGetPartyRequestParameters>
          2. <requestedCity?></requestedCity>
          3. <requestedCountry codeListVersion="?"?></requestedCountry>
          4. <requestedLanguage codeListVersion="?"?></requestedLanguage>
          5. <requestedPartyName?></requestedPartyName>
          6. <requestedPostalCode?></requestedPostalCode>
          7. <requestedStreetAddress?></requestedStreetAddress>
        </gepirGetPartyRequestParameters>
      </getPartyByName>
    </gep:getPartyByName>
  </soap:Body>
</soap:Envelope>
  
```

Figure 2-1: GetPartyByName request message

Table describes the required and optional SOAP request message attributes that are applicable for GS1 Sweden GEPIR Web Service API function.

Attributes are referenced by index in the screenshot above.

Table 3-1: GetPartyByName request message attributes

#	Attribute	Definition
1	requestHeader	Mandatory. See section “GEPIR Request Header” for definition.

2	requestedCity	Optional, minimum 3 characters. All or part of the city name by which the GEPIR Party is being searched. Examples: Stockholm, London ...
3	requestedCountry	Mandatory. Two-character ISO 3166-1 code for the country by which the GEPIRParty is being searched. Examples: SE, US, LV ...
4	requestedLanguage	Optional. Specifies the language of the request text fields if other than provided by default by the information provider. Examples: SV, EN ...
5	requestedPartyName	Mandatory. Minimum 3 characters. All or part of the company name by which the GepirParty is being searched. Example: Tarento, GS1 Sweden ...
6	requestedPostalCode	Optional, minimum 3 characters. All or part of the postal code by which the GepirParty is being searched. Example: 1007, SE1234 ...
7	requestedStreetAddress	Optional, minimum 3 characters. All or part of the street address by which the GepirParty is being searched. Example: Main Street 123 ...

**Example message:**

```

<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:gep="http://gepir4.ws.gs1.org/">
  <soap:Header>
    <gep:requestHeader>
      <requesterGLN>7300010001008</requesterGLN>
      <cascade>9</cascade>
    </gep:requestHeader>
  </soap:Header>
  <soap:Body>
    <gep:getPartyByName>
      <getPartyByName>
        <gepirGetPartyRequestParameters>
          <requestedCountry codeListVersion="1">SE</requestedCountry>
          <requestedLanguage
codeListVersion="1">EN</requestedLanguage>
          <requestedPartyName>GS1 Sweden AB</requestedPartyName>
        </gepirGetPartyRequestParameters>
      </getPartyByName>
    </gep:getPartyByName>
  </soap:Body>
</soap:Envelope>

```



### 2.2.1.2 Response message



Figure 3-2: GetPartyByName response message

Table describes the required and optional SOAP request message attributes that are applicable for GS1 Sweden GEPIR Web Service API function.

Attributes are referenced by index in the screenshot above.

Table 3-2: GetPartyByName response message attributes

#	Attribute	Definition
1	responseHeader	See section <a href="#">2.1.3</a> for definition.
2	gepirParty	See section <a href="#">2.1.4.1</a> for definition

### 2.2.1.3 Example

#### SOAP request example message:

```

<soap:Envelope      xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
  xmlns:gep="http://GEPIR4.ws.gsl.org/">
  <soap:Header>
    <gep:requestHeader>
      <requesterGLN>7300010001008</requesterGLN>
      <cascade>9</cascade>
    </gep:requestHeader>
  </soap:Header>
  <soap:Body>
    <gep:getPartyByName>
      <getPartyByName>
        <GEPIRGetPartyRequestParameters>
          <requestedCountry
            codeListVersion="1">SE</requestedCountry>
          <requestedLanguage
            codeListVersion="1">EN</requestedLanguage>
          <requestedPartyName>Henkel</requestedPartyName>
        </GEPIRGetPartyRequestParameters>
      </getPartyByName>
    </gep:getPartyByName>
  </soap:Body>
</soap:Envelope>
    
```

**SOAP Response message:**

```

<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="http://gepir4.ws.gs1.org/"   xmlns:oas="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soapenv:Header>
    <ns1:responseHeader>
      <responderGLN>7300010001008</responderGLN>
      <numberOfHits>11</numberOfHits>
      <gepirReturnCode codeListVersion="1.0">0</gepirReturnCode>
    </ns1:responseHeader>
  </soapenv:Header>
  <soapenv:Body>
    <ns1:getPartyByNameResponse>
      <partyDataLine>
        <gS1CompanyPrefix>735005385</gS1CompanyPrefix>
        <lastChangeDate>2016-09-12T07:34:31Z</lastChangeDate>
        <partyDataLanguage
codeListVersion="1.0">SE</partyDataLanguage>
        <returnCode codeListVersion="1.0">0</returnCode>
        <address>
          <city>Stockholm</city>
          <cityCode/>
          <countryCode codeListVersion="1.0">SE</countryCode>
          <countyCode/>
          <crossStreet/>
          <currencyOfPartyCode
codeListVersion="1.0">SEK</currencyOfPartyCode>
          <languageOfThePartyCode
codeListVersion="1.0">sv</languageOfThePartyCode>
          <name>GS1 Sweden AB</name>
          <pOBoxNumber/>
          <postalCode>111 91</postalCode>
          <provinceCode/>
          <state/>
          <streetAddressOne>Box 1178</streetAddressOne>
          <streetAddressTwo/>
          <streetAddressThree/>
        </address>
        <gS1CompanyPrefixLicensee>
          <gln>7300010000001</gln>
          <partyName>GS1 Sweden AB</partyName>
        </gS1CompanyPrefixLicensee>
        <informationProvider>
          <gln>7300010001008</gln>
          <partyName>GS1 Sweden</partyName>
        </informationProvider>
        <contact>
          <personName>Bo Raattamaa</personName>
          <communicationChannel>
            <communicationChannelCode
codeListVersion="1.0">EMAIL</communicationChannelCode>
          <communicationValue>bo.raattamaa@gs1.se</communicationValue>
          </communicationChannel>
        </communicationChannel>
      </partyDataLine>
    </ns1:getPartyByNameResponse>
  </soapenv:Body>
</soapenv:Envelope>

```

```

        <communicationChannelCode
codeListVersion="1.0">TELEPHONE</communicationChannelCode>

    <communicationValue>+46850101000</communicationValue>
    </communicationChannel>
    </contact>
    </partyDataLine>
    </gepirParty>
    </ns1:getPartyByNameResponse>
    </soapenv:Body>
</soapenv:Envelope>

```

## 2.2.2 Get Prefix Licensee (GetPrefixLicensee)

This function is used to discover the GS1 Company Prefix Licensee information about any GS1 Key that is requested.

### 2.2.2.1 Request Message

```

<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:gep="http://gepir4.ws.gs1.org/">
  <soap:Header>
    <gep:requestHeader>
      1. <requesterGLN?></requesterGLN>
      <cascade?></cascade>
    </gep:requestHeader>
  </soap:Header>
  <soap:Body>
    <gep:getPrefixLicensee>
      <getPrefixLicensee>
        <requestedKeyCode codeListVersion="?"?></requestedKeyCode>
        2. <requestedKeyValue?></requestedKeyValue>
        <requestedLanguage codeListVersion="?"?></requestedLanguage>
      </getPrefixLicensee>
    </gep:getPrefixLicensee>
  </soap:Body>
</soap:Envelope>

```

Figure 2-2: GetPrefixLicensee request message

Table describes the required and optional SOAP request message attributes that are applicable for GS1 Sweden GEPIR Web Service API function.

Attributes are referenced by index in the screenshot above.

Table 3-3: GetPrefixLicensee request attributes

#	Attribute	Definition
1	requestHeader	See section “GEPIR Request Header” for definition.
2	getPrefixLicensee	See section “GEPIR Requested Key” for definition.

#### Example message:

```

<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:gep="http://gepir4.ws.gs1.org/">
  <soap:Header>
    <gep:requestHeader>
      <requesterGLN>7300010001008</requesterGLN>

```

```

        <cascade>9</cascade>
    </gep:requestHeader>
</soap:Header>
<soap:Body>
    <gep:getPrefixLicensee>
        <getPrefixLicensee>
            <getPrefixLicensee>
                <requestedKeyCode>
codeListVersion="1">GTIN</requestedKeyCode>
                <requestedKeyValue>7300010001008</requestedKeyValue>
            </getPrefixLicensee>
        </getPrefixLicensee>
    </gep:getPrefixLicensee>
</soap:Body>
</soap:Envelope>

```

### 2.2.2.2 Response Message

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:gep="http://gepir4.ws.gs1.org/"
  xmlns:oas="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soapenv:Header> 1.
  <soapenv:Body>
    <gep:getPrefixLicenseeResponse>
      <gepirParty>
        <partyDataLine> 2.
      </gepirParty>
    </gep:getPrefixLicenseeResponse>
  </soapenv:Body>
</soapenv:Envelope>

```

Figure 3-4: GetPrefixLicensee response message

Table describes the required and optional SOAP request message attributes that are applicable for GS1 Sweden GEPIR Web Service API function.

Attributes are referenced by index in the screenshot above.

Table 3-4: GetPrefixLicensee response message attributes

#	Attribute	Definition
1	responseHeader	See section <a href="#">2.1.3</a> for definition.
2	gepirParty	See section <a href="#">2.1.4.1</a> for definition

### 2.2.2.3 Example

#### SOAP request example message:

```

<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
  xmlns:gep="http://gepir4.ws.gs1.org/">
  <soap:Header>
    <gep:requestHeader>
      <requesterGLN>7300010001008</requesterGLN>
      <cascade>9</cascade>
    </gep:requestHeader>
  </soap:Header>
  <soap:Body>
    <gep:getPrefixLicensee>

```

```

    <getPrefixLicensee>
      <getPrefixLicensee>
        <requestedKeyCode
codeListVersion="1">GTIN</requestedKeyCode>
        <requestedKeyValue>7300010001008</requestedKeyValue>
      </getPrefixLicensee>
    </getPrefixLicensee>
  </gep:getPrefixLicensee>
</soap:Body>
</soap:Envelope>

```

**SOAP Response message:**

```

<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns1="http://gepir4.ws.gs1.org/" xmlns:oas="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <soapenv:Header>
    <ns1:responseHeader>
      <responderGln>7300010001008</responderGln>
      <numberOfHits>1</numberOfHits>
      <gepirReturnCode codeListVersion="1.0">0</gepirReturnCode>
    </ns1:responseHeader>
  </soapenv:Header>
  <soapenv:Body>
    <ns1:getPrefixLicenseeResponse>
      <gepirParty>
        <partyDataLine>
          <gS1CompanyPrefix>730001</gS1CompanyPrefix>
          <lastChangeDate>2016-03-18T17:13:59Z</lastChangeDate>
          <partyDataLanguage
codeListVersion="1.0">SE</partyDataLanguage>
          <returnCode codeListVersion="1.0">0</returnCode>
          <address>
            <city>Stockholm</city>
            <cityCode/>
            <countryCode codeListVersion="1.0">SE</countryCode>
            <countyCode/>
            <crossStreet/>
            <currencyOfPartyCode
codeListVersion="1.0">SEK</currencyOfPartyCode>
            <languageOfThePartyCode
codeListVersion="1.0">sv</languageOfThePartyCode>
            <name>GS1 Sweden AB</name>
            <pOBoxNumber/>
            <postalCode>111 91</postalCode>
            <provinceCode/>
            <state/>
            <streetAddressOne>Box 1178</streetAddressOne>
            <streetAddressTwo/>
            <streetAddressThree/>
          </address>
          <gepirRequestedKey>
            <requestedKeyCode
codeListVersion="1.0">GTIN</requestedKeyCode>
          <requestedKeyValue>7300010001008</requestedKeyValue>
          <requestedLanguage codeListVersion="1.0"/>
        </gepirRequestedKey>
      </gepirParty>
    </ns1:getPrefixLicenseeResponse>
  </soapenv:Body>
</soapenv:Envelope>

```

```
<gS1CompanyPrefixLicensee>
  <gln>7300010000001</gln>
  <partyName>GS1 Sweden AB</partyName>
</gS1CompanyPrefixLicensee>
<informationProvider>
  <gln>7300010001008</gln>
  <partyName>GS1 Sweden</partyName>
</informationProvider>
<contact>
  <personName>Bo Raattamaa</personName>
  <communicationChannel>
    <communicationChannelCode
codeListVersion="1.0">EMAIL</communicationChannelCode>
  <communicationValue>bo.raattamaa@fakegs1.se</communicationValue>
  </communicationChannel>
</contact>
</partyDataLine>
<partyDataLine>
  <returnCode codeListVersion="1.0">10</returnCode>
  <gepirRequestedKey>
    <requestedKeyCode
codeListVersion="1.0">GTIN</requestedKeyCode>
  <requestedKeyValue>7300010001008</requestedKeyValue>
  <requestedLanguage codeListVersion="1.0"/>
</gepirRequestedKey>
</partyDataLine>
</gepirParty>
</ns1:getPrefixLicenseeResponse>
</soapenv:Body>
</soapenv:Envelope>
```