臺灣期貨交易所

TAIFEX OTC Client Clearing API

電文規範

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內容

1. TAIFEX OTC Client Clearing API 概論說明

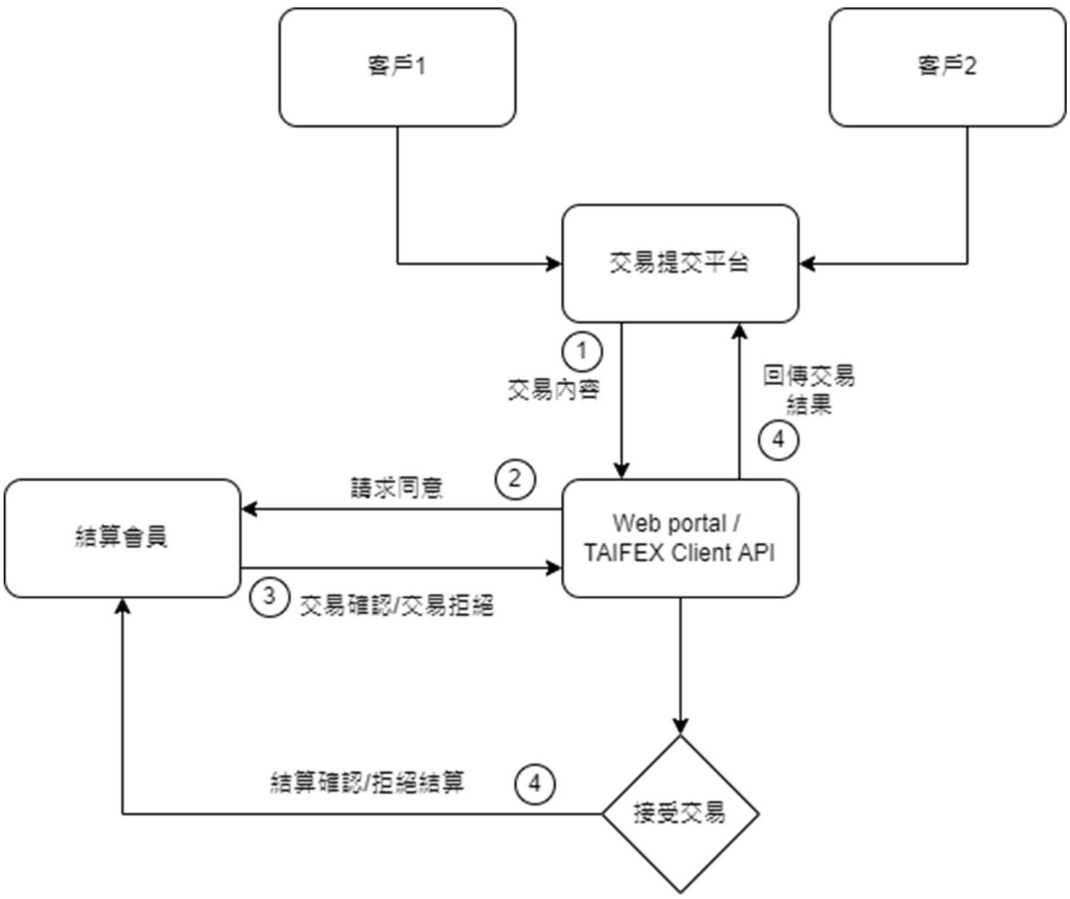
本文件旨在概述 TAIFEX 店頭衍生性金融商品集中結算客戶結算流程，並規範結算服務的回覆訊息內容。

TAIFEX OTC Client Clearing API 提供的服務包含：

- OTC IRS 及 NDF 商品交易確認及回覆功能。
- 提供結算會員串接本系統進行交易確認及回復。

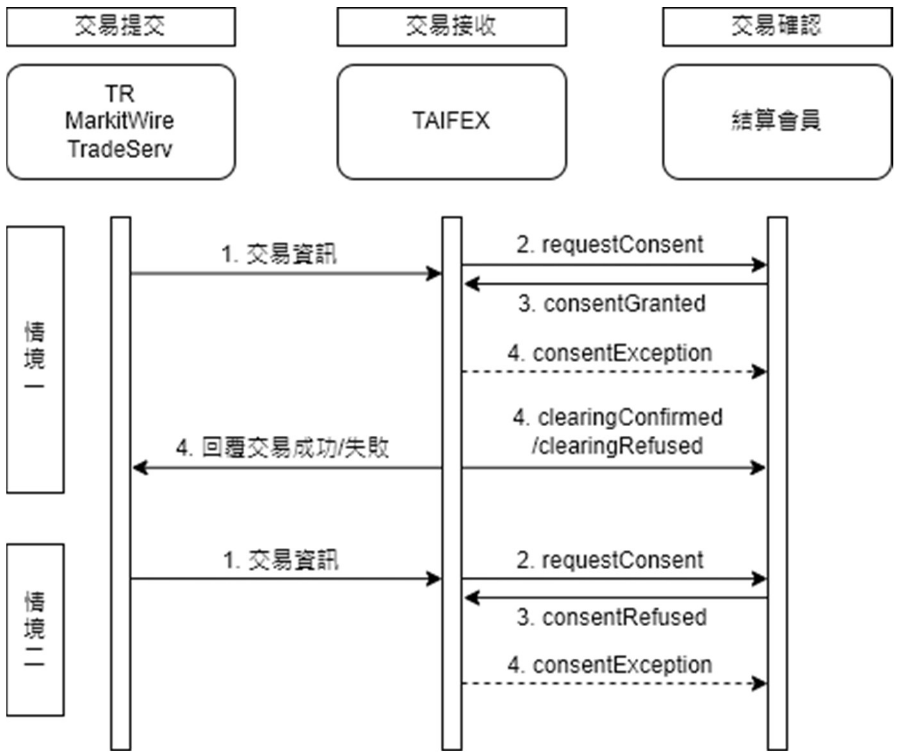
1.1 作業流程

客戶在交易提交確認平臺或透過經紀商辦理交易契約提交至交易提交確認平臺後，客戶指定之結算會員會收到 TAIFEX 發出之請求同意訊息 (requestConsent) 。該結算會員同意並在交易契約通過 TAIFEX 保證金適足性檢核後，該筆交易契約即完成集中結算 (Novated)。



1.2 訊息溝通流程圖

目前有兩種不同情境，如下圖所示。



情境一：

1. 交易提交平台收到提交之交易後，向期交所傳送交易資訊。

2. 期交所在接收到由交易平台所提交之交易後，向結算會員發出請求同意訊息(requestConsent)。

3. 結算會員確認交易內容且同意後回覆期交所交易確認訊息(consentGranted)。

4.1 期交所在收到結算會員回覆的交易確認訊息(consentGranted)後，若訊息內容有誤，則會向結算會員發出例外回覆訊息(consentException)。

4.2 期交所在收到結算會員回覆的交易確認訊息(consentGranted)後，接受此筆交易進行結算作業。若保證金檢核通過，會向結算會員發出結算確認訊息(clearingConfirmed)告知此交易已結算。若保證金檢核失敗，會向結算會員發出結算拒絕訊息(clearingRefused)告知拒絕此筆交易之結算。並同時通知交易提交平台。

情境二：

1. 交易提交平台收到提交之交易後，向期交所傳送交易資訊。

2. 期交所在接收到由交易平台所提交之交易後，向結算會員發出請求同意訊息(requestConsent)。

3. 結算會員確認交易內容且不同意此交易後回覆期交所交易拒絕訊息(consentRefused)。
4. 期交所在收到結算會員回覆的交易拒絕訊息(consentRefused)後，若訊息內容有誤，則會向結算會員發出例外回覆訊息(consentException)。

1.3 電文資料型態

OTC Client API 的電文傳輸格式基於由 ISDA 發起的 FpML（Financial products Markup Language），這是用來描述複雜衍生性金融商品的消息傳遞標準。

FpML 模式的功能類似於 XML 標準模式，其中元素由標記表示，可以包含更多屬性和元素內容，並準確地描述各個種類的商品細節。

FpML 版本使用 5.0。

1.4 電文格式說明

電文可分為四個種類，交易詢問、交易回覆、結算回覆、意外回覆。電文內容有四個主要的段落，header、trade、partyInfo 及 reason。

- Header: 包含訊息 ID、發送方、接收方、訊息建立時間及訊息關聯 ID 等資訊。
- Trade: 包含交易契約內容，格式依商品種類而定。
- Party Info: 包含結算服務提供方、交易來源方、結算會員及帳戶等資訊。
- Reason: 包含原因代碼及描述。

下表說明各種類電文須包含的段落內容。

	請求同意（request Consent）	交易確認（consent Granted）	交易拒絕（consent Refused）	意外回覆（consent Exception）	結算確認（clearing Confirmed）	結算拒絕（clearing Refused）
Header	V	V	V	V	V	V
Trade	V	X	X	X	V	V
Party Info	V	V	V	X	V	V
Reason	X	X	V	V	X	V

1.5 連線方式說明

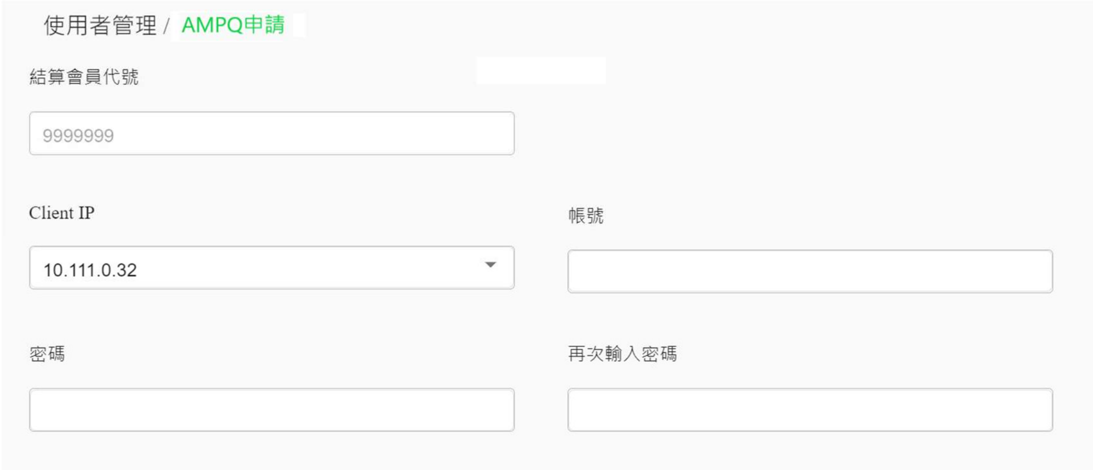
OTC Client API 傳輸是以 AMQP 1.0 作為通訊協定，AMQP 1.0 是一種開放又可靠的訊息通訊協定，適用於建置跨平台溝通(可使用不同語言、架構及作業系統)的應用程式。

Client API 訊息皆由期交所方主動發起，結算會員端接收後回覆。

使用依循 AMQP 協定之客戶端程式即可進行連線(e.g. ActiveMQ、RabbitMQ)。

a. ActiveMQ 帳號申請及連線

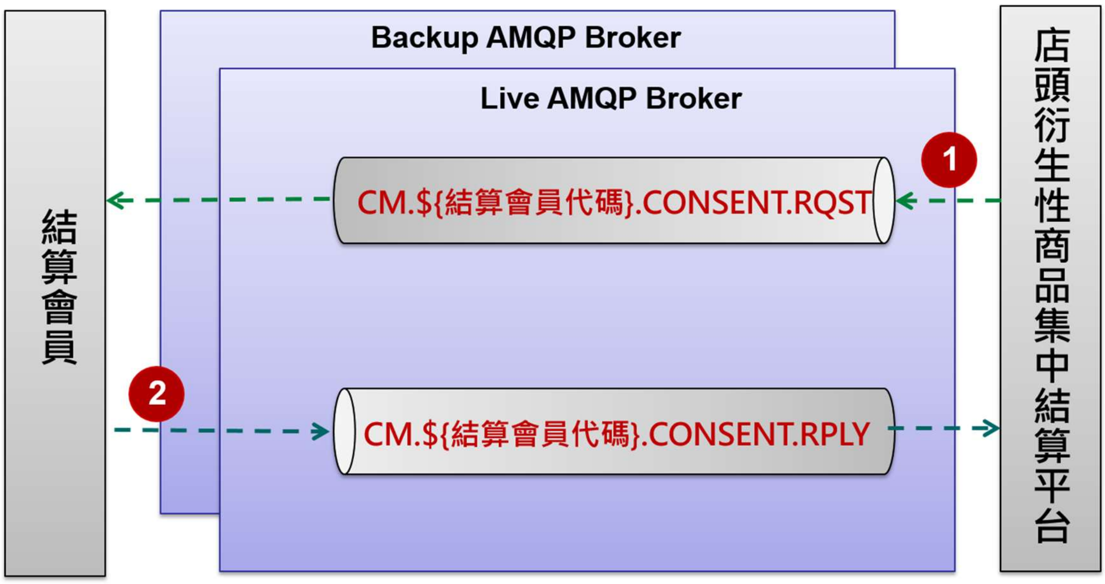
透過本公司提供的 Web portal 統一由管理者進行申請。且帳號可綁定五個 IP Address。



完成申請帳號後須透過 Domain Name 詢問 DNS 並進行連線。連線所使用的埠號為 5672，DNS IP 及 Domain Name 如下表所示：

	AMQP Broker & DNS IP
AMQP Broker（主）	amqp1.taifexccp
AMQP Broker（備）	amqp2.taifexccp
DNS(主)	192.168.231.67
DNS(備)	192.168.236.66

b. 佇列(Message Queue)命名規則



c. 訊息管理機制

若使用其他方式如 Web Portal 回覆 RFC，AMQP Broker 佇列資料僅保留至當天交易結束，即交易日當天未接收訊息於隔日自動刪除。

2. 訊息種類

FpML Message	Usage Description	傳送方	接收方
請求同意 requestConsent	requestConsent訊息從 TAIFEX 傳送到結算會員以要求同意交易契約。此訊息包含交易契約內容。	期交所	結算會員
交易確認 consentGranted	當結算會員同意交易時，結算會員會向 TAIFEX 傳送已同意的訊息。	結算會員	期交所
交易拒絕 consentRefused	當結算會員拒絕交易時，結算會員會向 TAIFEX 傳送已拒絕的訊息。	結算會員	期交所
意外回覆 consentException	期交所在收到結算會員回覆的交易確認(consentGranted)或交易拒絕(consentRefused)訊息後，若訊息內容有誤，則會向結算會員發出例外回覆訊息(consentException)。	期交所	結算會員

結算確認 clearingConfirmed	當 TAIFEX 同意接受交易契約結算，TAIFEX 會傳送 clearingConfirmed訊息予結算會員，通知結算會員該交易契約已完成結算。此訊息包含交易契約內容。	期交所	結算會員
結算拒絕 clearingRefused	當交易被 TAIFEX 拒絕時，TAIFEX 會傳送 clearingRefused訊息予結算會員。此訊息包含一個原因代碼和一個簡要描述交易契約被拒絕結算的原因。此訊息包含交易契約內容。	期交所	結算會員

3. 訊息格式

3.1 請求同意訊息 requestConsent

requestConsent 訊息從 TAIFEX 傳送到結算會員以要求同意交易契約。該訊息包含 IRS、NDF 契約規格，其中包含交易契約所有交易細節。


```xml
<requestConsent>
  <header>
    <messageId messageIdScheme="taifex_message_id"></messageId>
    <sentBy messageAddressScheme="taifex_id">TAIFEX</sentBy>
    <sendTo messageAddressScheme="taifex_cm_id">0120000</sentTo>
    <creationTimestamp>2022-09-20 09:00:22.7430000</creationTimestamp>
  </header>
  <isCorrection>false</isCorrection>
  <correlationId correlationIdScheme="taifex_trd_id">
IR2022092000001</correlationId>
  <sequenceNumber>1</sequenceNumber>
  <trade>
  </trade>
  <party id="clearing_firm">
    <partyId partyIdScheme="clearing_member_firms">0120000</partyId>
  </party>
  <party id="clearing_service">
    <partyId>TAIFEX</partyId>
  </party>
  <party id="trade_source">
    <partyId>MARKIT_WIRE</partyId>
  </party>
  <account>
    <accountId
accountIdScheme="clearing_firm_accounts">9000017</accountId>
  </account>
</requestConsent>
```

Field Name	Path	Description	Enumerations/Values/Schemes
Header Details			
messageId	<requestConsent><header><messageId>	A unique message Identifier. 用來識別每一則訊息的唯一訊息識別碼。	taifex_message_id
sentBy	<requestConsent><header><sentBy>	A party identifier for the message sender. This field should be created with TAIFEX. 訊息傳送方的識別碼。此欄位內容應為 TAIFEX。	taifex_id
sentTo	<requestConsent><header><sentTo>	A party identifier for the message receiver. This field is a Clearing member id of TAIFEX and should be a 7-character code. 訊息接收方的識別碼。此欄位內容應為包含 7 位字元之 TAIFEX 所屬結算會員識別碼。	taifex_cm_id
creationTimestemp	<requestConsent><header><creationTimestamp>	Message creation timestamp in timezone GMT+8. 訊息產生時的時間戳記，適用於 GMT+8 時區。	
isCorrection	<requestConsent><isCorrection>	Identify the message is a correction. This field will not be used by TAIFEX. 識別此訊息是否為更正訊息。 TAIFEX 不會使用本欄位。	
correlationId	<requestConsent><correlationId>	A unique trade identifier generated by TAIFEX. TAIFEX 產生之交易識別碼。	
sequenceNumber	<requestConsent><sequenceNumber>	This field should be set to 1. 此欄位設定為 1。	
Trade Details			
Party Details			

Field Name	Path	Description	Enumerations/Values/Schemes
Clearing Service	<requestConsent><party><partyId>	A party identifier for the clearing service provider. This field should be set to TAIFEX. 結算服務提供方之交易方識別碼。 此欄位設定為 TAIFEX。	id=" clearing_service" TAIFEX
Trade Source	<requestConsent><party><partyId>	A party identifier for the source of this trade. 此交易來源之交易方識別碼。	id=" trade_source" TR MARKIT_WIRE TRADE_SERV
Clearing Firm	<requestConsent><party><partyId>	A party identifier for the clearing firm this trade belong. This field should be a 7- character code. 此交易所屬結算會員之會員識別碼。 此欄位內容應包含 7 位字元。	id=" clearing_firm"
Clearing Firm Account	<requestConsent><account><accountId>	An account identifier for the client of the clearing firm this trade belong. This field should be a 7- character code. 此交易所屬結算會員之結算帳戶識別碼。 此欄位內容應包含 7 位字元。	

3.2 交易確認訊息 consentGranted

當結算會員同意交易時，結算會員會向 TAIFEX 傳送已同意的訊息。此訊息不包含交易契約部分內容。

```xml
<consentGranted fpmlVersion="5-9">
  <header>
    <messageId messageIdScheme="taifex_message_id"></messageId>
    <inReplyTo messageIdScheme="taifex_message_id"></inReplyTo>
    <sentBy messageAddressScheme="taifex_cm_id">0120000</sentBy>
    <sentTo messageAddressScheme="taifex_id">TAIFEX</sentTo>
    <creationTimestamp>2022-09-20 09:00:22.7430000</creationTimestamp>
  </header>
  <correlationId
correlationIdScheme="taifex_trade_id">IR2022092000001</correlationId>
  <sequenceNumber>1</sequenceNumber>
  <party id="clearing_firm">
    <partyId partyIdScheme="clearing_member_firms">0120000</partyId>
  </party>
  <account>
    <accountId
accountIdScheme="clearing_firm_accounts">9000017</accountId>
  </account>
</consentGranted>
```

Field Name	Path	Description	Enumerations/Values/Schemes
Header Details			
messageId	<consentGranted><header><messageId>	A unique message Identifier. 用來識別每一則訊息的唯一訊息識別碼。	taifex_message_id
inReplyTo	<consentGranted><header><inReplyTo>		
sentBy	<consentGranted><header><sentBy>	A party identifier for the message sender.	taifex_cm_id

Field Name	Path	Description	Enumerations/Values/Schemes
		This field is a Clearing member id of TAIFEX and should be a 7-character code. 訊息傳送方的識別碼。 此欄位內容應為包含 7 位字母之 TAIFEX 所屬結算會員識別碼。	
sentTo	<consentGranted><header><sentTo>	A party identifier for the message receiver. This field should be created with TAIFEX. 訊息接收方的識別碼。 此欄位內容應為 TAIFEX。	taifex_id
creationTimestemp	<consentGranted><header><creationTimestamp>	Message creation timestamp in timezone GMT+8. 訊息產生時的時間戳記，適用於 GMT+8 時區。	
correlationId	<consentGranted><correlationId>	A unique trade identifier generated by TAIFEX. TAIFEX 產生之交易識別碼。	
sequenceNumber	<consentGranted><sequenceNumber>	This field should be set to 1. 此欄位設定為 1。	
Party Details			
Clearing Firm	<consentGranted><party><partyId>	A party identifier for the clearing firm this trade belong. This field should be a 7- character code. 此交易所屬結算會員之會員識別碼。 此欄位內容應包含 7 位字元。	id=" clearing_firm"
Clearing Firm Account	<consentGranted><account><accountId>	An account identifier for the client of the clearing firm this trade belong. This field should be a 7- character code. 此交易所屬結算會員之結算帳戶識別碼。 此欄位內容應包含 7 位字元。	

3.3 交易拒絕訊息 consentRefused

當結算會員拒絕交易時，結算會員會向 TAIFEX 傳送已拒絕的訊息。此訊息不包含交易契約部分內容。


```xml
<consentRefused fpmlVersion="5-9">
  <header>
    <messageId messageIdScheme="taifex_message_id"></messageId>
    <inReplyTo messageIdScheme="taifex_message_id"></inReplyTo>
    <sentBy messageAddressScheme="taifex_cm_id">0120000</sentBy>
    <sentTo messageAddressScheme="taifex_id">TAIFEX</sentTo>
    <creationTimestamp>2022-09-20 09:00:22.7430000</creationTimestamp>
  </header>
  <correlationId
correlationIdScheme="taifex_trade_id">IR2022092000001</correlationId>
  <sequenceNumber>1</sequenceNumber>
  <party id="clearing_firm">
    <partyId partyIdScheme="clearing_member_firms">0120000</partyId>
  </party>
  <account>
    <accountId
accountIdScheme="clearing_firm_accounts">9000017</accountId>
  </account>
  <reason>
    <reasonCode>200001</reasonCode>
    <description>Margin is insufficient.</description>
  </reason>
</consentRefused>
```


Field Name	Path	Description	Enumerations/Values/Schemes
Header Details			
messageId	<consentRefused><header><messageId>	A unique message Identifier. 用來識別每一則訊息的唯一訊息識別碼。	taifex_message_id

Field Name	Path	Description	Enumerations/Values/Schemes
inReplyTo	<consentRefused><header><inReplyTo>		
sentBy	<consentRefused><header><sentBy>	A party identifier for the message sender. This field is a Clearing member id of TAIFEX and should be a 7-character code. 訊息傳送方的識別碼。 此欄位內容應為包含7位字元之TAIFEX所屬結算會員識別碼。	taifex_cm_id
sentTo	<consentRefused><header><sentTo>	A party identifier for the message receiver. This field should be created with TAIFEX. 訊息接收方的識別碼。 此欄位內容應為TAIFEX。	taifex_id
creationTimestemp	<consentRefused><header><creationTimestamp>	Message creation timestamp in timezone GMT+8. 訊息產生時的時間戳記，適用於GMT+8時區。	
correlationId	<consentRefused><correlationId>	A unique trade identifier generated by TAIFEX. TAIFEX產生之交易識別碼。	
sequenceNumber	<consentRefused><sequenceNumber>	This field should be set to 1. 此欄位設定為1。	
Party Details			
Clearing Firm	<consentRefused><party><partyId>	A party identifier for the clearing firm this trade belong. This field should be a 7- character code. 此交易所屬結算會員之會員識別碼。 此欄位內容應包含7位字元。	id=" clearing_firm"

Field Name	Path	Description	Enumerations/Values/Schemes
Clearing Firm Account	<consentRefused><account><accountId>	An account identifier for the client of the clearing firm this trade belong. This field should be a 7- character code. 此交易所屬結算會員之結算帳戶識別碼。 此欄位內容應包含7位字元。	

3.4 意外回覆訊息 consentException

期交所在收到結算會員回覆的交易確認(consentGranted)或交易拒絕(consentRefused)訊息後，若訊息內容有誤，則會向結算會員發出例外回覆訊息(consentException)。

```xml
<consentException fpmlVersion="5-9">
  <header>
    <messageId messageIdScheme="taifex_message_id"></messageId>
    <inReplyTo messageIdScheme="taifex_message_id"></inReplyTo>
    <sentBy messageAddressScheme="taifex_id">TAIFEX</sentBy>
    <sentTo messageAddressScheme="taifex_cm_id">0120000</sentTo>
    <creationTimestamp>2022-09-20 09:00:22.7430000</creationTimestamp>
  </header>
  <correlationId
correlationIdScheme="taifex_trade_id">IR2022092000001</correlationId>
  <reason>
    <reasonCode>100002</reasonCode>
    <description>Trade details are incorrect.</description>
  </reason>
</consentException>
```

Field Name	Path	Description	Enumerations/Values/Schemes
Header Details			
messageId	<consentException><header><messageId>	A unique message Identifier. 用來識別每一則訊息的唯一訊息識別碼。	taifex_message_id
inReplyTo	<consentException><header><inReplyTo>		
sentBy	<consentException><header><sentBy>	A party identifier for the message sender. This field is a Clearing member id of TAIFEX and should be a 7-character code. 訊息傳送方的識別碼。 此欄位內容應為包含 7 位字元之 TAIFEX 所屬結算會員識別碼。	taifex_cm_id

Field Name	Path	Description	Enumerations/Values/Schemes
sentTo	<consentException><header><sentTo>	A party identifier for the message receiver. This field should be created with TAIFEX. 訊息接收方的識別碼。 此欄位內容應為 TAIFEX。	taifex_id
creationTimestemp	<consentException><header><creationTimestamp>	Message creation timestamp in timezone GMT+8. 訊息產生時的時間戳記，適用於 GMT+8 時區。	
correlationId	<consentException><correlationId>	A unique trade identifier generated by TAIFEX. TAIFEX 產生之交易識別碼。	

3.5 結算確認訊息 clearingConfirmed

當 TAIFEX 同意接受交易契約結算，TAIFEX 會傳送 clearingConfirmed 訊息予結算會員，通知結算會員該交易契約已完成結算。此訊息包含交易契約內容。

```xml
<clearingConfirmed fpmlVersion="5-9">
  <header>
    <messageId messageIdScheme="taifex_message_id"></messageId>
    <sentBy messageAddressScheme="taifex_id">TAIFEX</sentBy>
    <sentTo messageAddressScheme="taifex_cm_id">0120000</sentTo>
    <creationTimestamp>2022-09-20 09:00:22.7430000</creationTimestamp>
  </header>
  <correlationId
correlationIdScheme="taifex_trade_id">IR2022092000001</correlationId>
  <sequenceNumber>1</sequenceNumber>
  <trade>
  </trade>
  <party id="clearing_firm">
    <partyId partyIdScheme="clearing_member_firms">0120000</partyId>
  </party>
  <party id="clearing_service">
    <partyId>TAIFEX</partyId>
  </party>
  <party id="trade_source">
    <partyId>MARKIT_WIRE</partyId>
  </party>
  <account>
    <accountId
accountIdScheme="clearing_firm_accounts">9000017</accountId>
  </account>
</clearingConfirmed>
```

Field Name	Path	Description	Enumerations/Values/Schemes
Header Details			

Field Name	Path	Description	Enumerations/Values/Schemes
messageId	<clearingConfirmed><header><messageId>	A unique message Identifier. 用來識別每一則訊息的唯一訊息識別碼。	taifex_message_id
sentBy	<clearingConfirmed><header><sentBy>	A party identifier for the message sender. This field should be created with TAIFEX. 訊息傳送方的識別碼。此欄位內容應為 TAIFEX。	taifex_id
sentTo	<clearingConfirmed><header><sentTo>	A party identifier for the message receiver. This field is a Clearing member id of TAIFEX and should be a 7-character code. 訊息接收方的識別碼。此欄位內容應為包含 7 位字元之 TAIFEX 所屬結算會員識別碼。	taifex_cm_id
creationTimestemp	<clearingConfirmed><header><creationTimestamp>	Message creation timestamp in timezone GMT+8. 訊息產生時的時間戳記，適用於 GMT+8 時區。	
correlationId	<clearingConfirmed><correlationId>	A unique trade identifier generated by TAIFEX. TAIFEX 產生之交易識別碼。	
sequenceNumber	<clearingConfirmed><sequenceNumber>	This field should be set to 1. 此欄位設定為 1。	
Party Details			
Clearing Service	<clearingConfirmed><party><partyId>	A party identifier for the clearing service provider. This field should be set to TAIFEX. 結算服務提供方之交易方識別碼。 此欄位設定為 TAIFEX。	id=" clearing_service" TAIFEX
Trade Source	<clearingConfirmed><party><partyId>	A party identifier for the source of this trade. 此交易來源之交易方識別碼。	id=" trade_source"

Field Name	Path	Description	Enumerations/Values/Schemes
			TR MARKIT_WIRE TRADE_SERV
Clearing Firm	<clearingConfirmed><party><partyId>	A party identifier for the clearing firm this trade belong. This field should be a 7- character code. 此交易所屬結算會員之會員識別碼。 此欄位內容應包含7位字元。	id=” clearing_firm”
Clearing Firm Account	<clearingConfirmed><account><accountId>	An account identifier for the client of the clearing firm this trade belong. This field should be a 7- character code. 此交易所屬結算會員之結算帳戶識別碼。 此欄位內容應包含7位字元。	

3.6 結算拒絕訊息 clearingRefused

當交易被 TAIFEX 拒絕時，TAIFEX 會傳送 clearingRefused 訊息予結算會員。該訊息包含一個原因代碼和一個簡要描述交易契約被拒絕結算的原因。此訊息包含交易契約內容。


```xml
<clearingRefused fpmlVersion="5-9">
  <header>
    <messageId messageIdScheme="taifex_message_id"></messageId>
    <sentBy messageAddressScheme="taifex_id">TAIFEX</sentBy>
    <sentTo messageAddressScheme="taifex_cm_id">0120000</sentTo>
    <creationTimestamp>2022-09-20 09:00:22.7430000</creationTimestamp>
  </header>
  <correlationId
correlationIdScheme="taifex_trade_id">IR2022092000001</correlationId>
  <sequenceNumber>1</sequenceNumber>
  <trade>
  </trade>
  <party id="clearing_firm">
    <partyId partyIdScheme="clearing_member_firms">0120000</partyId>
  </party>
  <party id="clearing_service">
    <partyId>TAIFEX</partyId>
  </party>
  <party id="trade_source">
    <partyId>MARKIT_WIRE</partyId>
  </party>
  <account>
    <accountId
accountIdScheme="clearing_firm_accounts">9000017</accountId>
  </account>
  <reason>
    <reasonCode>100001</reasonCode>
    <description>Margin is insufficient.</description>
  </reason>
</clearingRefused>
```

Field Name	Path	Description	Enumerations/Values/Schemes
Header Details			
messageId	<clearingRefused><header><messageId>	A unique message Identifier. 用來識別每一則訊息的唯一訊息識別碼。	taifex_message_id
sentBy	<clearingRefused><header><sentBy>	A party identifier for the message sender. This field should be created with TAIFEX. 訊息傳送方的識別碼。此欄位內容應為 TAIFEX。	taifex_id
sentTo	<clearingRefused><header><sentTo>	A party identifier for the message receiver. This field is a Clearing member id of TAIFEX and should be a 7-character code. 訊息接收方的識別碼。此欄位內容應為包含 7 位字元之 TAIFEX 所屬結算會員識別碼。	taifex_cm_id
creationTimestemp	<clearingRefused><header><creationTimestamp>	Message creation timestamp in timezone GMT+8. 訊息產生時的時間戳記，適用於 GMT+8 時區。	
correlation Id	<clearingRefused><correlationId>	A unique trade identifier generated by TAIFEX. TAIFEX 產生之交易識別碼。	
sequenceNumber	<clearingRefused><sequenceNumber>	This field should be set to 1. 此欄位設定為 1。	
Party Details			
Clearing Service	<clearingRefused><party><partyId>	A party identifier for the clearing service provider. This field should be set to TAIFEX. 結算服務提供方之交易方識別碼。 此欄位設定為 TAIFEX。	id="clearing_service" TAIFEX

Field Name	Path	Description	Enumerations/Values/Schemes
Trade Source	<clearingRefused><party><partyId>	A party identifier for the source of this trade. 此交易來源之交易方識別碼。	id=" trade_source " TR MARKIT_WIRE TRADE_SERV
Clearing Firm	<clearingRefused><party><partyId>	A party identifier for the clearing firm this trade belong. This field should be a 7- character code. 此交易所屬結算會員之會員識別碼。 此欄位內容應包含7位字元。	id=" clearing_firm "
Clearing Firm Account	<clearingRefused><account><accountId>	An account identifier for the client of the clearing firm this trade belong. This field should be a 7- character code. 此交易所屬結算會員之結算帳戶識別碼。 此欄位內容應包含7位字元。	

3.7 交易內容

此段落紀錄於 requestConsent、clearingConfirm 及 clearingRefused 訊息中出現的 trade 標籤內容。目前可接受的種類包含 IRS 及 NDF 之交易。

a. IRS(Interest Rate Swap)

```xml
<trade>
  <tradeHeader>
    <partyTradeIdentifier>
      <partyReference href="party1"/>
      <tradeId></tradeId>
    </partyTradeIdentifier>
    <partyTradeIdentifier>
      <partyReference href="party2"/>
      <tradeId></tradeId>
    </partyTradeIdentifier>
    <tradeDate>2022-09-27</tradeDate>
  </tradeHeader>
  <swap>
    <swapStream id="floatingLeg">
      <payerPartyReference href="party1"/>
      <receiverPartyReference href="party2"/>
      <calculationPeriodDates id="floatingLegCalcPeriodDates">
        <effectiveDate>
          <unadjustedDate>2022-09-29</unadjustedDate>
          <dateAdjustments>
            <businessDayConvention>NONE</businessDayConvention>
          </dateAdjustments>
        </effectiveDate>
        <terminationDate>
          <unadjustedDate>2032-09-29</unadjustedDate>
          <dateAdjustments>
            <businessDayConvention>MODFOLLOWING</businessDayConvention>
            <businessCenters id="primaryBusinessCenters">
              <businessCenter>TWTA</businessCenter>
            </businessCenters>
          </dateAdjustments>
```

```xml
        </terminationDate>
        <calculationPeriodDatesAdjustments>
          <businessDayConvention>MODFOLLOWING</businessDayConvention>
          <businessCenters>
            <businessCenter>TWTA</businessCenter>
          </businessCenters>
        </calculationPeriodDatesAdjustments>
        <firstRegularPeriodStartDate>2022-09-
29</firstRegularPeriodStartDate>
        <stubPeriodType>ShortInitial</stubPeriodType>
        <calculationPeriodFrequency>
          <periodMultiplier>3</periodMultiplier>
          <period>M</period>
          <rollConvention>29</rollConvention>
        </calculationPeriodFrequency>
      </calculationPeriodDates>
      <paymentDates id="floatingLegPaymentDates">
        <calculationPeriodDatesReference
href="floatingLegCalcPeriodDates"/>
        <paymentFrequency>
          <periodMultiplier>3</periodMultiplier>
          <period>M</period>
        </paymentFrequency>
        <payRelativeTo>CalculationPeriodEndDate</payRelativeTo>
        <paymentDaysOffset>
          <periodMultiplier>5</periodMultiplier>
          <period>D</period>
          <dayType>Business</dayType>
        </paymentDaysOffset>
        <paymentDatesAdjustments>
          <businessDayConvention>MODFOLLOWING</businessDayConvention>
          <businessCenters>
            <businessCenter>TWTA</businessCenter>
          </businessCenters>
        </paymentDatesAdjustments>
      </paymentDates>
      <resetDates id="floatingLegResetDates">
        <calculationPeriodDatesReference
```

```xml
href="floatingLegCalcPeriodDates"/>
        <resetRelativeTo>CalculationPeriodStartDate</resetRelativeTo>
        <fixingDates>
          <periodMultiplier>-2</periodMultiplier>
          <period>D</period>
          <dayType>Business</dayType>
          <businessDayConvention>NONE</businessDayConvention>
          <businessCenters>
            <businessCenter>TWTA</businessCenter>
          </businessCenters>
          <dateRelativeTo href="floatingLegResetDates"/>
        </fixingDates>
        <resetFrequency>
          <periodMultiplier>3</periodMultiplier>
          <period>M</period>
        </resetFrequency>
        <resetDatesAdjustments>
          <businessDayConvention>MODFOLLOWING</businessDayConvention>
          <businessCenters>
            <businessCenter>TWTA</businessCenter>
          </businessCenters>
        </resetDatesAdjustments>
      </resetDates>
      <calculationPeriodAmount>
        <calculation>
          <notionalSchedule>
            <notionalStepSchedule>
              <initialValue>50000000.00</initialValue>
              <currency>TWD</currency>
            </notionalStepSchedule>
          </notionalSchedule>
          <floatingRateCalculation>
            <floatingRateIndex>TWD-TAIBOR</floatingRateIndex>
            <indexTenor>
              <periodMultiplier>3</periodMultiplier>
              <period>M</period>
            </indexTenor>
            <spreadSchedule>
```

```xml
              <initialValue>0.000123</initialValue>
            </spreadSchedule>
          </floatingRateCalculation>
          <dayCountFraction>ACT/360</dayCountFraction>
          <compoundingMethod>Straight</compoundingMethod>
        </calculation>
      </calculationPeriodAmount>
      <stubCalculationPeriodAmount>
        <calculationPeriodDatesReference
href="floatingLegCalcPeriodDates"/>
        <initialStub>
          <floatingRate>
            <floatingRateIndex>TWD-TAIBOR</floatingRateIndex>
            <indexTenor>
              <periodMultiplier>2</periodMultiplier>
              <period>M</period>
            </indexTenor>
          </floatingRate>
          <floatingRate>
            <floatingRateIndex>TWD-TAIBOR</floatingRateIndex>
            <indexTenor>
              <periodMultiplier>3</periodMultiplier>
              <period>M</period>
            </indexTenor>
          </floatingRate>
          <stubRate>0.05</stubRate>
        </initialStub>
      </stubCalculationPeriodAmount>
    </swapStream>
    <swapStream id="fixedLeg">
      <payerPartyReference href="party2"/>
      <receiverPartyReference href="party1"/>
      <calculationPeriodDates id="fixedLegCalcPeriodDates">
        <effectiveDate>
          <unadjustedDate>2022-09-29</unadjustedDate>
          <dateAdjustments>
            <businessDayConvention>NONE</businessDayConvention>
          </dateAdjustments>
```

```xml
        </effectiveDate>
        <terminationDate>
          <unadjustedDate>2032-09-29</unadjustedDate>
          <dateAdjustments>
            <businessDayConvention>MODFOLLOWING</businessDayConvention>
            <businessCenters id="primaryBusinessCenters">
              <businessCenter>TWTA</businessCenter>
            </businessCenters>
          </dateAdjustments>
        </terminationDate>
        <calculationPeriodDatesAdjustments>
          <businessDayConvention>MODFOLLOWING</businessDayConvention>
          <businessCenters>
            <businessCenter>TWTA</businessCenter>
          </businessCenters>
        </calculationPeriodDatesAdjustments>
        <firstRegularPeriodStartDate>2022-09-
29</firstRegularPeriodStartDate>
        <stubPeriodType>ShortInitial</stubPeriodType>
        <calculationPeriodFrequency>
          <periodMultiplier>3</periodMultiplier>
          <period>M</period>
          <rollConvention>29</rollConvention>
        </calculationPeriodFrequency>
      </calculationPeriodDates>
      <paymentDates id="fixedLegPaymentDates">
        <calculationPeriodDatesReference href="fixedLegCalcPeriodDates"/>
        <paymentFrequency>
          <periodMultiplier>3</periodMultiplier>
          <period>M</period>
        </paymentFrequency>
        <payRelativeTo>CalculationPeriodEndDate</payRelativeTo>
        <paymentDaysOffset>
          <periodMultiplier>5</periodMultiplier>
          <period>D</period>
          <dayType>Business</dayType>
        </paymentDaysOffset>
        <paymentDatesAdjustments>
```

```xml
          <businessDayConvention>MODFOLLOWING</businessDayConvention>
          <businessCenters>
            <businessCenter>TWTA</businessCenter>
          </businessCenters>
        </paymentDatesAdjustments>
      </paymentDates>
      <calculationPeriodAmount>
        <calculation>
          <notionalSchedule>
            <notionalStepSchedule>
              <initialValue>50000000.00</initialValue>
              <currency>TWD</currency>
            </notionalStepSchedule>
          </notionalSchedule>
          <fixedRateSchedule>
            <initialValue>0.04</initialValue>
          </fixedRateSchedule>
          <dayCountFraction>ACT/365.FIXED</dayCountFraction>
        </calculation>
      </calculationPeriodAmount>
    </swapStream>
    <additionalPayment>
      <payerPartyReference href="party1"/>
      <receiverPartyReference href="party2"/>
      <paymentAmount>
        <currency>TWD</currency>
        <amount>1000</amount>
      </paymentAmount>
      <paymentDate>
        <unadjustedDate>2022-03-22</unadjustedDate>
        <dateAdjustments>
          <businessDayConvention>MODFOLLOWING</businessDayConvention>
          <businessCenters>
            <businessCenter>TWTA</businessCenter>
          </businessCenters>
        </dateAdjustments>
      </paymentDate>
      <paymentType>UpfrontFee</paymentType>
```

```
    </additionalPayment>
  </swap>
</trade>
```

Field Name	Path	Enumerations/Values/Schemes
Trade Date	<trade><tradeHeader><tradeDate>	yyyy-MM-dd
Effective Date	<trade><swap><swapStream id=" floatingLeg" ><calculationPeriodDates id=" floatingLegCalcPeriodDates" ><effectiveDate><unadjustedDate> <trade><swap><swapStream id=" fixedLeg" ><calculationPeriodDates id=" fixedLegCalcPeriodDates" ><effectiveDate><unadjustedDate>	yyyy-MM-dd
Maturity Date	<trade><swap><swapStream id=" floatingLeg" ><calculationPeriodDates id=" floatingLegCalcPeriodDates" ><terminationDate><unadjustedDate> <trade><swap><swapStream id=" fixedLeg" ><calculationPeriodDates id=" fixedLegCalcPeriodDates" ><terminationDate><unadjustedDate>	yyyy-MM-dd
Upfront Fee Currency	<trade><swap><additionalPayment><paymentAmount><currency>	
Upfront Fee Amount	<trade><swap><additionalPayment><paymentAmount><amount>	Decimal(14, 2)
Upfront Fee Payment Date	<trade><swap><additionalPayment><paymentDate><unadjustedDate>	yyyy-MM-dd

Field Name	Path	Enumerations/Values/Schemes
Pay/Receive Fixed		
Fixed Leg Principal Currency	<trade><swap><swapStream id=" fixedLeg" ><calculationPeriodAmount><calculation><notionalSchedule><notionalStepSchedule><currency>	
Fixed Leg Principal	<trade><swap><swapStream id=" fixedLeg" ><calculationPeriodAmount><calculation><notionalSchedule><notionalStepSchedule><initialValue>	Decimal(19, 2)
Fixed Rate	<trade><swap><swapStream id=" fixedLeg" ><calculationPeriodAmount><calculation><fixedRateSchedule><initialValue>	Decimal(9, 6)
Fixed Rate Day Count	<trade><swap><swapStream id=" fixedLeg" ><calculationPeriodAmount><calculation><dayCountFraction>	e.g. ACT/ACT.ISDA ACT/365.FIXED ACT/360 30/360 30E/360 30E/360.ISDA
Fixed Rate Payment Frequency	<trade><swap><swapStream id=" fixedLeg" ><paymentDates id=" fixedLegPaymentDates" ><paymentFrequency>	e.g. 1M 2M 3M 4M 5M 6M 7M 8M 9M
Pay/Receive Floating		

Field Name	Path	Enumerations/Values/Schemes
Floating Leg Principal Currency	<trade><swap><swapStream id=" floatingLeg" ><calculationPeriodAmount><calculation><notionalSchedule><notionalStepSchedule><currency>	
Floating Leg Principal	<trade><swap><swapStream id=" floatingLeg" ><calculationPeriodAmount><calculation><notionalSchedule><notionalStepSchedule><initialValue>	Decimal(19, 2)
Floating Rate Index	<trade><swap><swapStream id=" floatingLeg" ><calculationPeriodAmount><calculation><floatingRateCalculation><floatingRateIndex> <trade><swap><swapStream id=" floatingLeg" ><initialStub><floatingRate><floatingRateIndex> <trade><swap><swapStream id=" floatingLeg" ><finalStub><floatingRate><floatingRateIndex>	TWD-TAIBOR
Floating Rate Tenor	<trade><swap><swapStream id=" floatingLeg" ><calculationPeriodAmount><calculation><floatingRateCalculation><indexTenor>	e.g. 1M 2M 3M 4M 5M 6M 7M 8M 9M 10M 11M 12M

Field Name	Path	Enumerations/Values/Schemes
Floating Rate Index Spread	<trade><swap><swapStream id=" floatingLeg" ><calculationPeriodAmount><calculation><floatingRateCalculation><spreadSchedule><initialValue>	Decimal(9, 6)
Floating Rate Payment Frequency	<trade><swap><swapStream id=" floatingLeg" ><paymentDates id=" floatingLegPaymentDates" ><paymentFrequency>	e.g. 1M 2M 3M 4M 5M 6M 7M 8M 9M
Floating Rate Reset Frequency	<trade><swap><swapStream id=" floatingLeg" ><resetDates id="floatingLegResetDates"><resetFrequency>	e.g. 1M 2M 3M 4M 5M 6M 7M 8M 9M
Fixing Date Offset	<trade><swap><swapStream id=" floatingLeg" ><resetDates id=" floatingLegResetDates" ><fixingDates><periodMultiplier> <trade><swap><swapStream id=" floatingLeg" ><resetDates id=" floatingLegResetDates" ><fixingDates><period> <trade><swap><swapStream id=" floatingLeg" ><resetDates id=" floatingLegResetDates" ><fixingDates><dayType>	e.g. -2D
Floating Rate Day Count	<trade><swap><swapStream id=" floatingLeg" ><calculationPeriodAmount><calculation><dayCountFraction>	e.g. ACT/ACT.ISDA ACT/365.FIXED

Field Name	Path	Enumerations/Values/Schemes
		ACT/360 30/360
Business Day Convention	<trade><swap><swapStream id=" floatingLeg" ><calculationPeriodDates id=" floatingLegCalcPeriodDates" ><terminationDates><dateAdjustments><businessDayConvention> <trade><swap><swapStream id=" floatingLeg" ><calculationPeriodDates id=" floatingLegCalcPeriodDates" ><calculationPeriodDatesAdjustments><businessDayConvention> <trade><swap><swapStream id=" floatingLeg" ><paymentDates id=" floatingLegPaymentDates" ><paymentDatesAdjustments><businessDayConvention> <trade><swap><swapStream id=" floatingLeg" ><resetDates id=" floatingLegResetDates" ><resetDatesAdjustments><businessDayConvention> <trade><swap><swapStream id=" fixedLeg" ><calculationPeriodDates id=" fixedLegCalcPeriodDates" ><terminationDates><dateAdjustments><businessDayConvention> <trade><swap><swapStream id=" fixedLeg" ><calculationPeriodDates id=" fixedLegCalcPeriodDates" ><calculationPeriodDatesAdjustments><businessDayConvention> <trade><swap><swapStream id=" fixedLeg" ><paymentDates id=" fixedPaymentDates" ><paymentDatesAdjustments><businessDayConvention>	e.g. NONE FOLLOWING MODFOLLOWING PRECEDING MODPRECEDING

Field Name	Path	Enumerations/Values/Schemes
	<trade><swap><additionalPayment><paymentDate><dateAdjustments><businessDayConvention>	
Compounding Method	<trade><swap><swapStream id=" floatingLeg" ><calculationPeriodAmount><calculation><compoundingMethod>	e.g. Flat None Straight SpreadExclusive
Payment Lag	<trade><swap><swapStream id=" floatingLeg" ><paymentDates id=" floatingLegPaymentDates" ><paymentDaysOffset> <trade><swap><swapStream id=" fixedLeg" ><paymentDates id=" fixedLegPaymentDates" ><paymentDaysOffset>	
Fixing Dates Holiday Center	<trade><swap><swapStream id=" floatingLeg" ><resetDates id=" floatingLegResetDates" ><fixingDates><businessCenters><businessCenter>	e.g. TWTA
Payment Dates Holiday Center	<trade><swap><swapStream id=" floatingLeg" ><paymentDates id=" floatingLegPaymentDates" ><paymentDatesAdjustments><businessCenters><businessCenter> <trade><swap><swapStream id=" fixedLeg" ><paymentDates id=" fixedPaymentDates" ><paymentDatesAdjustments><businessCenters><businessCenter> <trade><swap><additionalPayment><paymentDate><dateAdjustments><businessCenters><businessCenter>	e.g. TWTA
Roll Convention	<trade><swap><swapStream id=" floatingLeg" ><calculationPeriodDates id=" floatingLegCalcPeriodDates" ><calculationPeriodFrequency><rollConvention>	e.g. NONE EOM

Field Name	Path	Enumerations/Values/Schemes
	<trade><swap><swapStream id=” fixedLeg” ><calculationPeriodDates id=” fixedLegCalcPeriodDates” ><calculationPeriodFrequency ><rollConvention>	
Stub Period Type	<trade><swap><swapStream id=” floatingLeg"><calculationPeriodDates id=’ floatingLegCalcPeriodDates” ><stubPeriodType> <trade><swap><swapStream id=” fixedLeg” ><calculationPeriodDates id=” fixedLegCalcPeriodDates” ><stubPeriodType>	e.g. ShortInitial ShortFinal LongInitial LongFinal
First Regular Period Start Date	<trade><swap><swapStream id=’ floatingLeg” ><calculationPeriodDates id=” floatingLegCalcPeriodDates” ><firstRegularPeriodStartDate> <trade><swap><swapStream id=’ fixedLeg” ><calculationPeriodDates id=” fixedLegCalcPeriodDates” ><firstRegularPeriodStartDate>	yyyy-MM-dd
Last Regular Period End Date	<trade><swap><swapStream id=’ floatingLeg” ><calculationPeriodDates id=” floatingLegCalcPeriodDates” ><lastRegularPeriodEndDate> <trade><swap><swapStream id=’ fixedLeg” ><calculationPeriodDates id=” fixedLegCalcPeriodDates” ><lastRegularPeriodEndDate>	yyyy-MM-dd
Stub Rate	<trade><swap><swapStream id=” floatingLeg” ><stubCalculationPeriodAmount><initialStub><stubRate>	Decimal(7, 4)

Field Name	Path	Enumerations/Values/Schemes
	<trade><swap><swapStream id=” floatingLeg” ><stubCalculationPeriodAmount><finalStub><stubRate>	
Stub Index Tenor 1	<trade><swap><swapStream id=” floatingLeg” ><stubCalculationPeriodAmount><initialStub><floatingRate><indexTenor> <trade><swap><swapStream id=” floatingLeg” ><stubCalculationPeriodAmount><finalStub><floatingRate><indexTenor>	e.g. 1W 2W 1M 2M 3M 6M
Stub Index Tenor 2	<trade><swap><swapStream id=” floatingLeg” ><stubCalculationPeriodAmount><initialStub><floatingRate><indexTenor> <trade><swap><swapStream id=” floatingLeg” ><stubCalculationPeriodAmount><finalStub><floatingRate><indexTenor>	e.g. 1W 2W 1M 2M 3M 6M

b. NDF(Non-Deliverable Forward)

```
<trade>
  <tradeHeader>
    <partyTradeIdentifier>
      <partyReference href="party1"/>
      <tradeId></tradeId>
    </partyTradeIdentifier>
    <partyTradeIdentifier>
      <partyReference href="party2"/>
      <tradeId></tradeId>
    </partyTradeIdentifier>
    <tradeDate>2022-09-27</tradeDate>
  </tradeHeader>
  <fxSingleLeg>
    <productType>ForeignExchange:NDF</productType>
```

```xml
    <exchangedCurrency1>
      <payerPartyReference href="party1"/>
      <receiverPartyReference href="party2"/>
      <paymentAmount>
        <currency>TWD</currency>
        <amount>50000000.00</amount>
      </paymentAmount>
    </exchangedCurrency1>
    <exchangedCurrency1>
      <payerPartyReference href="party2"/>
      <payerPartyReference href="party1"/>
      <paymentAmount>
        <currency>USD</currency>
        <amount>1000000.00</amount>
      </paymentAmount>
    </exchangedCurrency2>
    <valueDate>2022-09-27</valueDate>
    <exchangeRate>
      <quotedCurrencyPair>
        <currency1>TWD</currency1>
        <currency2>USD</currency2>
        <quoteBasis>Currency1PerCurrency2</quoteBasis>
      </quotedCurrencyPair>
      <rate>5.00000000</rate>
    </exchangeRate>
    <nonDeliverableSettlement>
      <settlementCurrency>USD</settlementCurrency>
      <fixing>
        <quotedCurrencyPair>
          <currency1>TWD</currency1>
          <currency2>USD</currency2>
          <quoteBasis>Currency1PerCurrency2</quoteBasis>
        </quotedCurrencyPair>
        <fixingDate>2022-09-27</fixingDate>
      </fixing>
    </nonDeliverableSettlement>
  </fxSingleLeg>
</trade>
```

Field Name	Path	Enumerations/Values /Schemes
Trade Date	<trade><tradeHeader><tradeDate>	yyyy-MM-dd
Value Date	<trade><fxSingleLeg><valueDate>	yyyy-MM-dd
Reference Currency	<trade><fxSingleLeg><exchangedCurrency1><paymentAmount><currency> <trade><fxSingleLeg><exchangeRate><quotedCurrencyPair><currency1> <trade><fxSingleLeg><nonDeliverableSettlement><fixing><quotedCurrencyPair><currency1>	TWD
Reference Currency Amount	<trade><fxSingleLeg><exchangedCurrency1><paymentAmount><amount>	Decimal(20, 4)
Base Currency	<trade><fxSingleLeg><exchangedCurrency2><paymentAmount><currency> <trade><fxSingleLeg><exchangeRate><quotedCurrencyPair><currency2> <trade><fxSingleLeg><nonDeliverableSettlement><fixing><quotedCurrencyPair><currency2>	USD
Base Currency Amount	<trade><fxSingleLeg><exchangedCurrency2><paymentAmount><amount>	Decimal(20, 4)
Forwarding Rate	<trade><fxSingleLeg><exchangeRate><rate>	Decimal(16, 8)
Settlement Currency	<trade><fxSingleLeg><nonDeliverableSettlement><settlementCurrency>	USD

Field Name	Path	Enumerations/Values /Schemes
Fixing Date	<trade><fxSingleLeg><nonDeliverableSettlement><fixing><fixingDate>	yyyy-MM-dd

3.8 原因代碼對照表

Reason Code	Description	說明
由期交所端發送(consentException、clearingRefused)		
100001	Margin is insufficient.	客戶繳存之客戶保證金低於結算會員收取之應繳客戶保證金。
100002	Trade details are incorrect.	交易內容錯誤。
100003	Consent overtime.	交易確認逾期。
100000		其他。
由結算會員端發送(consentRefused)		
200001	Margin is insufficient.	客戶繳存之客戶保證金低於結算會員收取之應繳客戶保證金。
200002	Client is default.	客戶未履行結算交割義務。
200003		客戶財務狀況或交易契約之風險程度不適合接受提交集中結算。
200004		交易契約有影響市場秩序或損害公益之虞。
200000		其他。