**Automated process for receiving the Transaction reports**

Beside the main manual electronical channel (KAP system), the Central Bank of Hungary (MNB) provides an automated way for submitting transaction reports. This document gives support for using this automated channel.

**Set up the automated channel for submitting transaction reports**

The automated channel is set up by a wcf service. It has two main functions:

* to fulfil the reporting requirement
* to query feedback about the reporting

**Fulfilling the reporting requirement:**

The parts of the method for fulfilling the reporting requirement are the following:

Return value:

string **Knumber**, the unique identifier of the package

Incoming parameters:

string **userName,** the ERA identifier of the User

string **passwordHash**, the hash value of the User’s password, it is given by MNB

string **senderMainNumber**, the registered number of the Sender (submitting entity), in case of a foreign Sender it is a generated identifier and is given by MNB

string **dataProviderMainNumber**, the registered number of the reporting entity

byte[] **package**, xml package, its structure is described by the Annex of this document

string **fileName**, name and structure of the ISO20022 reporting file as described in the Annex of this document

byte[] **isoData**, the ISO20022 reporting in a binary format

DateTime **period**, the reference date of the reporting

Outgoing parameter:

string message

Signature of the method: string SendTransactionReport(string userName, string passwordHash, string senderMainNumber, string dataProviderMainNumber, byte[] package, string fileName, byte[] isoData, DateTime period, out string message)

Operating of the method: the system validates in order the following:

* the given userName-passwordHash exists in the registration database (RegDb),
* the valid User has authorization rights to submit the transaction reports on behalf of the Sender
* within the given reference date, based upon the data stored in the Receiving system, the Sender-reporting entity pair is enabled to submit the report with MIFIR code

In case of any of the above written validation checks run error, the return value will be an empty string and it returns with the message parameter filled out with the error. In case the validation checks are successful, the system sends in the reporting package and the reporting file into the Reciever’s TransactionReporting channel and sends back the message from the Reciever with a filled return value.

**Query feedback about the reporting:**

The status of the data reporting and the result of the validation checks (error list) can be queried as the following method:

Return Value:

byte[] isoResult, the ISO20022 format feedback result of the validation checks

string **userName,** the ERA identifier of the User

string **passwordHash**, the hash value of the User’s password, it is given by MNB

string **senderMainNumber**, the registered number of the Sender (submitting entity), in case of a foreign Sender it is a generated identifier and is given by MNB

string **dataProviderMainNumber**, the registered number of the reporting entity

byte[] **kNumber**, the unique identifier of the package that is sent in and that is queried

Outgoing parameter:

string message

Signature of the method: byte[] QueryTransactionReport(string userName, string passwordHash, string senderMainNumber, string dataProviderMainNumber, string kNumber, out string message)

Operating of the method: the system validates in order the following:

* the given userName-passwordHash exists in the registration database (RegDb),
* the valid User has authorization rights to submit the transaction reports on behalf of the Sender

In case of any of the above written validation checks run error, the return value will be an empty byte [] and it returns with the message parameter filled out with the error. In case the validation checks are successful, the system – using the senderMainNumber, dataProviderMainNumber and the kNumber – calls the Trem system and returns the values from it (error message or ISO20022 error list) to the requester.

**Annex:**

**The XML schema of the package that is needed to be submitted:**

<?xml version="1.0" encoding="utf-8"?>

<Kuldemeny>

<Documents Id="DocumentsElement">

<Document Id="Filedata1" FileName="Urlap.xml" KuldoTorzsszam="00000000" AdatszolgaltatoTorzsszam="00000000" KapcsolattartoId="1234" KapcsolattartoNev="Teszt Kapcsolattartó Péter">base64 kódolt Urlap.xml állomány

</Document>

</Documents>

<Form Id="Form">

<ChannelName>TRANZAKCIOSJELENTES</ChannelName>

<EM>E</EM>

<ElozmenyKszam />

</Form>

<Signatures Id="Signatures">

</Signatures>

</Kuldemeny>

The reporting package must be signed with XAdES detached signature, that is executed with the certificate that is uploaded into the RegDb. The Urlap.xml (it means Webform.xml) structure is the following:

<Urlap>

<Tipus>TRANZAKCIOSJELENTES</Tipus>

<Verzio>0</Verzio>

<JelentesKod>MIFIR</JelentesKod>

<UjraKuldesAlairasHibaMiatt>false</UjraKuldesAlairasHibaMiatt>

<VonatkozasKezdete>2018-01-23T00:00:00</VonatkozasKezdete>

<VonatkozasVege>2018-01-23T00:00:00</VonatkozasVege>

<ProgramVerzio></ProgramVerzio>

<Bejelento>

<CsaladiNev>Teszt Kapcsolattartó</CsaladiNev>

<Utonev>Péter</Utonev>

<MasodlagosUtonev></MasodlagosUtonev>

<AnyjaCsaladiNeve>Anyja</AnyjaCsaladiNeve>

<AnyjaUtoneve>Neve</AnyjaUtoneve>

<AnyjaMasodlagosUtoneve></AnyjaMasodlagosUtoneve>

<SzuletesiHely>Születési hely</SzuletesiHely>

<SzuletesiDatum>1992-09-19T00:00:00</SzuletesiDatum>

<Allampolgarsag>HU</Allampolgarsag>

<Tipus>Empty</Tipus>

</Bejelento>

<KozzetetelreKotelezettIntezmeny>

<Nev>Adatszolgaltató neve</Nev>

<Torzsszam>00000000</Torzsszam>

<Tipusa>Befektetési szolgáltató</Tipusa>

</KozzetetelreKotelezettIntezmeny>

<KuldoIntezmeny>

<Nev>Küldő neve</Nev>

<Torzsszam>00000000</Torzsszam>

</KuldoIntezmeny>

<Dokumentum>

<Tipus>ESETI</Tipus>

<TipusId>1</TipusId>

<Altipus></Altipus>

<AltipusId>0</AltipusId>

<Targya></Targya>

<Eredete>Eredeti</Eredete>

<EredetenekMegjelolese></EredetenekMegjelolese>

</Dokumentum>

<Fajlok></Fajlok>

<Dokumentumok>

<Dok>

<Nev>00000000\_DATTRA\_20180123.xml</Nev>

<Tipus>JELENTES</Tipus>

</Dok>

</Dokumentumok>

</Urlap>

**The file name convention of the reporting package is the following:**

nnnnnnnn\_DATTRA\_ÉÉÉÉHHNN.xml, where nnnnnnnn is the registered number of the reporting entity, ÉÉÉÉHHNN is the reference date of the reporting.