



**SECURITIES AND  
FUTURES COMMISSION**  
證券及期貨事務監察委員會

## **OTCR Reporting File Template and Submission Process Flow**

---

**November 2022**

# Contents

---

Revision History	3
Introduction	4
Report template and samples	4
Conversion of the Template into Unicode Text format	7
Submission channels	8
ZIP file with password protection (Applicable to OTCR WebApp only)	14

## Revision History

Version	Date	Synopsis
1.0	22 July 2022	First issue
1.1	28 November 2022	<ul style="list-style-type: none"> <li>▪ Replaced the OTCR WebApp submission screenshot in paragraph 12.d [Page 9]</li> <li>▪ Added examples of the OTCR Response File to paragraph 13.i [Page 11]</li> <li>▪ Added a correction and provided the OTCR Response Files removal time in paragraph 13.k [Page 13]</li> <li>▪ Inserted a new paragraph 13.n - OTCR SFTP account control [Page 13]</li> </ul>


## Introduction

1. This document should be read in conjunction with the OTCR Technical Information Paper.
2. As mentioned in the OTCR Technical Information Paper, an OTCR Reporting File Template (the Template) will be provided to facilitate manual preparation of the OTCRRPT input file. This document aims to demonstrate how the Template could be used. Process flow of the two file submission channels are also illustrated.
3. Relevant Regulated Intermediaries (RRIs) are advised to read this document carefully and use the examples as reference for adopting to the reporting requirements.

## Report template and samples

### OTCR Reporting File Template

4. The Template in the published name of “OTCR\_template\_to\_txt.xlsx”, subject to updates from time to time, can be downloaded from the WINGS Platform when the OTCR WebApp is released to facilitate manual preparation of the OTCR Reporting File. RRIs are advised to check the WINGS Platform in due course for updates and use the latest Template version for submitting the reports.

Name of template	Microsoft Excel file
OTCR Reporting File Template (OTCR_template_to_txt.xlsx)	 OTCR_template_to_txt.xlsx

5. Colour codes are used in the Template to define mandatory, conditional, and non-required fields for specific actions and conditions. The colour codes are here to assist RRIs to report under the OTCR by manual input more conveniently and are not meant to replace the specification prescribed in the section of OTCR Reporting File data format under the OTCR Technical Information Paper.
6. The sample screenshots depicted below show examples of the Add (A), Edit (E) and Delete (D) actions. By selecting the corresponding action type under the “Action” column, the respective cells that require mandatory input according to the data format specification will change to yellow colour while conditional fields will remain in white colour.

e.g. Add (A) and Edit (E) actions:

Transaction ID	Action	Type of transaction	Stock Code	Currency Code of the transaction	Transaction price per share	Number of shares transferred	Number of shares in the transaction	Number of shares in the deposit / withdrawal	Total number of CID	Share transfer date	Share transaction date	Deposit / Withdrawal date	CF number of Relevant Regulated Intermediary	Role of Relevant Regulated Intermediary in the share transfer
1														
2	A													
3														

Transaction ID	Action	Type of transaction	Stock Code	Currency Code of the transaction	Transaction price per share	Number of shares transferred	Number of shares in the transaction	Number of shares in the deposit / withdrawal	Total number of CID	Share transfer date	Share transaction date	Deposit / Withdrawal date	CF number of Relevant Regulated Intermediary	Role of Relevant Regulated Intermediary in the share transfer
1														
2	E													
3														

7. Cells that are not required under the action Delete (D) will change to grey colour as depicted in sample screenshots below:

e.g. Delete (D) action:

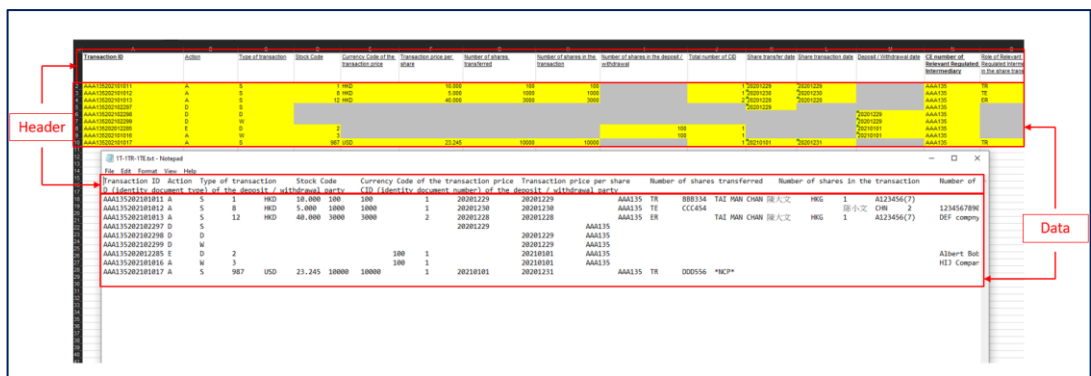
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Transaction ID	Action	Type of transaction	Stock Code	Currency Code of the transaction price	Transaction price per share	Number of shares transferred	Number of shares in the transaction	Number of shares in the deposit / withdrawal	Total number of CID	Share transfer date	Share transaction date	Deposit / Withdrawal date	CE number of Relevant Regulated Intermediary	Role of Relevant Regulated Intermediary in the share transfer
1	D													
2														
3														

P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
CE number of the counterparty corporation	CID (full name) of the transferor	CID (entity, document's issuing country or jurisdiction) of the transferor	CID (entity, document type) of the transferor	CID (entity, document number) of the transferor	CID (full name) of the transferee	CID (entity, document's issuing country or jurisdiction) of the transferee	CID (entity, document type) of the transferee	CID (entity, document number) of the transferee	CID (full name) of the deposit / withdrawal	CID (entity, document's issuing country or jurisdiction) of the deposit / withdrawal party	CID (entity, document type) of the deposit / withdrawal party	CID (entity, document number) of the deposit / withdrawal party
1												
2												
3												

Colour legend:  Mandatory field;  Non-required field;  Conditional field

8. The below screenshot shows an example of the Unicode Text output from the Template:








The screenshot shows a table with a header row and multiple data rows. The header row is highlighted in yellow and labeled 'Header'. The data rows are labeled 'Data'. The table contains columns for Transaction ID, Action, Type of transaction, Stock Code, Currency Code, Transaction price per share, Number of shares transferred, Number of shares in the transaction, Number of shares in the deposit / withdrawal, Total number of CID, Share transfer date, Share transaction date, Deposit / Withdrawal date, CE number of Relevant Regulated Intermediary, and Role of Relevant Regulated Intermediary in the share transfer.

Transaction ID	Action	Type of transaction	Stock Code	Currency Code of the transaction price	Transaction price per share	Number of shares transferred	Number of shares in the transaction	Number of shares in the deposit / withdrawal	Total number of CID (entity, document type) of the deposit / withdrawal party	CID (entity, document number) of the deposit / withdrawal party	CID (entity, document's issuing country or jurisdiction) of the deposit / withdrawal party	CID (entity, document type) of the deposit / withdrawal party	CID (entity, document number) of the deposit / withdrawal party								
AAC482011026-1	A	S	776	USD	0.216	70000	70000	1	20211026	20211026	AAC483	TR	B3046	TAI HENG CHUNG 德太德	HKG	1	7345678(0)				
AAC482011026-2	A	S	300	HKD	478.400	1000000	1000000	2	20211026	20211026	AAC483	TR	80Q277	德太德, CHN	2	12345619082211234					
AAC482011026-3	A	S	380	HKD	488.600	200000	200000	1	20211026	20211026	AAC483	TR	80Q277	德太德	2	6543219590822345					
AAC482011026-4	A	S	380	HKD	482.000	8000	8000	2	20211026	20211026	AAC483	TR	80Q277	德太德	2	123456789012345					
AAC482011026-5	A	S	380	HKD	477.000	120000	120000	2	20211026	20211026	AAC483	ER	AAC483	ER	JOYCE SHITH	HKG	1	5654321(0)			
AAC482011026-6	A	S	380	HKD	418.400	15100000	15100000	4	20211026	20211026	AAC483	ER	AAC483	ER	JOYCE SHITH	HKG	1	5654321(0)			
AAC482011026-7	A	S	380	HKD	472.000	555100	555100	5	20211027	20211027	AAC483	ER	AAC483	ER	JOYCE SHITH	HKG	1	5654321(0)			
AAC482011027-1	A	D	388						2500000	1	AAC483										
AAC482011027-2	A	D	388						65100	2	AAC483										
AAC482011027-3	A	D	388								AAC483										
AAC482011027-4	A	W	380						120000000	1	AAC483										
AAC482011028-1	A	W	380						550000	3	AAC483										
AAC482011028-1	A	W	380								AAC483										

## Sample scenarios

9. Under the OTCR Technical Information Paper, there are 5 sample scenarios and the relevant sample files in Unicode Text (i.e. .txt) have been provided. In this document, sample files in Excel using the Template for these 5 sample scenarios are further provided below for reference purpose.

Sample scenarios in the OTCR Technical Information Paper	Sample Excel
Scenario 1:	 1T-1TR-1TE.xlsx
Scenario 2:	 1T-1TR-3TE.xlsx
Scenario 3:	 1T-2TR-3TE.xlsx
Scenario 4:	 1T-3D.xlsx
Scenario 5:	 1T-3W.xlsx

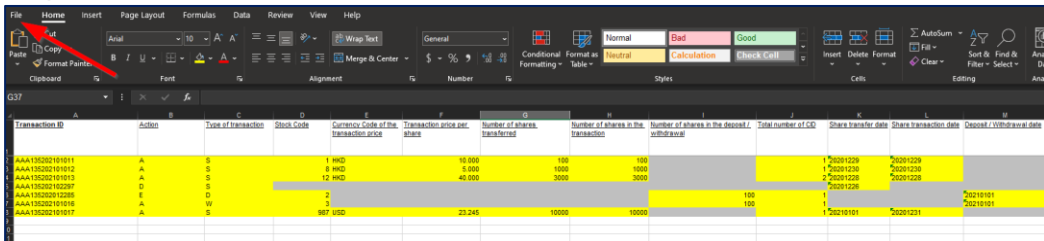
## Conversion of the Template into Unicode Text format

10. The Template's data must be converted into Unicode Text format before submission. To ensure the encoding of non-English characters are correctly represented in the OTCRRPT input file, please follow the step-by-step guide below for converting the Template's data into a Unicode Text formatted OTCRRPT input file:

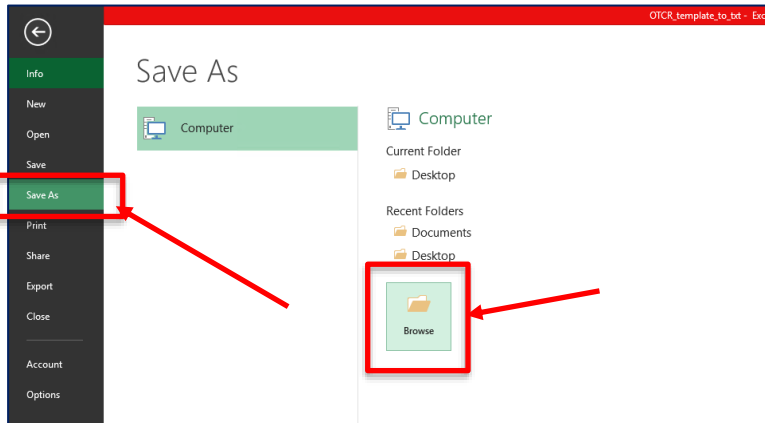
a. Step 1 – Input the transaction data using the Template:

Transaction ID	Action	Type of transaction	Stock Code	Currency Code of the transaction/stock	Transaction price per share	Number of shares to be transacted	Number of shares in the transaction	Number of shares in the deposit	Total number of USD	Share transfer date	Share transaction date	Deposit withdrawal date	CE number of Return Requirement	Block of Shares to be transacted
AAA13202101011	A	S	1 HKD		10,000	100	100			7/20/1229	7/20/1229		AAA135	70
AAA13202101012	A	S	8 HKD		5,000	1000	1000			7/20/1229	7/20/1229		AAA135	10
AAA13202101013	A	S	12 HKD		40,000	3000	3000			7/20/1229	7/20/1229		AAA135	20
AAA13202102287	D	S							100			7/20/1229	AAA135	
AAA1320212288	E	D				2						7/20/1229	AAA135	
AAA13202101016	A	W							100			7/20/1229	AAA135	
AAA13202101017	A	S	967 USD		23,245	10000	10000			7/20/1231	7/20/1231		AAA135	70

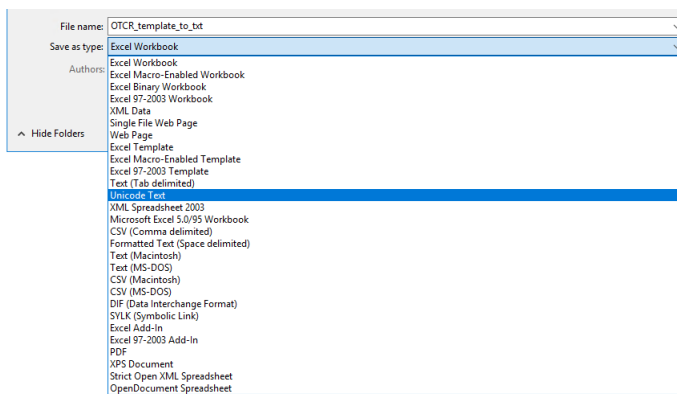
b. Step 2 – Save the content into Unicode Text file



▪ Select File



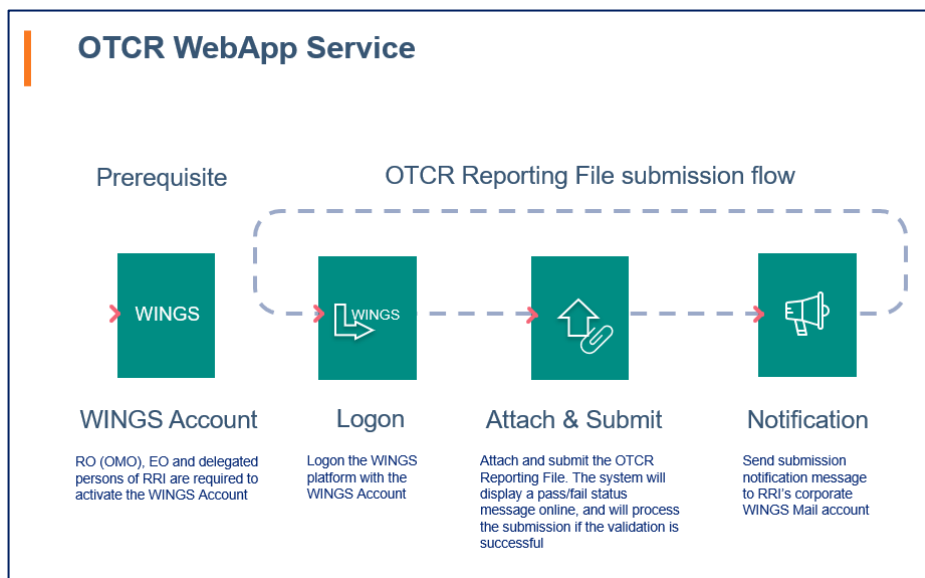
▪ Save As -> Browse



▪ Save as type: Unicode Text -> Save

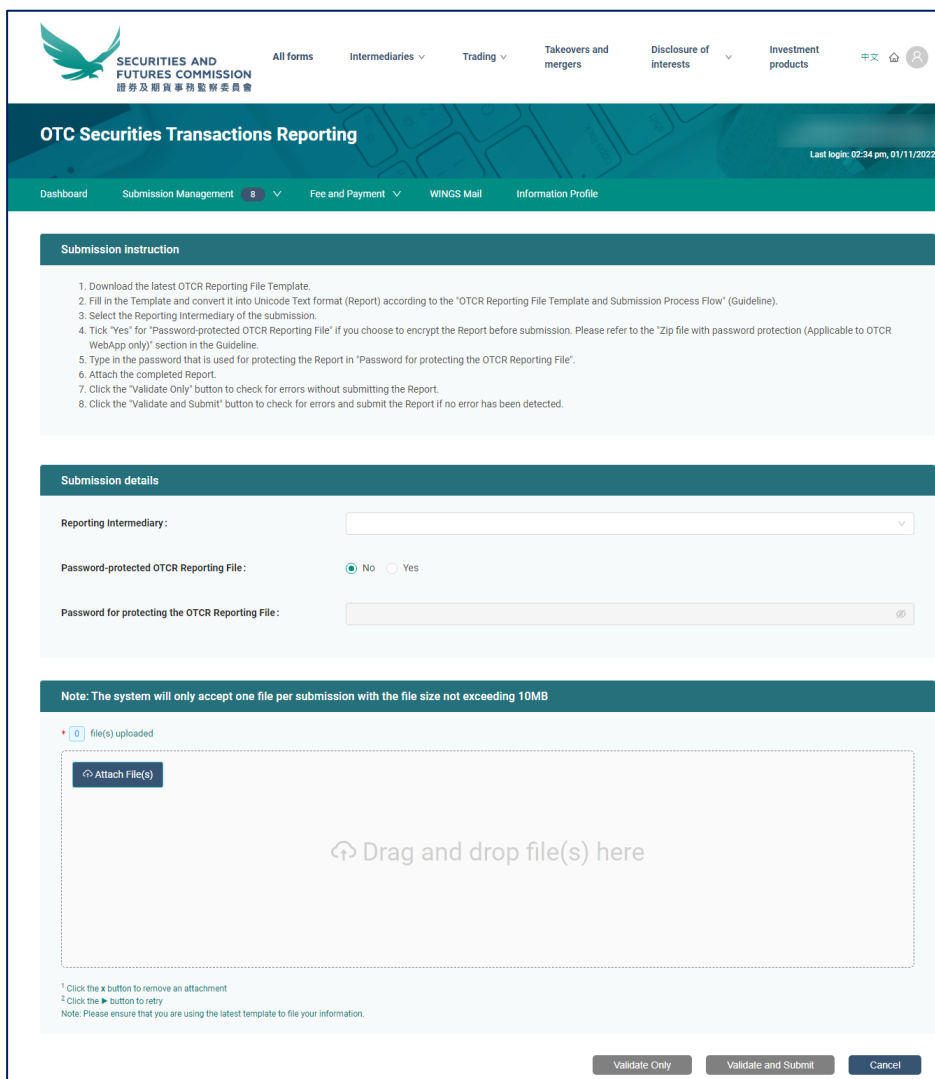
## Submission channels

11. As mentioned in the OTCR Technical Information Paper, the OTCRRPT input file has to be submitted via the WINGS platform through any of the two data transmission channels, the OTCR WebApp and OTCR SFTP. Process flow relating to these channels are set out below.
12. OTCR WebApp submission channel
  - a. The OTCR WebApp is the manual submission channel for reporting under the OTCR. Responsible officers and delegates of RRI (collectively referred to as “Submitter”) with authority to report under the OTCR on behalf of the firm can logon to the WINGS platform with the Submitter’s self-registered WINGS User Account and attach the OTCRRPT input file for reporting purpose.
  - b. This channel provides an option for the Submitter to submit an encrypted OTCRRPT (Protected OTCRRPT) input file by means of compressing and password protecting the file using the 7-Zip (or compatible) software before attaching the encrypted file for submission.
  - c. The process flow diagram shown below illustrates the basic steps on how the manual submission is done:



- d. The OTCR WebApp user-interface is shown below as a reference to illustrate the manual submission process:





The screenshot shows the 'OTC Securities Transactions Reporting' web application. At the top, there is a navigation bar with the SFC logo and menu items: All forms, Intermediaries, Trading, Takeovers and mergers, Disclosure of interests, and Investment products. Below this is a sub-header for 'OTC Securities Transactions Reporting' with a 'Last login: 02:34 pm, 01/11/2022' timestamp. A secondary navigation bar includes Dashboard, Submission Management (with a notification icon), Fee and Payment, WINGS Mail, and Information Profile.

The main content area is divided into sections:

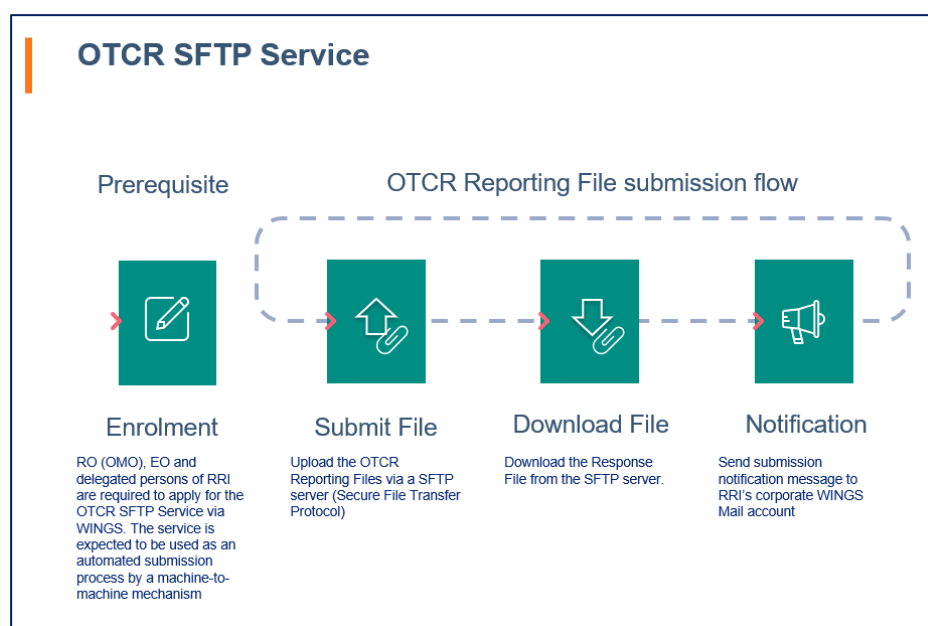
- Submission instruction:** A list of 8 steps:
  - Download the latest OTC Reporting File Template.
  - Fill in the Template and convert it into Unicode Text format (Report) according to the "OTCR Reporting File Template and Submission Process Flow" (Guideline).
  - Select the Reporting Intermediary of the submission.
  - Tick "Yes" for "Password-protected OTCR Reporting File" if you choose to encrypt the Report before submission. Please refer to the "Zip file with password protection (Applicable to OTCR WebApp only)" section in the Guideline.
  - Type in the password that is used for protecting the Report in "Password for protecting the OTCR Reporting File".
  - Attach the completed Report.
  - Click the "Validate Only" button to check for errors without submitting the Report.
  - Click the "Validate and Submit" button to check for errors and submit the Report if no error has been detected.
- Submission details:** A form with three fields:
  - Reporting Intermediary: A dropdown menu.
  - Password-protected OTCR Reporting File: Radio buttons for 'No' (selected) and 'Yes'.
  - Password for protecting the OTCR Reporting File: A text input field with a password icon.
- Note:** The system will only accept one file per submission with the file size not exceeding 10MB.
- File Upload:** A section showing '0 file(s) uploaded' and a large dashed box with the text 'Drag and drop file(s) here'. An 'Attach File(s)' button is located at the top left of the drop area.
- Footer:** Three buttons: 'Validate Only', 'Validate and Submit', and 'Cancel'.

- e. Submitter electing to submit a Protected OTCRRPT input file (i.e. by checking the "Password-protected OTCR Reporting File" option) would also need to enter the password used to encrypt the Protected OTCRRPT input file for the submission system to carry out the decipherment (i.e. by typing in the password in the "Password for protecting the OTCR Reporting File" field). To learn more about how to zip a file, please refer to the section "ZIP file with password protection (Applicable to OTCR WebApp only)".
- f. The OTCR WebApp is designed to display a response message immediately after the submission has been processed informing the Submitter whether the OTCRRPT input file has passed or failed the validation. A notification showing the submission reference will only be sent to the RRI's WINGS Mail inbox when the submission is successful. If any part of the file fails to pass the validation, the errors will be shown on screen. Please refer to paragraph 13(j) for the list of error messages.
- g. The submission file should be either in .txt or .zip format with size not larger than 10MB.

*Important note: the conceptual design of the OTCR WebApp shown above is a work-in-progress prototype and may be subject to further changes.*

### 13. OTCR SFTP submission channel

- a. The OTCR SFTP is the automated machine-to-machine submission channel for reporting under the OTCR. RRI seeking automation for the submission process can do so by sending in an application for enrolling the service (Procedure for the service enrolment application will be announced in due course).
- b. The process flow diagram shown below illustrates the high level flow on how the automation submission is done:



- c. RRI opting for the automation submission approach will need to develop its own computer program and infrastructure setup (including the provisioning of a SFTP client software) at its own expenses for connecting and fully utilising the OTCR SFTP submission channel.
- d. For the preparation of implementing the OTCR SFTP submission channel, the RRI is expected to generate a SSH (Secure Shell) cryptography key pair (i.e. a private key and a public key) and provide the public key to the SFC during the service enrolment application process. The public key is used for encrypting the data sent over the Internet.
- e. The recommended encryption ciphers for generating the SSH key pair are specified in the below table:

SSH key pair format	
Key type:	RSA-2048

- f. The configuration of the client SFTP software for the OTCRRPT input file submission and logon information are specified below:






SFTP logon information	
Host name and Port:	<i>To be provided by the SFC</i>
Logon type:	Key file
Username:	<i>To be provided by the SFC</i>
Key file:	<i>RRI's SSH private key</i>

- g. A designated folder and folder path will be assigned to each RRI who has enrolled in the service for uploading the OTCRRPT input file.

Designated file upload path	
Path:	/submission

- h. A corresponding OTCR Response File (Please refer to the section of *OTCR Response File* under the OTCR Technical Information Paper for details) for each submission will be generated and deposited in the designated folder for the RRI to download.
- i. The OTCR Response File contains the summary and results of the corresponding submission including but not limited to the below information:
- Summary of the validation result
  - Date and time of the submission
  - Submission reference number (Only when the validation has passed)
  - Error message(s) (Only when the validation has failed)

Examples of the OTCR Response File:

Example	Example description	Sample file
1	Successful submission	 OTCRRPT_AAA00 1_20221027_OTCF
2	Failed submission – Invalid filename format <i>(Note: the prefix of the sample filename is "RRPT" rather than "OTCRRPT". Hence, the error.)</i>	 RRPT_AAA001_20 221027_OTCRRES
3	Failed submission – Missing header	 OTCRRPT_AAA00 1_20221031_1_OT
4	Failed submission – Duplicated transaction ID	 OTCRRPT_AAA00 1_20221031_1_OT
5	Failed submission – Maximum error count reached	 OTCRRPT_AAA00 1_20221031_OTCF

j. List of error messages:

Error message	Remark <i>(Please refer to the Technical Information Paper for more details)</i>
File is not TXT	The file is not a text file (i.e. TXT).
File in ZIP is not TXT	The archive file in the ZIP is not a text file (i.e. TXT).
Invalid ZIP	The file is not in ZIP format.
ZIP file must contain exactly one file	ZIP file does not contain a valid OTCR Reporting File.
File is empty	OTCR Reporting File is empty.
Password incorrect	The password cannot decrypt the ZIP file.
Invalid filename format	The filename format of the OTCR Reporting File or the ZIP file is invalid.
Invalid filename format for file in ZIP	The filename format of the OTCR Reporting File extracted from the ZIP is invalid.
CEREF in filename does not match	The CE number in the OTCR Reporting File or the ZIP file does not match the selected "Reporting Intermediary".
Submission date in filename does not match	The submission date that forms part of the filename of the OTCR Reporting File or the ZIP file does not match the current date. <i>E.g. OTCRRPT + "_" + &lt;CE no. of RRI&gt; + "_" + &lt;Submission date in YYYYMMDD&gt; + "_" + &lt;No. of submission per submission day*&gt; + ".txt"</i>
Submission no. in filename is not valid	The submission number is not valid.
ZIP is not encrypted	The ZIP file is not password protected.
Only ZIP is accepted when protected by password	If the option "Password-protected OTCR Reporting File" is "Yes", then the file being uploaded should be a ZIP file.
Invalid format	Invalid data format detected in the OTCR Reporting File.
Missing header "{header}"	The corresponding header label is invalid. e.g. Missing header "Transaction ID".
Invalid header order "{header}"	The ordering of the header is invalid. e.g. Invalid header order "Stock Code"
No record in file	No record is detected in the OTCR Reporting File.
Action is not valid for this transaction	The action is invalid (i.e. not "A", "E" or "D") for the transaction.
"{field_name}" is required	The mandatory field is missing in the row. e.g. "Stock Code" is required.
Invalid "{field_name}"	The input for the field failed to pass the validation rule. e.g. Invalid "Stock Code".
CE number of Relevant Regulated Intermediary does not match	The "CE number of Relevant Regulated Intermediary" in the OTCR Reporting File does not match the selected "Reporting Intermediary".
Duplicated Transaction ID	The combination of the transaction id and the action should be unique.

"{field_name}" is not allowed	The field should not contain any input. e.g. "Number of shares transferred" is not allowed.
CID record is not allowed for transaction to be deleted	CID related fields should not contain any input for the action "D" (i.e. Delete).
CID record is required	CID related fields should be filled.
CID of the transferor above is blank	The CID related fields of the transferor of a joint account in the previous row should be filled.
CID of the transferee above is blank	The CID related fields of the transferee of a joint account in the previous row should be filled.
Reporting file is more than 10MB	The OTCR Reporting File must be 10MB in size or less.
Max error count reached	Only the first 1,000 errors are shown.
System error. If this problem persists after retrying, please contact SFC. (Ref no.: {error_reference_no.})	Unexpected errors have been detected. e.g. System error. If this problem persists, please contact SFC. (Ref no.: 18RK2D )

k. Folder path for downloading the OTCR Response File:

Designated file download path	
Path:	/ackreceived

*Note: OTCR Response Files will be removed after seven calendar days.*

- l. A notification containing the submission reference will be delivered to the RRI's WINGS Mail inbox.
- m. The submission file size should not be larger than 10MB per file.
- n. OTCR SFTP account control:

Control measure	Policy
Logon session	Restricted to one session per OTCR SFTP account, i.e. concurrent logon is disallowed.
Logon frequency	Restricted to a maximum number of five consecutive successful logon per OTCR SFTP account within five minutes, i.e. a sixth attempt to logon within the 5-minute interval will result a penalty account lockout time of five minutes. The account lockout will be lifted automatically thereafter.
Logon failure	A maximum number of five consecutive logon failure attempts per OTCR SFTP account within a 5-minute interval will result a penalty lockout time of five minutes. The account lockout will be lifted automatically thereafter.

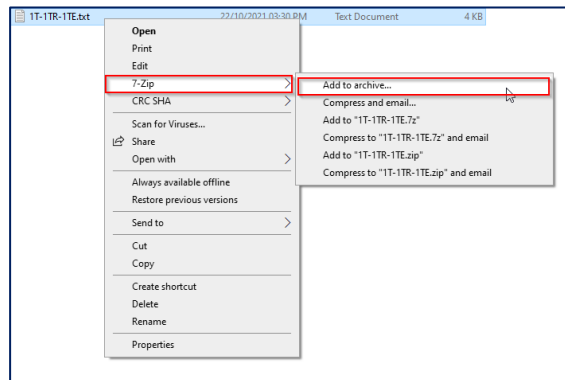
## ZIP file with password protection (Applicable to OTCR WebApp only)

14. 7-Zip is free software with open source that could be used on any computer without registering or paying for it (<https://www.7-zip.org/faq.html>).
15. 7-Zip supports several different compression and non-compression archive formats, but the OTCR WebApp Service will only accept the ZIP format.
16. Please refer to the 7-zip.org website for software installation, licence, and other details.

### Compress file with password protection by using 7-Zip

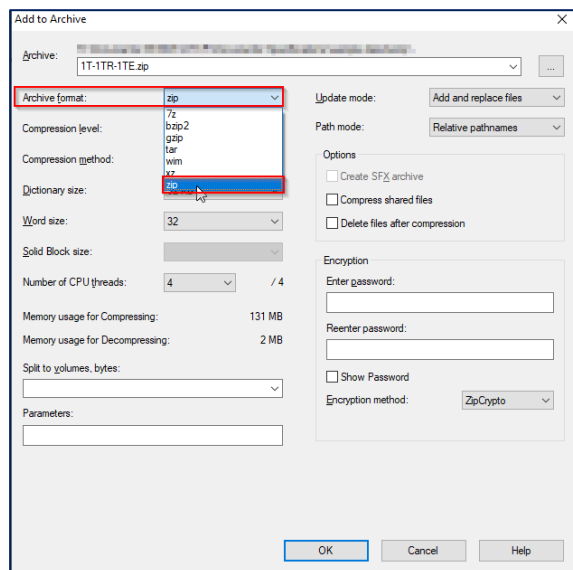
#### 17. Step 1 – Archive

- In Microsoft Windows Explorer, select and right-click on the file you would like to put into a ZIP file.
- Select “7-Zip” -> “Add to archive...” from the menu.



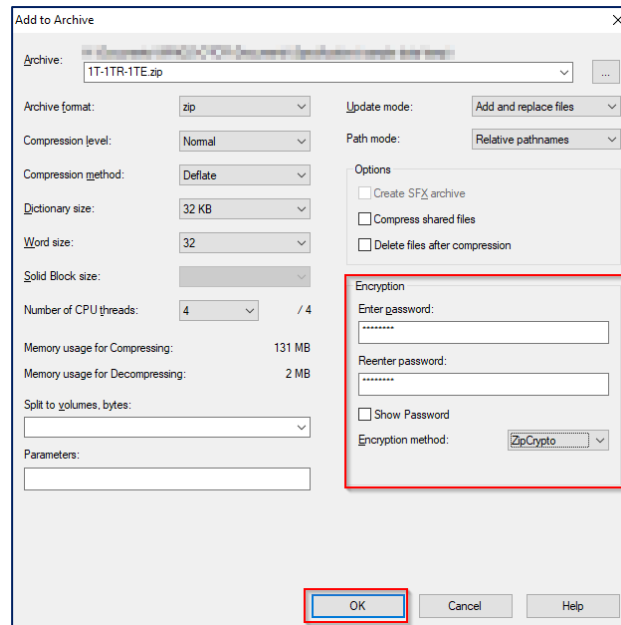
#### 18. Step 2 – Select format

- Select “zip” for the “Archive format” option



## 19. Step 3 – Enter password

- In the Encryption section, enter and re-enter a password. Keep the “Encryption method:” as the default, i.e. “ZipCrypto”. Click “OK” to create the password-protected ZIP file.



## Guidelines for strong passwords

20. When considering an appropriate password for encrypting the OTCR reporting files, you should consider adopting the below best practice.
21. In choosing a strong password, the best practice suggests meeting a combination of three of the five complexity requirements below:
  - Password should contain at least 8 characters and up to 128 characters.
  - Contain at least one upper case letter, i.e. A through Z
  - Contain at least one lower case letter, i.e. a through z
  - Contain at least one base-10 digit, i.e. 0 through 9
  - Contain at least one of the following special characters, i.e. ! @ # \$ % ^ & \* ( )