

Statistics Iceland
Borgartúni 21a
IS-105 Reykjavík
Iceland

Gistiskýrslur **- Schema**

Last updated:
13.2.2017

| | |
|----------------|---|
| Owner | Statistics Iceland |
| Version | 2.00 |
| Author | Sigurður Marísson sigurdur.marisson@stative.is |

Table of Contents

| | | |
|-------|--|----|
| 1 | Introduction..... | 3 |
| 2 | Namespace..... | 4 |
| 3 | Data Description..... | 5 |
| 3.1 | Root..... | 5 |
| 3.2 | hagstofa:gistiskyrsla | 5 |
| 3.2.1 | hagstofa:skilaadili (optional) | 5 |
| 3.2.2 | hagstofa:tengilidur (optional) | 6 |
| 3.2.3 | hagstofa:frambod | 6 |
| 3.2.4 | hagstofa:gistinaetur (optional. No need to fill out if no guests on given time period) | 7 |
| 3.2.5 | hagstofa:tegund_ferdamennsku (optional. No need to fill out if no guests on given time period) | 7 |
| 3.2.6 | hagstofa:medalverd (optional) | 8 |
| 4 | Diagram gistiskyrslur_v02.xsd | 9 |
| 5 | Schema gistiskyrslur_v02.xsd | 10 |
| 6 | Diagram tengilidur.xsd | 12 |
| 7 | Schema tengilidur.xsd..... | 12 |
| 8 | Example XML document based on schema | 14 |
| 9 | Web Services | 16 |
| 9.1 | Introduction | 16 |
| 9.2 | Authentication | 16 |
| 9.3 | Sending data..... | 16 |
| 9.3.1 | Structure of Web Service | 16 |
| 9.3.2 | Validate..... | 17 |
| 9.3.3 | Send | 17 |
| 9.3.4 | Response from Web Service..... | 17 |

1 Introduction

Operators of guesthouses and hotels in Iceland must send monthly reports about the number of overnight stays, on a standardized form to Statistics Iceland. Statistics Iceland manages the gathering of the information.

The most effortless way to deliver the overnight stays reports is by using the XML **SOAP** Web Services provided. We use an XSD Schema to describe how we want the data to be structured.

This document is to show how to use this SOAP Web Service and its XSD schema.

There exists another way to deliver the overnights stay reports via **Vefskilakerfi**, a form based web site for delivering reports to Statistics Iceland. This document does not cover the use of that system.

2 Namespace

The Schema consists of two separate namespaces.

1. <http://hagstofa.is/innsofnun/gistiskyrslur>
2. <http://hagstofa.is/innsofnun/general>

The former is the namespace of the data collection. The latter is the namespace for data provider and contact information. The namespaces are separate because the contact information is possibly used in conjunction with other data collections, and can therefore not belong to a namespace for a specific data collection.

XSD documents containing Schemas:

| Document | Description | Namespace |
|-----------------------|---|---|
| Gistiskyrslur_v02.xsd | Defines the structure of data to be delivered. | http://hagstofa.is/innsofnun/gistiskyrslur |
| tengilidur.xsd | Defines information about the data provider and contacts. | http://hagstofa.is/innsofnun/general |

3 Data Description

XML data is divided into two parts.

- head containing delivery information
- lines containing the data

Bolded elements and attributes are obligatory. Others are optional.

3.1 Root

The root of the document is named *hagstofa.xmlskil_gistiskyrsla* and its definition is like this:

| Attribute | Description | Data Type |
|-----------|--|-----------|
| erTest | Describes that the purpose of the data is for testing only. Optional unless the data is for testing purposes only. | boolean |

| Element | Description | Data Type |
|---------------------|---|--------------|
| gistiskyrsla | Information about the data delivery, for example time periods, data provider and so on. | gistiskyrsla |

3.2 hagstofa:gistiskyrsla

hagstofa:gistiskyrsla is a single report of overnight stays data. The same data provider can deliver reports for several other data providers.

| Attribute | Description | Data Type |
|-----------------------------|---|------------|
| timabil | Time period of the data. Format: YYYYMmm (Here M is a constant) Example: <ul style="list-style-type: none">• 2016M01• 2016M02• 2016M03 (for January, February and March 2016) | string(7) |
| gististadur_audkenni | ID of hotel/guesthouse, as defined in the systems of Statistics Iceland. | integer(6) |
| er_lokad | Is the hotel/guesthouse closed during time period? | Boolean |
| Lokad_athugasemdir | Comments about closing | String |

| Element | Description | Data Type |
|---------------------|--|---------------------|
| skilaadili | Description of data provider. | skilaadili |
| tengilidur | Description of contacts (one or more). | tengilidur |
| frambod | Supply of overnight stays during time period. | frambod |
| gistinaetur | Number of overnight stays during time period. | gistinaetur |
| tegund_ferdamennsku | Type of tourism. | tegund_ferdamennsku |
| medalverd | Average price of overnight stays during time period. | double |

3.2.1 hagstofa:skilaadili (optional)

skilaadili is a general element used in more than one context. It describes an individual provider for which data is delivered. It is extremely important to Statistics Iceland to have information about who to contact if something needs to be clarified.

We emphasize that name is the only obligatory field, but it is very helpful to us to have as much contact information as possible.

Once for each data delivery.

| Element | Description | Data Type |
|--------------|--|-----------|
| Nafn | Name of data provider | String |
| email | Email address of data provider | String |
| simi | Telephone number of data provider | String |
| kennitala | Kennitala for data provider (in Iceland, persons and enterprises are issued a unique identification number which is recorded in the national register and register of enterprises) | String |
| heimilisfang | Physical address of data provider | String |
| postnumer | Postcode of data provider | Integer |
| url | Website of data provider | String |

3.2.2 hagstofa:tengilidur (optional)

tengilidur is a general element used in more than one context. It describes information about a contact. It is possible to register more than one contact for each data provider. It is extremely important for Statistics Iceland to get as detailed information as possible, in case something needs clarifying. For that reason we recommend as much detail as possible, even though most of it is optional.

Once for each contact for each data provider.

| Element | Description | Data Type |
|--------------|--|-----------|
| nafn | Name of contact | String |
| email | Email address of contact | String |
| simi | Telephone number of contact | String |
| kennitala | Kennitala for contact (in Iceland, persons and enterprises are issued a unique identification number which is recorded in the national register and register of enterprises) | String |
| heimilisfang | Physical address of contact | String |
| postnumer | Postcode of contact | Integer |
| url | Website of contact | String |

3.2.3 hagstofa:frambod

frambod is an element composed of several items of information about the supply of overnight stays on reported time period.

Once for each data delivery for each data provider.

| Element | Description | Data Type |
|--------------------------------|---|-----------|
| kennitala_rekstraradila | Kennitala of enterprise (in Iceland, persons and enterprises are issued a unique identification number which is recorded in the national register and register of enterprises). | String |
| fjoldi_herbergja | Number of rooms available for hire on given time period. | integer |
| fjoldi_herbergi_rum | Number of beds available for hire on given time period. | integer |
| fjoldi_ibuda | Number of apartments available for hire on given time period. | integer |

| | | |
|------------------------|---|---------|
| fjöldi_ibuda_rum | Number of beds in apartments available for hire on given time period. | integer |
| fjöldi_sumarhusa | Number of summer cottages available for hire on given time period. | integer |
| fjöldi_sumarhusa_rum | Number of beds in summer cottages available for hire on given time period. | integer |
| fjöldi_utleigt_samtals | Total number of hired rooms, apartments and summer cottages on given time period. | integer |

3.2.4 hagstofa:gistinaetur (optional. No need to fill out if no guests on given time period)

gistinaetur is an element that appears as many times as there are many different nationalities of guests.

| Attribute | Description | Data Type |
|-----------|--|-----------|
| thjoderni | Two characters long nationality code, as defined by ISO-3166 standard. Schema does not verify existence of code in the standard. | string |

| Element | Description | Data Type |
|---------------------|---|-----------|
| tegund_ferdamennsku | Type of tourism. You can choose between three different types of tourism (written specifically like this): <ul style="list-style-type: none"> • einkaerindi • vidskiptaerindi • radstefna (where einkaerindi is <i>private</i> , vidskiptaerindi is <i>business</i> and radstefna is <i>conference</i>) | string |
| Fjöldi_gesta | Number of guests on given time period for given type of tourism. | integer |
| Fjöldi_gistinatta | Number of overnight stays on given time period for given type of tourism. | integer |
| medalverd | Average price for overnight stay for given time period for given type of tourism. | double |

3.2.5 hagstofa:tegund_ferdamennsku (optional. No need to fill out if no guests on given time period)

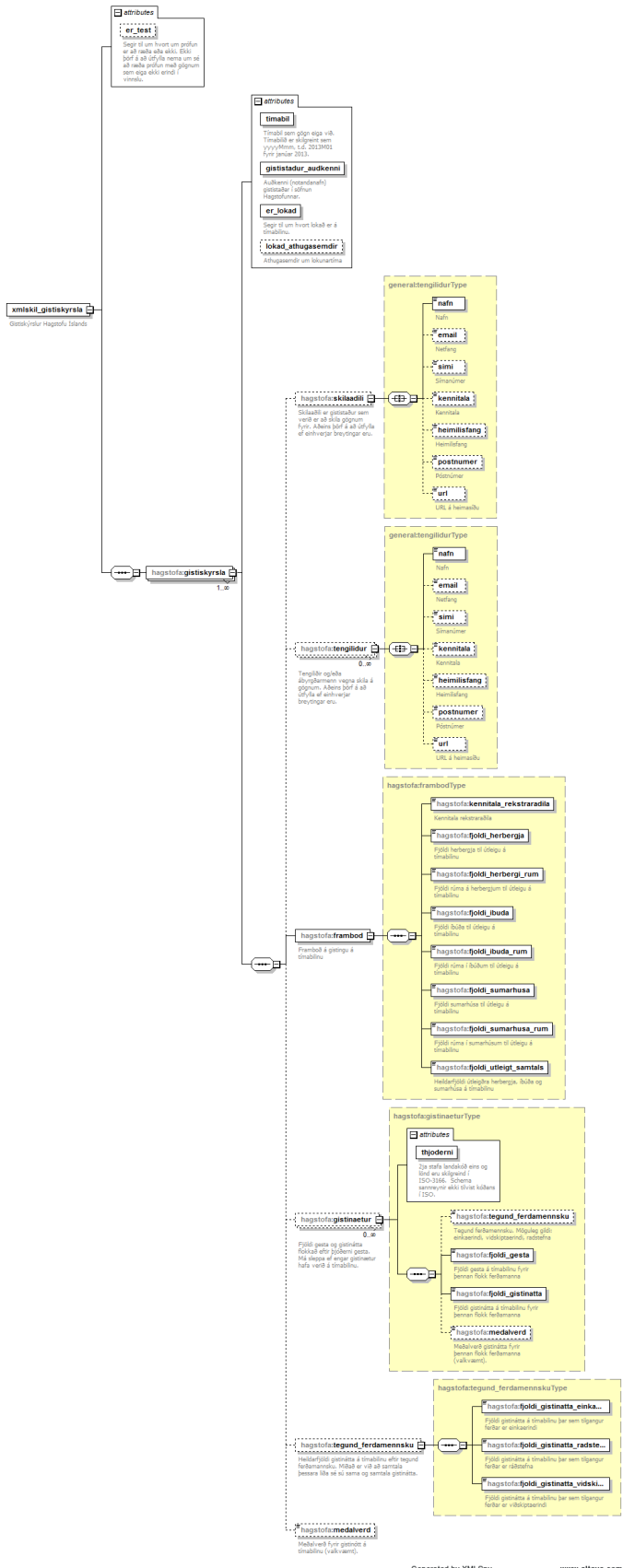
Here is a summary of number of overnight stays by type of tourism.

| Element | Description | Data Type |
|-----------------------------------|--|-----------|
| fjöldi_gistinatta_einkaerindi | Total number of overnight stays on given time period where type of tourism is private. | integer |
| fjöldi_gistinatta_radstefna | Total number of over night stays on given time period where type of tourism is conference. | integer |
| fjöldi_gistinatta_vidskiptaerindi | Total number of over night stays on given time period where type of tourism is business. | integer |

3.2.6 hagstofa:medalverd (optional)

Here is information on average price of overnight stay.

4 Diagram gistiskyrslur_v02.xsd



Generated by XMLSpy www.altova.com

5 Schema gistiskýrslur_v02.xsd

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Gistiskýrslur Hagstofu Íslands -->
<xs:schema xmlns:hagstofa="http://hagstofa.is/innsofnun/gistiskýrslur" xmlns:general="http://hagstofa.is/innsofnun/general"
xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:ns1="http://hagstofa.is/innsofnun/gistiskýrslur" targetNamespace="http://hagstofa.is/innsofnun/gistiskýrslur"
elementFormDefault="qualified" attributeFormDefault="unqualified">
<xs:import namespace="http://hagstofa.is/innsofnun/general" schemaLocation="tengiliður.xsd"/>
<xs:complexType name="frambodType" id="frambodType">
<xs:sequence>
<xs:element name="kennitala_rekstraradila" type="general:kennitalaType">
<xs:annotation>
<xs:documentation>Kennitala rekstraraðila</xs:documentation>
</xs:annotation>
</xs:element>
<xs:element name="fjoldi_herbergja" type="xs:integer">
<xs:annotation>
<xs:documentation>Fjöldi herbergja til útleigu á tímabilinu</xs:documentation>
</xs:annotation>
</xs:element>
<xs:element name="fjoldi_herbergi_rum" type="xs:integer">
<xs:annotation>
<xs:documentation>Fjöldi rúma á herbergjum til útleigu á tímabilinu</xs:documentation>
</xs:annotation>
</xs:element>
<xs:element name="fjoldi_ibuda" type="xs:integer">
<xs:annotation>
<xs:documentation>Fjöldi íbúða til útleigu á tímabilinu</xs:documentation>
</xs:annotation>
</xs:element>
<xs:element name="fjoldi_ibuda_rum" type="xs:integer">
<xs:annotation>
<xs:documentation>Fjöldi rúma í íbúðum til útleigu á tímabilinu</xs:documentation>
</xs:annotation>
</xs:element>
<xs:element name="fjoldi_sumarhusa" type="xs:integer">
<xs:annotation>
<xs:documentation>Fjöldi sumarhúsa til útleigu á tímabilinu</xs:documentation>
</xs:annotation>
</xs:element>
<xs:element name="fjoldi_sumarhusa_rum" type="xs:integer">
<xs:annotation>
<xs:documentation>Fjöldi rúma í sumarhúsum til útleigu á tímabilinu</xs:documentation>
</xs:annotation>
</xs:element>
<xs:element name="fjoldi_uteigt_samtals" type="xs:integer">
<xs:annotation>
<xs:documentation>Heildarfjöldi útleigðra herbergja, íbúða og sumarhúsa á tímabilinu</xs:documentation>
</xs:annotation>
</xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="gistinaeturType" id="gistinaeturType">
<xs:sequence>
<xs:element name="tegund_ferðamennsku" minOccurs="0">
<xs:annotation>
<xs:documentation>Tegund ferðamennsku. Möguleg gildi: einkaerindi, vískaerindi, radstefna</xs:documentation>
</xs:annotation>
<xs:simpleType>
<xs:restriction base="xs:string">
<xs:maxLength value="20"/>
<xs:enumeration value="einkaerindi"/>
<xs:enumeration value="vískaerindi"/>
<xs:enumeration value="radstefna"/>
</xs:restriction>
</xs:simpleType>
</xs:element>
<xs:element name="fjoldi_gesta" type="xs:integer">
<xs:annotation>
<xs:documentation>Fjöldi gesta á tímabilinu fyrir þennan flokk ferðamanna</xs:documentation>
</xs:annotation>
</xs:element>
<xs:element name="fjoldi_gistinatta" type="xs:integer">
<xs:annotation>
<xs:documentation>Fjöldi gistinátta á tímabilinu fyrir þennan flokk ferðamanna</xs:documentation>
</xs:annotation>
</xs:element>
<xs:element name="medalverd" type="xs:decimal" minOccurs="0">
<xs:annotation>
<xs:documentation>Meðalverð gistinátta fyrir þennan flokk ferðamanna (valkvæmt).</xs:documentation>
</xs:annotation>
</xs:element>
</xs:sequence>
<xs:attribute name="thjoderni" use="required">
```

```

<xs:annotation>
  <xs:documentation>2ja stafa landakóð eins og lönd eru skilgreind í ISO-3166. Schema sannreynir ekki tilvist kóðans í ISO.</xs:documentation>
</xs:annotation>
<xs:simpleType>
  <xs:restriction base="xs:string">
    <xs:maxLength value="2"/>
    <xs:minLength value="2"/>
    <xs:pattern value="[A-Z][A-Z]"/>
  </xs:restriction>
</xs:simpleType>
</xs:attribute>
</xs:complexType>
<xs:complexType name="tegund_ferdamennskuType" id="tegund_ferdamennskuType">
  <xs:sequence>
    <xs:element name="fjoldi_gistinatta_einkaerindi" type="xs:integer">
      <xs:annotation>
        <xs:documentation>Fjöldi gistinátta á tímabilinu þar sem tilgangur ferðar er einkaerindi</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="fjoldi_gistinatta_radstefna" type="xs:integer">
      <xs:annotation>
        <xs:documentation>Fjöldi gistinátta á tímabilinu þar sem tilgangur ferðar er ráðstefna</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="fjoldi_gistinatta_vidskiptaerindi" type="xs:integer">
      <xs:annotation>
        <xs:documentation>Fjöldi gistinátta á tímabilinu þar sem tilgangur ferðar er viðskiptaerindi</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:element name="xmlskil_gistiskyrsla">
  <xs:annotation>
    <xs:documentation>Gistiskýrslur Hagstofu Íslands</xs:documentation>
  </xs:annotation>
  <xs:complexType id="xmlskil_gistiskyrsla">
    <xs:sequence minOccurs="1">
      <xs:element name="gistiskyrsla" maxOccurs="unbounded">
        <xs:complexType>
          <xs:sequence maxOccurs="1">
            <xs:element name="skilaadili" type="general:tengiliðurType" minOccurs="0" maxOccurs="1">
              <xs:annotation>
                <xs:documentation>Skilaaðili er gististaður sem verið er að skila gögnum fyrir. Aðeins þörf á að útfylla ef einhverjar breytingar eru.</xs:documentation>
              </xs:annotation>
            </xs:element>
            <xs:element name="tengiliður" type="general:tengiliðurType" minOccurs="0" maxOccurs="unbounded">
              <xs:annotation>
                <xs:documentation>Tengiliðir og/eða ábyrgðarmenn vegna skila á gögnum. Aðeins þörf á að útfylla ef einhverjar breytingar eru.</xs:documentation>
              </xs:annotation>
            </xs:element>
            <xs:element name="framboð" type="hagstofa:framboðType" minOccurs="1" maxOccurs="1">
              <xs:annotation>
                <xs:documentation>Framboð á gistingu á tímabilinu</xs:documentation>
              </xs:annotation>
            </xs:element>
            <xs:element name="gistinaetur" type="hagstofa:gistinaeturType" minOccurs="0" maxOccurs="unbounded">
              <xs:annotation>
                <xs:documentation>Fjöldi gesta og gistinátta flokkað eftir þjóðerni gesta. Má sleppa ef engar gistinætur hafa verið á tímabilinu.</xs:documentation>
              </xs:annotation>
            </xs:element>
            <xs:element name="tegund_ferdamennsku" type="hagstofa:tegund_ferdamennskuType" minOccurs="0" maxOccurs="1">
              <xs:annotation>
                <xs:documentation>Heildarfjöldi gistinátta á tímabilinu eftir tegund ferðamannsku. Miðað er við að samtala þessara liða sé sú sama og samtala gistinátta.</xs:documentation>
              </xs:annotation>
            </xs:element>
            <xs:element name="medalverd" type="xs:decimal" minOccurs="0" maxOccurs="1">
              <xs:annotation>
                <xs:documentation>Meðalverð fyrir gistinótt á tímabilinu (valkæmt).</xs:documentation>
              </xs:annotation>
            </xs:element>
          </xs:sequence>
          <xs:attribute name="timabil" use="required">
            <xs:annotation>
              <xs:documentation>Tímabil sem gögn eiga við. Tímabilið er skilgreint sem yyyyMmm, t.d. 2013M01 fyrir janúar 2013.</xs:documentation>
            </xs:annotation>
          </xs:attribute>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
  <xs:restriction base="xs:string">
    <xs:maxLength value="7"/>
    <xs:pattern value="[1-2][0-9][0-9]M[0-1][0-9]"/>
  </xs:restriction>

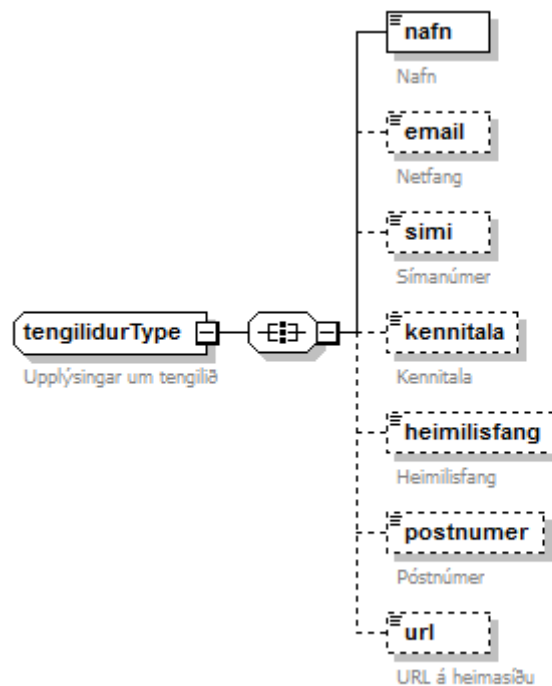
```

```

        </xs:restriction>
      </xs:simpleType>
    </xs:attribute>
    <xs:attribute name="gististadur_audkenni" use="required">
      <xs:annotation>
        <xs:documentation>Auðkenni (notandanafn) gististaðar í söfnun Hagstofunnar.</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:integer"/>
      </xs:simpleType>
    </xs:attribute>
    <xs:attribute name="er_lokad" type="xs:boolean" use="required">
      <xs:annotation>
        <xs:documentation>Segir til um hvort lokað er á tímabilinu.</xs:documentation>
      </xs:annotation>
    </xs:attribute>
    <xs:attribute name="lokad_athugasemdir" use="optional">
      <xs:annotation>
        <xs:documentation>Athugasemdir um lokunartíma</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="255"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:attribute>
  </xs:complexType>
</xs:element>
</xs:sequence>
<xs:attribute name="erTest" type="xs:boolean"/>
</xs:complexType>
</xs:element>
</xs:schema>

```

6 Diagram tengilidur.xsd



Generated by XMLSpy

www.altova.com

7 Schema tengilidur.xsd

```

<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns="http://hagstofa.is/innsofnun/general" xmlns:mstns="http://hagstofa.is/innsofnun/general"
  xmlns:xs="http://www.w3.org/2001/XMLSchema" targetNamespace="http://hagstofa.is/innsofnun/general"
  elementFormDefault="qualified" version="0.1">
  <xs:simpleType name="kennitalaType">
    <xs:annotation>
      <xs:documentation>Kennitala</xs:documentation>

```

```

</xs:annotation>
<xs:restriction base="xs:string">
  <xs:maxLength value="11"/>
  <xs:pattern value="[0-9]{6}-*[0-9]{3}[0,8,9]"/>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="emailType">
  <xs:annotation>
    <xs:documentation>Tölvupóstfang</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:maxLength value="100"/>
    <xs:pattern value="[A-Za-z0-9._%~]+@[A-Za-z0-9.-]+\.[A-Za-z]{2,4}"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="simiType">
  <xs:annotation>
    <xs:documentation>Sími</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:maxLength value="20"/>
    <xs:pattern value="(+[0-9]{3}-*\s*)*[0-9]{3}-*\s*[0-9]{4}"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="postnumerType">
  <xs:annotation>
    <xs:documentation>Póstnúmer</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:unsignedInt">
    <xs:minInclusive value="100"/>
    <xs:maxExclusive value="999"/>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="tengilidurType" id="hs.innsofnun.general.tengilidurType">
  <xs:annotation>
    <xs:documentation>UppDescriptionar um tengilið</xs:documentation>
  </xs:annotation>
  <xs:all>
    <xs:element name="nafn" id="hs.innsofnun.general.tengilidur.nafn" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Nafn</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="100"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="email" type="emailType" id="hs.innsofnun.general.tengilidur.email" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Netfang</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="simi" type="simiType" id="hs.innsofnun.general.tengilidur.simi" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Símanúmer</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="kennitala" type="kennitalaType" id="hs.innsofnun.general.tengilidur.kennitala" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Kennitala</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heimilisfang" id="hs.innsofnun.general.tengilidur.heimilisfang" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Heimilisfang</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="100"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="postnumer" type="postnumerType" id="hs.innsofnun.general.tengilidur.postnumer" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Póstnúmer</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="url" id="hs.innsofnun.general.tengilidur.url" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>URL á heimasíðu</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">

```

```

    <xs:maxLength value="100"/>
  </xs:restriction>
</xs:simpleType>
</xs:element>
</xs:all>
</xs:complexType>
</xs:schema>

```

8 Example XML document based on schema

This is an example of how an XML document based on the template might look like. In the document all possibilities are shown, some of them optional. In this example the data provider is returning a report for two separate establishments (with different *gististadur_aukenni*).

```

<?xml version="1.0" encoding="UTF-8"?>
<!--Þetta er DEMO skjal ætlað til að sýna mögulega notkun á skemanu gistiskýrslur_v02.xsd-->
<hagstofa.xmlskil_gistiskýrsla xsi:schemaLocation="http://hagstofa.is/innsofnun/gistiskýrslur
http://hagstofa.is/schema/innsofnun/gistiskýrslur/v02/gistiskýrslur_v02.xsd" xmlns:general="http://hagstofa.is/innsofnun/general"
xmlns:hagstofa="http://hagstofa.is/innsofnun/gistiskýrslur" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
erTest="true">
  <hagstofa.gistiskýrsla timabil="2013M01" gististadur_aukenni="1234567" er_lokad="false" lokad_athugasemdir="Alltaf opið,
nema þegar lokað er">
    <hagstofa.skilaadili>
      <general:nafn>Himnavist</general:nafn>
      <general:email>himnavist@himnavist.is</general:email>
      <general:simi>1234567</general:simi>
      <general:kennitala>999999-9999</general:kennitala>
      <general:heimilisfang>Á himnum</general:heimilisfang>
      <general:postnumber>100</general:postnumber>
      <general:url>http://himnavist.org</general:url>
    </hagstofa.skilaadili>
    <hagstofa.tengiliður>
      <general:nafn>Jón Jón Jónsson</general:nafn>
      <general:email>jon.jonsson@himnavist.org</general:email>
      <general:simi>1234567</general:simi>
      <general:kennitala>9999999999</general:kennitala>
      <general:heimilisfang>Á himnum</general:heimilisfang>
      <general:postnumber>100</general:postnumber>
      <general:url>http://himnavist.org</general:url>
    </hagstofa.tengiliður>
    <hagstofa.tengiliður>
      <general:nafn>Guðmundur Jón Jónsson</general:nafn>
      <general:email>gudmundur.jonsson@himnavist.org</general:email>
      <general:simi>1234567</general:simi>
      <general:kennitala>9999999999</general:kennitala>
      <general:heimilisfang>Á himnum</general:heimilisfang>
      <general:postnumber>100</general:postnumber>
      <general:url>http://himnavist.org</general:url>
    </hagstofa.tengiliður>
    <hagstofa.frambod>
      <hagstofa:kennitala_rekstraradila>9999999999</hagstofa:kennitala_rekstraradila>
      <hagstofa:fjoldi_herbergja>1</hagstofa:fjoldi_herbergja>
      <hagstofa:fjoldi_herbergi_rum>2</hagstofa:fjoldi_herbergi_rum>
      <hagstofa:fjoldi_ibuda>2</hagstofa:fjoldi_ibuda>
      <hagstofa:fjoldi_ibuda_rum>4</hagstofa:fjoldi_ibuda_rum>
      <hagstofa:fjoldi_sumarhusa>3</hagstofa:fjoldi_sumarhusa>
      <hagstofa:fjoldi_sumarhusa_rum>6</hagstofa:fjoldi_sumarhusa_rum>
      <hagstofa:fjoldi_utleigt_samtals>4</hagstofa:fjoldi_utleigt_samtals>
    </hagstofa.frambod>
    <hagstofa.gistinaetur thjoderni="IS">
      <hagstofa.tegund_ferdamennsku>radstefna</hagstofa.tegund_ferdamennsku>
      <hagstofa:fjoldi_gesta>1</hagstofa:fjoldi_gesta>
      <hagstofa:fjoldi_gistinatta>2</hagstofa:fjoldi_gistinatta>
      <hagstofa:medalverd>0</hagstofa:medalverd>
    </hagstofa.gistinaetur>
    <hagstofa.gistinaetur thjoderni="DK">
      <hagstofa.tegund_ferdamennsku>einkaerindi</hagstofa.tegund_ferdamennsku>
      <hagstofa:fjoldi_gesta>2</hagstofa:fjoldi_gesta>
      <hagstofa:fjoldi_gistinatta>4</hagstofa:fjoldi_gistinatta>
      <hagstofa:medalverd>0</hagstofa:medalverd>
    </hagstofa.gistinaetur>
    <hagstofa.gistinaetur thjoderni="FO">
      <hagstofa.tegund_ferdamennsku>einkaerindi</hagstofa.tegund_ferdamennsku>
      <hagstofa:fjoldi_gesta>2</hagstofa:fjoldi_gesta>
      <hagstofa:fjoldi_gistinatta>4</hagstofa:fjoldi_gistinatta>
      <hagstofa:medalverd>0</hagstofa:medalverd>
    </hagstofa.gistinaetur>
    <hagstofa.gistinaetur thjoderni="SE">
      <hagstofa.tegund_ferdamennsku>einkaerindi</hagstofa.tegund_ferdamennsku>
      <hagstofa:fjoldi_gesta>2</hagstofa:fjoldi_gesta>

```

<hagstofa:fjoldi_gistinatta>4</hagstofa:fjoldi_gistinatta>
<hagstofa:medalverd>0</hagstofa:medalverd>
</hagstofa:gistinaetur>
<hagstofa:tegund_ferdamennsku>
<hagstofa:fjoldi_gistinatta_einkaerindi>12</hagstofa:fjoldi_gistinatta_einkaerindi>
<hagstofa:fjoldi_gistinatta_radstefna>0</hagstofa:fjoldi_gistinatta_radstefna>
<hagstofa:fjoldi_gistinatta_vidskiptaerindi>2</hagstofa:fjoldi_gistinatta_vidskiptaerindi>
</hagstofa:tegund_ferdamennsku>
<hagstofa:medalverd>1000.0</hagstofa:medalverd>
</hagstofa:gistiskyrsla>
<hagstofa:gistiskyrsla timabil="2013M01" gististadur_audkenni="2345678" er_lokad="false" lokad_athugasemdir="Alltaf opið,
nema þegar lokað er">
<hagstofa:skilaadili>
<general:nafn>Hótel Gisting</general:nafn>
<general:email>hotelgisting@hotelgisting.is</general:email>
<general:simi>1234567</general:simi>
<general:kennitala>9999999999</general:kennitala>
<general:heimilisfang>Gistivöllum 99</general:heimilisfang>
<general:postnumber>100</general:postnumber>
<general:url>http://hotelgisting.is</general:url>
</hagstofa:skilaadili>
<hagstofa:tengiliður>
<general:nafn>Guðmundur Guðmundsson</general:nafn>
<general:email>gudmundur@hotelgisting.is</general:email>
<general:simi>1234567</general:simi>
<general:kennitala>9999999999</general:kennitala>
<general:heimilisfang>Gistivöllum 101</general:heimilisfang>
<general:postnumber>100</general:postnumber>
<general:url>http://hotelgisting.is</general:url>
</hagstofa:tengiliður>
<hagstofa:tengiliður>
<general:nafn>Guðmunda Guðmundsdóttir</general:nafn>
<general:email>gudmunda@hotelgisting.is</general:email>
<general:simi>1234567</general:simi>
<general:kennitala>9999999999</general:kennitala>
<general:heimilisfang>Gistivöllum 103</general:heimilisfang>
<general:postnumber>100</general:postnumber>
<general:url>http://hotelgisting.is</general:url>
</hagstofa:tengiliður>
<hagstofa:framboð>
<hagstofa:kennitala_rekstraradila>8888888888</hagstofa:kennitala_rekstraradila>
<hagstofa:fjoldi_herbergja>10</hagstofa:fjoldi_herbergja>
<hagstofa:fjoldi_herbergi_rum>20</hagstofa:fjoldi_herbergi_rum>
<hagstofa:fjoldi_ibuda>5</hagstofa:fjoldi_ibuda>
<hagstofa:fjoldi_ibuda_rum>10</hagstofa:fjoldi_ibuda_rum>
<hagstofa:fjoldi_sumarhusa>0</hagstofa:fjoldi_sumarhusa>
<hagstofa:fjoldi_sumarhusa_rum>0</hagstofa:fjoldi_sumarhusa_rum>
<hagstofa:fjoldi_utleigt_samtals>0</hagstofa:fjoldi_utleigt_samtals>
</hagstofa:framboð>
<hagstofa:gistinaetur thjoderni="US">
<hagstofa:tegund_ferdamennsku>radstefna</hagstofa:tegund_ferdamennsku>
<hagstofa:fjoldi_gesta>50</hagstofa:fjoldi_gesta>
<hagstofa:fjoldi_gistinatta>100</hagstofa:fjoldi_gistinatta>
<hagstofa:medalverd>0</hagstofa:medalverd>
</hagstofa:gistinaetur>
<hagstofa:gistinaetur thjoderni="DE">
<hagstofa:tegund_ferdamennsku>vidskiptaerindi</hagstofa:tegund_ferdamennsku>
<hagstofa:fjoldi_gesta>10</hagstofa:fjoldi_gesta>
<hagstofa:fjoldi_gistinatta>20</hagstofa:fjoldi_gistinatta>
<hagstofa:medalverd>0</hagstofa:medalverd>
</hagstofa:gistinaetur>
<hagstofa:tegund_ferdamennsku>
<hagstofa:fjoldi_gistinatta_einkaerindi>0</hagstofa:fjoldi_gistinatta_einkaerindi>
<hagstofa:fjoldi_gistinatta_radstefna>120</hagstofa:fjoldi_gistinatta_radstefna>
<hagstofa:fjoldi_gistinatta_vidskiptaerindi>0</hagstofa:fjoldi_gistinatta_vidskiptaerindi>
</hagstofa:tegund_ferdamennsku>
<hagstofa:medalverd>1100.0</hagstofa:medalverd>
</hagstofa:gistiskyrsla>
</hagstofa:xmlskil_gistiskyrsla>

9 Web Services

9.1 Introduction

Data delivery will be through the **SOAP** Web Service, which is hosted at Statistics Iceland. All traffic to and from the service goes through https protocol, using encryption by server certificate. This is a "one-way" SSL. Statistics Iceland does not require a client certificate from the user. User authentication is by use of a GetAccessKey Web Method.

9.2 Authentication

The Web Service that receives data is access controlled. Users of the service need to have a username and password provided by Statistics Iceland.

Authentication is done by calling a separate Web Service **metadata**. The Method GetAccessKey is called with username and password as input. If user is authenticated the service responds by returning an AccessKey. This AccessKey is then used as a parameter when calling the web service that receives data.

The metadata Web Service is located at:

- **asmx:** <https://services.hagstofa.is/webservices/metadata.asmx>
- **wSDL:** <https://services.hagstofa.is/webservices/metadata.asmx?wsdl>

| GetAccessKey(string UserName, string Password) | | |
|--|---|---|
| Description | Takes in as parameters UserName and Password of the user wishing to authenticate, and returns the unique string (AccessKey) used as authentication in subsequent call to the data Web Services. You need to get a new AccessKey before each call to the data Web Service. | |
| Parameters | Data Type | Description |
| UserName | String | UserName as defined by Statistics Iceland |
| Password | String | Password as defined by Statistics Iceland |

9.3 Sending data

It is assumed that data will be sent by Web Service hosted by Statistics Iceland at this address:

https://services.hagstofa.is/wsdL.aspx?service=qistiskyrslur_v02

All data will be validated against a schema. Schema is available at this address:

http://hagstofa.is/schema/Innsofnun/qistiskyrslur/v02/qistiskyrslur_v02.xsd

A Test-Console is available at this address:

http://hagstofa.is/schema/Innsofnun/Gistiskyrslur_v02-TestConsole.zip

It is essential that the XML document includes a correct reference to the schema in the root element (like shown in the [example](#) above):

```
xsi:schemaLocation="http://hagstofa.is/innsofnun/gistiskyrslur  
http://hagstofa.is/schema/innsofnun/gistiskyrslur/v02/gistiskyrslur_v02.xsd"
```

9.3.1 Structure of Web Service

The Web Service has two methods, **Validate** and **Send**. Both take in as parameters xml and AccessKey.

The purpose of the **Validate** method is to provide an easy way to validate XML data against its XSD schema, without sending the data. Statistics Iceland does not store the data but logs all communication.

The purpose of the **Send** method is to validate and send the XML data. The data is always validated against XSD Schema before sending and the data is then stored on our internal data server.

Logging is the same for both methods. All communication is logged, as well as the response. Data contents are never logged.

9.3.2 Validate

| Validate(string AccessKey, string xml) | | |
|--|---|--|
| Description | Method takes in as parameters xml and AccessKey and returns an XML answer . | |
| Parameters | Data Type | Description |
| AccessKey | String | Valid AccessKey obtained by calling the GetAccessKey Medtod |
| xml | String | XML needs to be defined according to schema http://hagstofa.is/schema/innsstofnun/gistiskyrslur/v02/gistiskyrslur_v02.xsd and it needs to have a correct reference to schema location in root element like this: <code>xsi:schemaLocation="http://hagstofa.is/innsstofnun/gistiskyrslur http://hagstofa.is/schema/innsstofnun/gistiskyrslur/v02/gistiskyrslur_v02.xsd"</code> . |

9.3.3 Send

| Send(string AccessKey, string xml) | | |
|------------------------------------|---|--|
| Description | Method takes in as parameters xml and AccessKey and returns an XML answer . | |
| Parameters | Data Type | Description |
| AccessKey | String | Valid AccessKey obtained by calling the GetAccessKey Medtod |
| xml | String | XML needs to be defined according to schema http://hagstofa.is/schema/innsstofnun/gistiskyrslur/v02/gistiskyrslur_v02.xsd and it needs to have a correct reference to schema location in root element like this: <code>xsi:schemaLocation="http://hagstofa.is/innsstofnun/gistiskyrslur http://hagstofa.is/schema/innsstofnun/gistiskyrslur/v02/gistiskyrslur_v02.xsd"</code> . |

9.3.4 Response from Web Service

Both methods respond with an XML response that is structured like this:

```
<NewDataSet>
  <XmlResult>
    <Result>success or warnings or error, depends on result</Result>
    <Message>Message</Message>
    <Info>
      <InternalID>Optional, only if send</InternalID>
      <ReceivedTime>2016-03-03T10:49:14.0726681+00:00</ReceivedTime>
    </Info>
  </XmlResult>
</NewDataSet>
```

Result: Result of validation/send.

Possible values:

- Success: Data is well formed and it validates correctly against schema. Transmission succeeded.
- Warnings: Warning, for example xml string is empty or does not contain data.
- Error: Error in transmission, XML does not validate against schema, or there was a problem when storing data on server.

Message: String with information, used in conjunction with Error and Warnings. Detailed description of all exceptions if there are any.

Info: A class that holds information about the transmission.
Includes two data fields:

- ReceivedTime: Date and time when transmission received. Optional. Only when data is sent.
- InternalID: Internal ID of the XML file for in-house use.

If Web Service does not respond or other errors occur, we recommend trying to send later, perhaps 1-2 hrs. later.

If Web Service has timeout problems because of large dataset, there is nothing that prevents splitting the data up into smaller pieces and sent.