

Annexure I**Straight Through Processing (STP) functionality in the eDPM system.**

Currently, Participants manually upload transaction files generated from their back-office system into the eDPM system. Further, Participants manually download the response files i.e. out file, error file, VR-out file, VR-error file etc., (*in respect of aforesaid uploaded files through eDPM system*) and upload the same into their back-office system. In this regard, Participants are hereby informed that NSDL has developed **Straight Through Processing (STP)** functionality to facilitate Participants to seamlessly carry out the aforesaid functionalities between back-office system of Participant and NSDL eDPM system. To avail this facility, Participants would be required to transfer/store the instruction/transaction files generated from their back-office system to the pre-defined folder on the configured machine of the Participant. NSDL STP utility installed on the Participant's machine will pool and upload the transaction files seamlessly into the NSDL eDPM system. The transaction files, currently uploaded through eDPM Upload link / Master DP Upload link, will get auto uploaded and auto verify-released in eDPM system through NSDL STP Utility. Further, all the response files will be auto downloaded to the pre-designated folder assigned by Participants. Participants will then be required to transfer the file(s) from the pre-designated folder to their back office system. The detailed features of NSDL STP Utility are explained below:

1. Configuring Machine and Pre-defined Folder:

Participants will assign/designate a folder on the configured client machine/Server where transaction/instruction files generated from their back-office system will be transferred/stored automatically. In this regard, a mechanism will be required to be developed in Participant's back-office system to generate the transaction files and automatically transfer/store the same in the pre-designated folder for onward upload into the eDPM system.

Alternatively, these files can also be transferred manually to the pre-designated folder till such time the Participant develops the auto transfer mechanism.

2. Auto Upload of transaction file into eDPM system:

Once the transaction files are transferred/stored in the pre-defined folder of the configured client machine, NSDL STP Utility will facilitate in transferring/pooling of these files from the pre-designated folder and auto-upload into the NSDL eDPM system. This will facilitate in eliminating the manual intervention of the User to select the transaction file (*generated from the back-office system*) and then manually upload the same to the eDPM system.

3. Auto Verify-Release of transaction file at eDPM system:

All the transaction files that are auto-uploaded into the eDPM system will be Auto Verify-Released at the same time. In the current system, User has to upload and verify release transaction files separately. However, while using NSDL STP Utility, the transaction files will be Auto-Uploaded as well as Auto Verify-Released seamlessly without manual intervention.

4. Auto download of Response files from eDPM system:

After the files have been successfully uploaded and verify released in the eDPM system, the respective response files viz.; 'Out' file, 'Error' file, 'VR-out' file, 'VR-error' file, Rejection Report etc. will be downloaded automatically from eDPM system and pushed into the pre-designated folder on the configured client machine of the Participant by the NSDL STP utility.

5. NSDL STP Utility:

NSDL STP Utility will be required to be installed on Participant's configured Client machine, which will help Participant to monitor the status of the files/responses that are uploaded and downloaded respectively, as exhibited below:



The screenshot displays the NSDL STP Utility interface. At the top left is the NSDL logo, and to its right is the text "NSDL STP UTILITY". Below this is a horizontal blue bar. The main content area features a light blue box with the heading "Login". Inside this box, there are four input fields: "Username:", "Password:", "New Password:", and "Confirm New Password:". A "Login" button is positioned below the "Confirm New Password" field.



NSDL File Download Agent
Version: 1.0

Welcome IN302404
[Change Password](#)

Current Status		Completed Files			
Filename	Type	Status	Priority	Size	
26-06-2019					
IN302404_Settlement_WithoutIDT_1_20190626155654_25385_STP_vr.out	Download	Complete	Medium	3.99 KB	
IN302404_Settlement_WithoutIDT_1_20190626155654_25385_STP.out	Download	Complete	Medium	3.99 KB	
IN302404_Settlement_WithoutIDT_1.txt	Upload	Complete	High	14.08 KB	
IN302404_Settlement_WithoutIDT_20190626154904_25384_STP.err	Download	Complete	Medium	1.31 KB	
IN302404_Settlement_WithoutIDT_20190626154904_25384_STP.out	Download	Complete	Medium	0.06 KB	
IN302404_Settlement_WithoutIDT.txt	Upload	Complete	High	14.08 KB	
PLEDGE2_20190626131007_25383_STP_vr.out	Download	Complete	Medium	8.78 KB	
PLEDGE2_20190626131002_25383_STP.out	Download	Complete	Medium	8.78 KB	
PLEDGE2.txt	Upload	Complete	High	30.63 KB	
10-06-2019					
Settlement_Booking Functions_5_20190610152733_25346_STP.err	Download	Complete	Medium	1.2 KB	
Settlement_Booking Functions_5_20190610152733_25346_STP.out	Download	Complete	Medium	0.06 KB	
Settlement_Booking Functions_5.txt	Upload	Complete	High	41.91 KB	

6. STP Folder & File Structure on Participant STP Configured machine:

The files Uploaded / Failed / Downloaded / Archived through NSDL STP Utility will be maintained in activity wise, date wise and file REF ID wise folders on Participant's configured machine, as exhibited below:

Folder Structure:

(I) **Upload Folder:** Files that are required to be uploaded to eDPM system will be stored in this folder. This folder has the following sub-folders:

- a) eDPM Upload
- b) DIS Issuance Upload
- c) Transfer of Holding

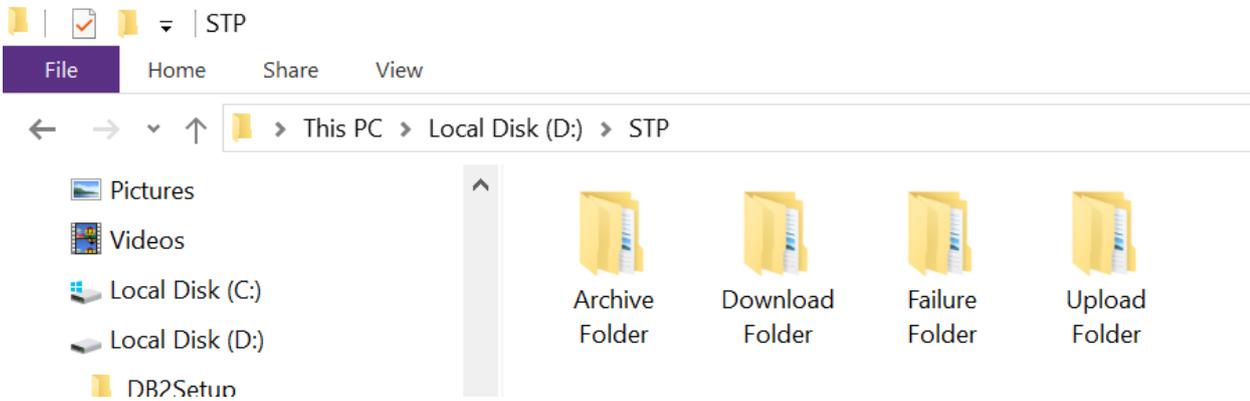
All files to be uploaded to eDPM system need to be transferred to eDPM upload folder. However, Participants, if they wish so, may use separate folder for DIS issuance upload and Transfer of Holding upload.

(II) **Failure Folder:** Will contain uploaded files that have failed for the current date.

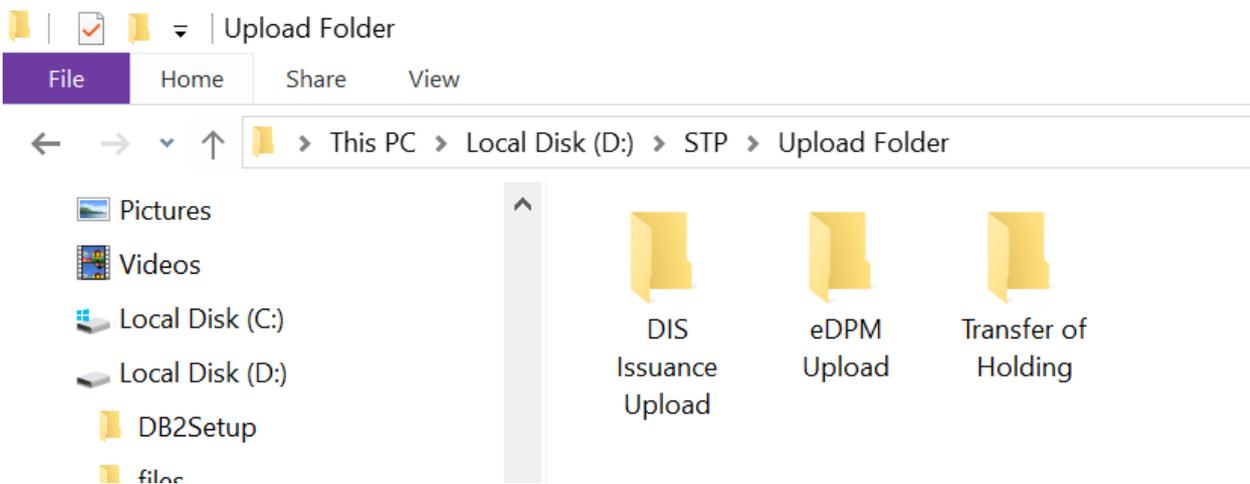
(III) **Download Folder:** Will contain response files for the current date.

(IV) **Archive Folder:** Will contain successfully uploaded files.

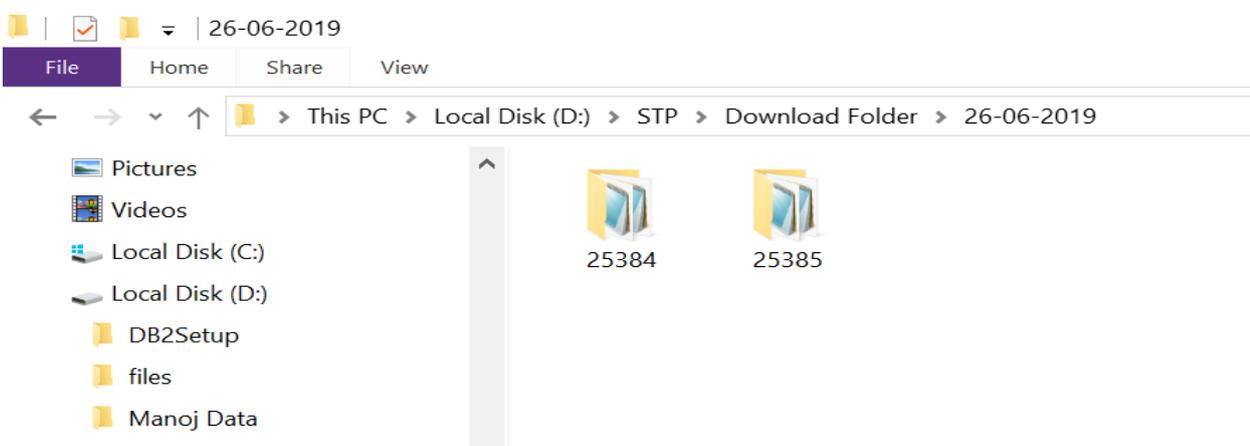
Folder wise Structure:



Upload folder structure:



Date wise and REF ID wise Structure:



7. Message Processing from eDPM system to the Local DPM system:

There will be no change to the transaction status, reports, exports, audit trail etc. with respect to the transactions executed through NSDL STP Utility. All the instructions uploaded through STP mode will be tagged against a separate User ID in eDPM system, to differentiate STP related transactions executed in eDPM system.

8. Security Measures:

- a) Defined STP User explicitly for STP function
- b) Two way SSL Handshake
- c) Encrypted channel of Communication
- d) Participants Server IP address level checked during upload/download.
- e) Files can be signed and encrypted using eSigner during upload.

9. Pre-Requisites for STP-DP Functionality:

- a) Machine must have connectivity to eDPM.
- b) Installation of software (NSDL STP Utility) on Pre-defined Machine
- c) NSDL STP Utility will facilitate only transfer of files from/to pre-designated folder from/to NSDL eDPM system. STP utility will not facilitate any transfer from/to Back-office system. Participants will be required to develop this functionality / mechanism.
- d) Mechanism to be developed in Participant's back-office system to generate the transaction files and automatically transfer/store the same in the pre-designated folder for onward to upload into the eDPM system as well as to update the back office system. Alternatively, Participants can also transfer the files manually to the pre-designated folders.

For availing the NSDL STP Utility, Participants will be required to submit an undertaking enclosed at Annexure A.

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