Working with the file gateway

File gateway is used to send reports on off-exhange trades and receive response notifications from the repository. The general principle of working with the file the gateway is as follows:

- drafting an FpML message;
- copying a message to an ***.xml** in the outgoing messages folder. In addition:
    1. If the message includes an attachment, the attachment file must also be placed in the same folder. An XML message file should contain a link to the attachment file in accordance with the FpML format;
    2. the message should have a correct **<correlationId />** element.

> ⓘ Format of attachments – PDF.

- File gateway signs messages with a digital signature, encrypts thema based on the NSD certificate and sends a message to the NSD **WSL service.** The message will be moved from the Outbox folder to the Sent folder;
- File gateway decrypts the repository response message and places it in the Inbox folder in the xml format.

After the delivery of the response message it gets processed in accordance with the rules on processing of exported messages. If the process of sending the message fails, the file of the original message is deleted from the outbox folder and gets to the error folder. A XML failure report file with a name like **FILENAME.error** gets into the same error folder.

> ⓘ Messages, which were impossible to decrypt, will be loaded to the Inbox folder in an encrypted form. To solve the problem, contact the NSD technical support (see Contacts).

The process of sending and receiving messages is displayed in the service's web interface. Additionally, the web-based interface allows viewing:

- statistics on completed operations in the form of diagrams;
- log with records about events and system errors.

Exporting messages

Messages are exported automatically according to the export timer settings. Each exported message is processed according to a set of rules, depending on the type of message.

Table 1 – Rules of message exporting

Message	Set of rules
If the message is an encrypted CRY-package, containing an FpML message, and (possibly) attachments (eg, **F011001.zip**)	1. The service finds the original sent message, the answer to which was received, by **correlationId** 2. The response message is recorded in the inbox. The file name of the original message will be used as a file name 3. If the original message is not found, the message is processed based on the rule (2) 4. If the file name is already taken, a unique file name of the form**FILENAME_10.xml** is generated 5. If such file name is already taken, a unique file name of the form **FILENAME_10.EXT** is generated 6. Attachment files are unpacked into the outbox folder preserving the original file name
If the message is an encrypted CRY-package that does not contain FpML-messages (eg, **CERROR01.cry**).	1. All files are unpacked into the folder output messages while preserving the original file name 2. If such file name is already taken, a unique file name of the form **FILENAME_10.EXT** is generated

If the message is an unencrypted ZIP- package (eg, **CERROR01.zip**)	1. Attachment files are unpacked into a subfolder in the outbox folder 2. The name of the exported message is used as a name for the subfolder 3. If the folder name is already taken, a unique file name of the form **FILENAME_10.EXT** is generated
Miscellaneous	1. The message file is written to outbox, its original name preserved 2. If this file name is already taken, a unique file name of the form**FILENAME_10.EXT** is generated