

# **Interface specification**

for the flood information and management system  
(HWIMS)

of the National Flood Centre (LHWZ)

**here specifically:**  
**Query of track values (time series)**

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## 1 Introduction

With the commissioning of the new software HWIMS (Flood Information and Management System) in 2015 by the State Flood Centre, the web service interface for querying trace values (time series) has also changed.

This interface description is limited to frequently used query functions in order to present them as clearly and simply as possible.

## 2 User group

The description is intended for all "system users" permanently set up in HWIMS.

## 3 Prerequisite

The prerequisite for using the web service interface is that the specialist administrator of the LHWZ Sachsen has created the user and assigned him the appropriate rights.

## 4 Query options

The web service interface can be used to retrieve all data for which the user has the corresponding rights. This includes, for example, master data of stations or time series values of various resolutions and physical quantities. The result of such a query is returned in an xml structure. In the HWIMS system, time series are referred to as tracks.

*It should be noted that all time series values retrieved with this interface are unchecked raw data.*

## 5 Technical basics

### 5.1 Standards

The web service was developed with the standards

- **SOAP** (Simple Object Access Protocol) and
- **WSDL** (Web Services Description Language )

is implemented. The underlying structure and the possible functions are described in the corresponding WSDL.

*It should be noted that not all functions described therein are available to all users, as this depends on the rights granted.*

A user who wants to use the web service described here should have basic knowledge in the use of SOAP web services. For quick testing of a query, the free tool SoapUI should be mentioned here.

### 5.2 Authentication

Authentication is required to access the web service. Authentication is performed using HTTP Basic Authentication.

### 5.3 Restrictions

The difference between the beginning and the end of the period to be recalled shall not exceed 100 days.



## 5.4 Query functions

### 5.4.1 Recall of values of a track (time series)

#### 5.4.1.1 Central data

<b>Function Designation</b>	supplyValuesToTrack2
<b>verbal description</b>	With this function values of <b>exactly one track</b> (time series) can be retrieved. Values here can be measured values or values aggregated from them. All values are unchecked raw data.
<b>Address</b>	<a href="https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/spurwerte-ws">https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/spurwerte-ws</a>
<b>WSDL</b>	<a href="https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/spurwerte-ws?wsdl">https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/spurwerte-ws?wsdl</a>

#### 5.4.1.2 Query parameters

Parameter	Data type	Description	Examples
measuring station code	String	Code number of the station to be queried see [1*]	501060 (for Dresden gauge)
measuring stationType	String	Choice between level and ombrometer	Level Ombrometer
PhysicalSize	String	Determines which physical quantity is queried	W (for water level) Q (for flow rate) P (for precipitation)
trackType	String	identifies the desired track (time series). This also indirectly determines the time interval (resolution) of the values.	for possible options see table below See [*2]
startTime	Date	Specifies the point in time from which the values are to be supplied.  The information is always given in <b>CET</b> (Central European Time), i.e. without a daylight saving time shift.	2016-09-01T00:00:00
endTime	Date	Specifies the time by which the values are to be delivered.  The information is always given in <b>CET</b> (Central European Time), i.e. without a daylight saving time shift.	2016-09-01T01:00:00



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statistical time data	Boolean	see explanation below See [*3]	true false
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### To [\*1]

The lists of the stations (ombrometers and gauges) including their identification numbers can be found on the page

<https://www.umwelt.sachsen.de/umwelt/infosysteme/lhwz/messnetze.html>.

If necessary, further information will be sent to the system users individually.

### To [\*2]

Possible track types are:

Track type	phys. Size	Time in terval	Comments
Destination	W	15 min	Measured data (date values) of the water level in cm
Target-TW-1H	W	1 h	aggregated measured data (date values) of the water level in cm
Target MW-1T	W	1 day	aggregated measurement data (daily mean) of the water level in cm See also [*3]
Destination	Q	15 min	Calculated flow rate values (term values) in m <sup>3</sup> /s. The calculation is usually carried out according to the Wechmann function on the basis of W/Q relationships.
Target-TW-1H	Q	1 h	aggregated flow rate values (forward values) in m <sup>3</sup> /s
Target MW-1T	Q	1 day	aggregated flow values (daily mean) in m <sup>3</sup> /s See also [*3]
Destination	P	1 h	aggregated precipitation values (hourly totals) in mm
Target-Sum-1T-7-7	P	1 day	aggregated precipitation values (daily totals) in mm See also [*3]

### To [\*3]

The switch parameter "**Statistical time data**" causes a modified output of the time data for **daily values**. This distinction was inserted in order to be able to deal with different views (technical, statistical).

The parameter has **no influence** on **hour or 15min values**. There are the two options true or false.



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**true:**

The time stamp of the value always contains only the date, but no indication of the time. The value refers to the specified day for the **water level** and **flow rate**.

Since the aggregation interval for **precipitation** is from 7 a.m. (CET) of the previous day to 7 a.m. (CET) of the current day, the specified value for this option refers to the previous day.

**false:**

The timestamp of the value always contains the date and time. The end of the interval is always specified as the time.

Since the aggregation interval for the water level/flow rate ends at 24:00, and 24:00 is not permissible from a technical point of view, the value is set to 0 o'clock on the following day instead.

The following table shows some examples and their effects on the output.

statistical time data	Track type	for phys. Size	Output example	Comments
true	Target MW-1T	W or Q	2016-09-01	Daily mean value from 01.09.2016
false	Target MW-1T	W or Q	2016-09-01T00:00:00+01:00	Daily mean value from 31.08.2016
true	Target-Sum-1T-7-7	P	2016-09-01	Daily sum starting from 07 o'clock of 01.09.2016 until 07 o'clock of 02.09.2016
false	Target-Sum-1T-7-7	P	2016-09-01T07:00:00+01:00	Daily sum starting from 07 o'clock of the 31.08.2016 until 07 o'clock of 01.09.2016

### 5.4.1.3 Example query for water level (request)

The following example shows a typical query of water level term values in 15 min intervals.

see sample file: [http://spurwerte.webservice.hwims.\\_systems\\_hms.com/](http://spurwerte.webservice.hwims._systems_hms.com/) `<defineValuesToTrack? (Level 15min) Request.xml`  
`<soapenv:Envelope xmlns:track="http://spurwerte.webservice.hwims._systems_hms.com/" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">`

### 5.4.1.4 Example response for water level (Response)

The following xml structure shows the system's response to the above query:

```
<track:supplyValuesToTrack2>
  <trackIdentifier>
    <measuring station code> 501060</measuring station code>
    <measuring station type> Level</measuring station type>.
    <physicalSize> W</physicalSize>
    <trackType> Target</trackType>.
  </trackIdentifier>
  <startZeitpunkt> 2017-03-08T00:00:00</startZeitpunkt>
  <endeZeitpunkt> 2017-03-08T01:00:00</endeZeitpunkt>
  <statisticTimes> false</statisticTimes>.
</track:supplyValuesToTrack2>
</soapenv:Body>
</soapenv:Envelope>
```



```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:supplyValuesToTrack2Response xmlns:ns2="http://spurwerte.webservice.hwims.t_systems_mms.com/">
      <track values>
        <track>
          <trackIdentifier>
            <measuring station code> 501060</measuring station code>
            <measuring station type> Level</measuring station type>.
            <physicalSize> W</physicalSize>
            <trackType> Target</trackType>.
          </trackIdentifier>
          <value xsi:type="ns2:valueDateTimeDTO" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
            <status> OK</status>
            <tendency> constant</tendency>
            <value> 215.0</value>
            <zeitstempel> 2017-03-08T00:00:00+01:00</zeitstempel>
          </value>
          <value xsi:type="ns2:valueDateTimeDTO" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
            <status> OK</status>
            <tendency> constant</tendency>
            <value> 216.0</value>
            <zeitstempel> 2017-03-08T00:15:00+01:00</zeitstempel>
          </value>
          <value xsi:type="ns2:valueDateTimeDTO" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
            <status> OK</status>
            <tendency> constant</tendency>
            <value> 216.0</value>
            <zeitstempel> 2017-03-08T00:30:00+01:00</zeitstempel>
          </value>
          <value xsi:type="ns2:valueDateTimeDTO" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
            <status> OK</status>
            <tendency> constant</tendency>
            <value> 216.0</value>
            <zeitstempel> 2017-03-08T00:45:00+01:00</zeitstempel>
          </value>
          <value xsi:type="ns2:valueDateTimeDTO" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
            <status> OK</status>
            <tendency> constant</tendency>
            <value> 215.0</value>
            <zeitstempel> 2017-03-08T01:00:00+01:00</zeitstempel>
          </value>
        </track>
      </track values>
    </ns2:supplyValuesToTrack2Response>
  </soap:Body>
</soap:Envelope>
```

see sample file: *deliverValuesToTrack2 - (Level, 15min) - Request.xml*

#### 5.4.1.5 Example query of the 1-hour precipitation (request)

The following example shows a typical query of 1-hour precipitation totals.

```
see sample file: deliverValuesToTrack2 - (Ombrometer, 1h) - Request.xml
<soapenv:Envelope xmlns:track="http://spurwerte.webservice.hwims.t_systems_mms.com/" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header/>
  <soapenv:Body>
    <track:supplyValuesToTrack2>
      <trackIdentifier>
        <measuring station code> 41045</measuring station code>
        <measuring station type> Ombrometer</measuring station type>.
        <physicalSize> P</physicalSize>
        <trackType> Target</trackType>.
      </trackIdentifier>
      <startZeitpunkt> 2017-03-09T00:00:00</startZeitpunkt>
      <endeZeitpunkt> 2017-03-09T01:00:00</endeZeitpunkt>
      <statistictimes> false</statistictimes>.
    </track:supplyValuesToTrack2>
  </soapenv:Body>
</soapenv:Envelope>
```



#### 5.4.1.6 Example response of the 1-hour precipitation (Response)

The following xml structure shows the system's response to the above query:

see sample file: [deliverValuesToTrack2 \(Ombrometer 1h\) - Response.xml](#)

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:supplyValuesToTrack2Response xmlns:ns2="http://spurwerte.webservice.hwims.t_systems_mms.com/">
      <trackValues>
        <track>
```

#### 5.4.1.7 Example query of daily precipitation totals (request)

The following example shows a typical query of 1-hour precipitation totals.

Note: the parameter **StatisticalTime** is true here. This enforces that the answer only returns the date and no time information. In addition, the date of the day on which the interval begins is used.

see sample file: [deliverValuesToTrack2 \(Ombrometer 1d\) - Request.xml](#)

```
<soapenv:Envelope xmlns:track="http://spurwerte.webservice.hwims.t_systems_mms.com/" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <value xsi:type="ns2:valueDateTimeDTO" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <status> OK </status>
```

#### 5.4.1.8 Example response of daily precipitation totals (Response)

The following xml structure shows the system's response to the above query:

```
<soap:Envelope xmlns:track="http://spurwerte.webservice.hwims.t_systems_mms.com/" xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:supplyValuesToTrack2Response xmlns:ns2="http://spurwerte.webservice.hwims.t_systems_mms.com/">
      <trackValues>
        <track>
          <trackIdentifier>
            <measuring station code> 41045</measuring station code>
            <measuring station type> Ombrometer</measuring station type>
            <physicalSize> P</physicalSize>
            <trackType> Target-Sum-11-7-7</trackType>
          </track>
          <startZeitpunkt> 2017-03-08T07:00:00</startZeitpunkt>
          <endeZeitpunkt> 2017-03-09T07:00:00</endeZeitpunkt>
          </ns2:supplyValuesToTrack2Response>
        </soap:Body>
      </soap:Envelope>
    </soapenv:Body>
```





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```
<physicalSize> P</physicalSize>
<trackType> Target-Sum-1T-7-7</trackType>
</trackIdentifier>
<value xsi:type="ns2:valueDateDTO" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <status> OK</status>
  <value> 5.5</value>
  <timestamp> 2017-03-08</timestamp>
</value>
</track>
</track values>
</ns2:supplyValuesToTrack2Response>
</soap:Body>
</soap:Envelope>
```

see sample file: *deliverValuesToTrack2 - (Ombrometer, 1Tag) - Response.xml*

### 5.4.2 Retrieval of values from several tracks (time series)

#### 5.4.2.1 Central data

<b>Function Designation</b>	supplyValuesToTracks2
<b>verbal description</b>	With this function, values of <b>several tracks</b> (time series), <b>phys. Variables</b> and <b>measuring stations</b> can be retrieved.  Values here can be measured values or values aggregated from them. All values are unchecked raw data.
<b>Address</b>	<a href="https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/spurwerte-ws">https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/spurwerte-ws</a>
<b>WSDL</b>	<a href="https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/spurwerte-ws?wsdl">https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/spurwerte-ws?wsdl</a>

#### 5.4.2.2 Query parameters

Identical to chapter 5.4.1.2

The only difference is that the element "spurIdentifikator" and its subelements can **occur several times in** the query (see example).

#### 5.4.2.3 Example query for water level and flow (request)

The following example shows a typical query of water level deadline values in 1 hour intervals.

In contrast to the already presented query, here the water level of Schöna and the flow of Dresden are requested together.

```
<soapenv:Envelope xmlns:track="http://spurwerte.webservice.hwims.t_systems_mms.com/" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header/>
  <soapenv:Body>
    <track:supplyValuesToTracks2>
      <trackIdentifier>
        <measuring station code> 501010</measuring station code>
        <measuring station type> Level</measuring station type>.
        <physicalSize> W</physicalSize>
        <trackType> Target-TW-1H</trackType>.
      </trackIdentifier>
      <trackIdentifier>
        <measuring station code> 501060</measuring station code>
        <measuring station type> Level</measuring station type>.
        <physicalSize> Q</physicalSize>
        <trackType> Target-TW-1H</trackType>.
      </trackIdentifier>
    </track:supplyValuesToTracks2>
  </soapenv:Body>
</soapenv:Envelope>
```



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```
</trackIdentifier>
<startZeitpunkt> 2017-03-08T00:00:00</startZeitpunkt>
<endeZeitpunkt> 2017-03-08T01:00:00</endeZeitpunkt>
<statistictimes> false</statistictimes>.
</track:supplyValuesToTracks2>
</soapenv:Body>
</soapenv:Envelope>
```

see sample file: *deliverValuesToTracks2 - (2 levels, 1h) - Request.xml*

### 5.4.2.4 Example response for water level and flow (Response)

The following xml structure shows the system's response to the above query:

```
<?xml version='1.0' encoding='UTF-8'>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:supplyValuesToTracks2Response xmlns:ns2="http://epurwarte.webservice.hwims.t-systems_mms.com/">
      <track values>
        <track>
          <trackIdentifier>
            <measuring station code> 501060</measuring station code>
            <measuring station type> Level</measuring station type>.
            <physicalSize> W</physicalSize>
            <trackType> Target-TW-1H</trackType>.
          </trackIdentifier>
          <value xsi:type="ns2:valueDateTimeDTO" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
            <status> OK</status>
            <value> 363.0</value>
            <zeitstempel> 2017-03-08T00:00:00+01:00</zeitstempel>
          </value>
          <value xsi:type="ns2:valueDateTimeDTO" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
            <status> OK</status>
            <value> 363.0</value>
            <zeitstempel> 2017-03-08T01:00:00+01:00</zeitstempel>
          </value>
        </track>
      </track values>
      <trackIdentifier>
        <measuring station code> 501010</measuring station code>
        <measuring station type> Level</measuring station type>.
        <physicalSize> W</physicalSize>
        <trackType> Target-TW-1H</trackType>.
      </trackIdentifier>
      <value xsi:type="ns2:valueDateTimeDTO" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
        <status> OK</status>
        <tendency> constant</tendency>
        <value> 223.0</value>
        <zeitstempel> 2017-03-08T00:00:00+01:00</zeitstempel>
      </value>
      <value xsi:type="ns2:valueDateTimeDTO" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
        <status> OK</status>
        <tendency> constant</tendency>
        <value> 223.0</value>
        <zeitstempel> 2017-03-08T01:00:00+01:00</zeitstempel>
      </value>
    </ns2:supplyValuesToTracks2Response>
  </soap:Body>
</soap:Envelope>
```

#### Function Designation

### 5.4.3 Retrieval of prediction values of a track (time series)

#### 5.4.3.1 Central data



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<b>verbal description</b>	<p>With this function, forecast values of <b>exactly one track</b> (time series) can be retrieved. Only the currently available prediction is returned.</p> <p>Note: Forecasts are currently only available for selected gauges and only in the event of a flood. In the future, it is planned that forecasts will also be calculated and published for non-flood conditions.</p>
<b>Address</b>	<a href="https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/spurwerte-ws">https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/spurwerte-ws</a>
<b>WSDL</b>	<a href="https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/spurwerte-ws?wsdl">https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/spurwerte-ws?wsdl</a>

#### 5.4.3.2 Query parameters

Parameter	Data type	Description	Examples
measuring station code	String	Code number of the station to be queried see [1*]	501060 (for Dresden gauge)
measuring stationType	String	only level possible	Level
PhysicalSize	String	Determines which physical quantity is queried	W (for water level) Q (for flow rate)
trackType	String	identifies the desired track (time series). This also indirectly determines the time interval (resolution) of the values.	for possible options see table below See [*2]
startTime	Date	Specifies the time from which the values are to be supplied.  The information is always given in <b>CET</b> (Central European Time), i.e. without a daylight saving time shift.	2016-09-01T00:00:00
endTime	Date	Specifies the time by which the values are to be delivered.  The information is always given in <b>CET</b> (Central European Time), i.e. without a daylight saving time shift.	2016-09-01T01:00:00

#### To [\*1]

The list of stations (gauges) including their identification numbers can be found at <https://www.umwelt.sachsen.de/umwelt/infosysteme/lhwz/messnetze.html>.

However, as described above, forecasts are currently only provided for selected gauges and in the event of flooding.



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To [\*2]

Possible track types are:

Track type	phys. Size	Time in terval	Comments
Vorh-Centre-1H	W	1 h	mean value of the prediction of the water level in cm
Fore-1H	W	1 h	Value of the lower scatter range of the prediction of the water level in cm <i>this time series does not exist for all stations</i>
Fore-upper-1H	W	1 h	Value of the upper scatter range of the prediction of the water level in cm <i>this time series does not exist for all stations</i>
Vorh-Centre-1H	Q	1 h	mean value of the flow prediction in m³/s
Fore-1H	Q	1 h	Value of the lower scatter range of the flow prediction in m³/s <i>this time series does not exist for all stations</i>
Fore-upper-1H	Q	1 h	Value of the upper scatter range of the predicted flow rate in m³/s <i>this time series does not exist for all stations</i>

#### 5.4.3.3 Example query for the prediction of the water level (request)

The following example shows a typical query for the prediction of the water level in 1 hour intervals.

see sample file: <http://schemas.xmlsoap.org/soap/envelope/> <http://spurwerte.web-service.hwims.t-systems-mms.com/>

#### 5.4.3.4 Example response for water level prediction (response)

The following xml structure shows the system's response to the above query:

```
<?xml version='1.0' encoding='UTF-8'>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:supplyCurrentPredictionValuesToTrackResponse
      xmlns:ns2="http://spurwerte.web-service.hwims.t-systems-mms.com/">
      <measuring station code> 2210</measuring station code>
      <measuring station type> Level</measuring station type>
      <physical size> W</physical size>
      <track type> Fore-Centre-1H</track type>
      <startZeitpunkt> 2017-03-10T00:00:00+01:00</startZeitpunkt>
      <endeZeitpunkt> 2017-03-10T03:00:00+01:00</endeZeitpunkt>
    </ns2:supplyCurrentPredictionValuesToTrackResponse>
  </soap:Body>
</soap:Envelope>
```



```
<track>
  <trackIdentifier>
    <measuring station code> 2210</measuring station code>
    <measuring station type> Level</measuring station type>.
    <physicalSize> W</physicalSize>
    <trackType> Fore-Centre-1H</trackType>.
  </trackIdentifier>
  <value>
    <creation timestamp> 2017-03-09T10:05:00+01:00</creation timestamp>
    <status> OK</status>
    <value> 246.0</value>
    <zeitstempel> 2017-03-10T00:00:00+01:00</zeitstempel>
  </value>
  <value>
    <creation timestamp> 2017-03-09T10:05:00+01:00</creation timestamp>
    <status> OK</status>
    <value> 246.0</value>
    <zeitstempel> 2017-03-10T01:00:00+01:00</zeitstempel>
  </value>
  <value>
    <creation timestamp> 2017-03-09T10:05:00+01:00</creation timestamp>
    <status> OK</status>
    <value> 246.0</value>
    <zeitstempel> 2017-03-10T02:00:00+01:00</zeitstempel>
  </value>
  <value>
    <creation timestamp> 2017-03-09T10:05:00+01:00</creation timestamp>
    <status> OK</status>
    <value> 246.0</value>
    <zeitstempel> 2017-03-10T03:00:00+01:00</zeitstempel>
  </value>
</track>
</track values>
</ns2:deliverCurrentPredictionValuesToTrackResponse>
</soap:Body>
</soap:Envelope>
```

see sample file: *deliverCurrentPredictionValuesToTrack - (level, 1h) - Response.xml*

## 5.4.4 Retrieval of station master data

The function "deliverMasterDataToMeasuringStation" described below represents only a selection of the possible functions.

### 5.4.4.1 Central data

<b>Function Designation</b>	SupplyMasterDataToMeasuringStation
<b>verbal description</b>	Function returns all master data of a station
<b>Address</b>	<a href="https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/stammdaten-ws">https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/stammdaten-ws</a>
<b>WSDL</b>	<a href="https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/stammdaten-ws?wsdl">https://www.umwelt.sachsen.de/umwelt/infosysteme/hwims/webservices/stammdaten-ws?wsdl</a>

### 5.4.4.2 Query parameters

Parameter	Data type	Description	Examples
-----------	-----------	-------------	----------



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measuring station code	String	Code number of the station to be queried see [1*]	501060 (for Dresden gauge)
measuring stationType	String	Choice between level and ombrometer	Level Ombrometer

#### To [1]

The lists of the stations (ombrometers and gauges) including their identification numbers can be found on the page

<https://www.umwelt.sachsen.de/umwelt/infosysteme/lhwz/messnetze.html>.

If necessary, further information will be sent to the system users individually.

#### 5.4.4.3 Example query of master data of a station (request)

The following example shows a typical query of master data of a water level.

*see sample file: deliverMasterDataToMeasuringStation - (Level) Request.xml*  
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/" xmlns:stam="http://stammdaten.webservice.hwims.t-systems.mms.com/">

#### 5.4.4.4 Example response from master data of a station (Response)

The following xml structure shows the system's response to the above query:

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <stam:supplyMasterDataToMeasuringStationResponse>
      <measuring station code> 564290</measuring station code>
      <measuring station type> Level</measuring station type>
      <master data>
        <measuring station>
          <name> St. Egidien</name>
          <gewaesser> Lungwitzbach</gewaesser>
          <gkhigh> 5628966</gkhigh>
          <gkrechts> 4542844</gkrechts>
          <hhq> 62.7</hhq>
          <hhqdatum> 2013-06-02T00:00:00+01:00</hhqdatum>
          <hhw> 261.0</hhw>
          <hhwdatum> 2013-06-02T00:00:00+01:00</hhwdatum>
          <height> 258,643</height>
          <isPublicVisible> true</isPublicVisible>
          <code> 564290</code>
          <mhq> 29,583</mhq>
          <mhws> 173.0</mhws>
          <mnq> 0.439</mnq>
          <mnws> 32,667</mnws>
          <mq> 1,174</mq>
          <mw> 42,333</mw>
        </measuring station>
        <type> level</type>
      </master data>
    </stam:supplyMasterDataToMeasuringStationResponse>
  </soap:Body>
</soap:Envelope>
```



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[</soap:Envelope>](#)

see sample file:

*deliverMasterDataToMeasuringStation - (1Level) - Response.xml*



## 6 List of abbreviations

Abbreviation	Long form
CET	Central European Time (independent of summer and winter)
HWIMS	Flood management and information system
LfULG	Saxon State Office for Environment, Agriculture and Geology
LHWZ	National Flood Centre