

In preparation – preliminary version



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## 2. Introduction

This document describes how to use Web Service for uploading bids and downloading auction results for ID, Daily and LT auctions.

### 2.1 Overview

The WS is implemented for:

#### Upload functionality

- There is possibility to upload XML bid file via WS
  - Daily Auctions -> Daily Bids Upload (XML)
  - Long Term Auctions -> LT Bids Upload (XML)
  - Intraday Auctions – Intraday Bids Upload (XML)

#### Download functionality

- There is possibility to download XML auction results via WS
  - Long-term Results Download (XML)
  - Daily Results Download (XML)
  - Intraday Results Download (XML)

### 3. Web Service description

This chapter describes web service functionalities and it's divided in two parts - Upload and Download.

Traders can call WS to upload XML files. The functionality is the same as using web forms.

There is a list of functionalities provided by WS. Each functionality is identified by Functionality ID (FID) and it has the parameters. These FID and Parameters will be used in SOAP message. The Acknowledgement will be generated as a part of synchronous response of WS.

#### 3.1 Upload part

**Marking of items by colors:**

**Green marked FID** from a table below will be used to identify functionality in SOAP message - also marked by green color in SOAP example.

**Blue marked Parameters** from the table below will be used as the parameters in SOAP message

**Yellow marked text** in a request below the table is a part of the header and it needs to be changed according to the user's account information

Functionality	FID	Parameters	ACK generated by DAMAS
Upload Daily Bids	DMSWS_UPLOAD_DAILY_BIDS	"XML" file	Yes
Upload LT Bids	DMSWS_UPLOAD_LT_BIDS	"XML" file	Yes
Upload Intraday Bids	DMSWS_UPLOAD_ID_BIDS	"XML" file	Yes

Soap message example with XML file parameter:

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:wsa="http://schemas.xmlsoap.org/ws/2004/03/addressing" xmlns:wss="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd" xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd">
  <soap:Header>
    <wsa:Action>http://damas.ems.rs/wse/RunSynchronous</wsa:Action>
    <wsa:MessageID>uuid:8e6a71e4-0fd1-4ed1-978c-d9f0c79fff77</wsa:MessageID>
    <wsa:ReplyTo>
      <wsa:Address>http://schemas.xmlsoap.org/ws/2004/03/addressing/role/anonymous</wsa:Address>
    </wsa:ReplyTo>
    <wsa:To>https://damas.ems.rs/wse/DamasService.asmx</wsa:To>
    <wss:Security soap:mustUnderstand="1">
      <wsu:Timestamp wsu:id="Timestamp-084baa3f-595b-4ce9-8228-09e9e40a0c86">
        <wsu:Created>2015-05-11T08:31:20Z</wsu:Created>
        <wsu:Expires>2015-05-11T08:36:20Z</wsu:Expires>
      </wsu:Timestamp>
      <wsse:UsernameToken wsu:id="SecurityToken-084baa3f-595b-4ce9-8228-09e9e40a0c86">
        <wsse:Username>damas_account_username</wsse:Username>
        <wsse:PasswordType="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-username-token-profile-1.0#PasswordText">BASE64(MD5(damas_account_password))</wsse:Password>
        <wsse:Nonce>BASE64(nonce)</wsse:Nonce>
      <wsu:Created>2015-05-11T08:31:20Z</wsu:Created>
    </wss:Security>
  </soap:Header>
  <soap:Body>
    <wse:RunSynchronous>
      <wse:XMLFile>XMLFile.xml</wse:XMLFile>
    </wse:RunSynchronous>
  </soap:Body>
</soap:Envelope>
```

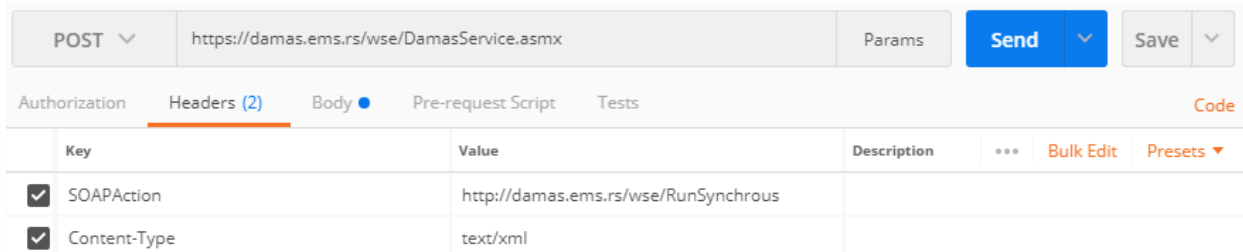
```

    </wsse:UsernameToken>
  </wsse:Security>
</soap:Header>
<soap:Body>
  <RunSynchronous xmlns="http://damas.ems.rs/wsse">
    <Input>
      <FID>DMSWS_UPLOAD_DAILY_BIDS</FID>
      <MessageHeader xsi:nil="true"/>
      <Parameters>
        <XmlParam Name="XML">
          <BidDocument xsi:noNamespaceSchemaLocation=" ../schema/bid-document.xsd" DtdVersion="2" DtdRelease="0">
            <DocumentIdentification v="pk_1"/>
            <DocumentVersion v="3"/>
            <DocumentType v="A24"/>
            <SenderIdentification v="10X--TRADER01---" codingScheme="A01"/>
            <SenderRole v="A29"/>
            <ReceiverIdentification v="10YRO-EMS-----P" codingScheme="A01"/>
            <ReceiverRole v="A07"/>
            <CreationDateTime v="2007-12-31T11:10:30Z"/>
            <BidTimeInterval v="2010-02-02T23:00Z/2010-02-03T23:00Z"/>
            <Domain v="10YRO-TEL-----P" codingScheme="A01"/>
            <SubjectParty v="10X--TRADER01---" codingScheme="A01"/>
            <SubjectRole v="A29"/>
            <BidTimeSeries>
              <BidIdentification v="1"/>
              <AuctionIdentification v="ROBG-D-03022010-00053"/>
              <BusinessType v="A03"/>
              <InArea v="10YCA-BULGARIA-R" codingScheme="A01"/>
              <OutArea v="10YRO-TEL-----P" codingScheme="A01"/>
              <MeasureUnitQuantity v="MAW"/>
              <Currency v="LEI"/>
              <MeasureUnitPrice v="MWH"/>
              <Divisible v="A01"/>
              <BlockBid v="A02"/>
              <Period>
                <TimeInterval v="2010-02-02T23:00Z/2010-02-03T23:00Z"/>
                <Resolution v="PT60M"/>
                <Interval>
                  <Pos v="1"/>
                  <Qty v="0"/>
                  <PriceAmount v="0"/>
                </Interval>
                .....
                <Interval>
                  <Pos v="24"/>
                  <Qty v="0"/>
                  <PriceAmount v="0"/>
                </Interval>
              </Period>
            </BidTimeSeries>
          </BidDocument>
        </XmlParam>
      </Parameters>
    </Input>
  </RunSynchronous>
</soap:Body>
</soap:Envelope>

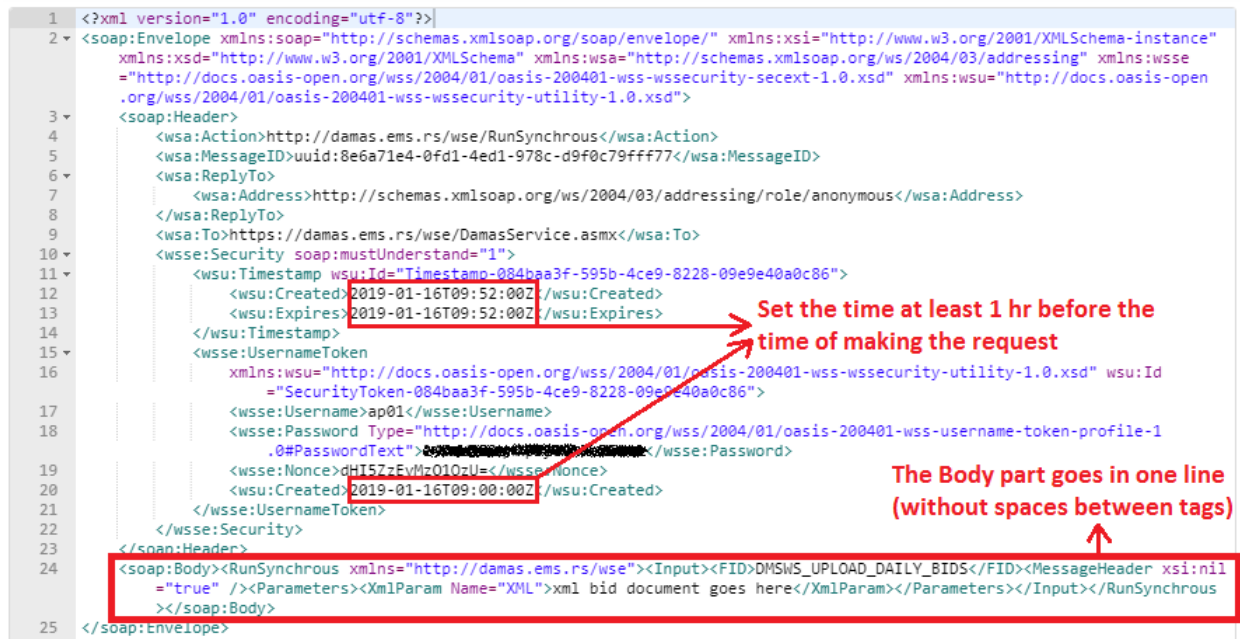
```

An example of the right formatted request (Postman testing tool was used on a picture below):

### Header



### Body



WSDL file can be found on the following link (Token password is needed):

<https://damas.ems.rs/wse/damasservice.asmx?wsdl>

In order to use Web Service, you need either Token with certificate for DAMAS access or separate digital certificate which contains private key and can be integrated into you own software solution. This digital certificate is issued at EMS premises. Please send us an email to [alokacija@ems.rs](mailto:alokacija@ems.rs) in order to get mentioned additional digital certificate.

### 3.2 Download part

Traders can call WS to download auction results. The functionality is the same as using web forms.

The request is the same as the request for bid uploading. The only change is the body part and it is shown on the example below.

#### Marking of items by colors:

**Green marked FID** from table below will be used to identify functionality in SOAP message - also marked by green color in SOAP example.

**Blue marked Parameters** from table below will be used as parameters in SOAP message

Functionality	FID	Parameters	ACK generated by DAMAS
Download term Results	Long-DMSWS_DOWNLOAD_LT_RESULTS	"AuctionID" - ID of Auction "Trader" – EIC code	No
Download Results	Daily DMSWS_DOWNLOAD_DAILY_RESULTS	"AuctionID" - ID of Auction "Trader" – EIC code	No
Download Results	Intraday DMSWS_DOWNLOAD_ID_RESULTS	"AuctionID" - ID of Auction "Trader" – EIC code	No

Soap message example with simple parameters:

... header part goes here...

```
<soap:Body>
  <RunSynchronous xmlns="http://damas.ems.rs/wse">
    <Input>
      <FID>DMSWS_DOWNLOAD_DAILY_RESULTS</FID>
      <MessageHeader xsi:nil="true"/>
      <Parameters>
        <StringParam Name="AuctionID">HRRS-I-09082018-35015</StringParam>
        <StringParam Name="Trader">Trader's EIC code goes here</StringParam>
      </Parameters>
    </Input>
  </RunSynchronous>
</soap:Body>
</soap:Envelope>
```