

PSS End-to-End Test User Guide

Appendix A2

Test Scenario List and Execution Notes for Optional Messages



I. LIST OF TEST SCENARIOS

Ref No.	Business Functions	Test Scenarios
Optiona	al Messages	
3. Main	tain Account Transfe	r Instruction (ATI)
AT01	Input ATI	Input ATI successfully
		1. PSS input an ATI to CCASS/3 (only input Stock Code, no ISIN)
		2. PSS input an ATI to CCASS/3 (no Stock Code, only input ISIN)
		3. PSS input an ATI to CCASS/3 (input both Stock Code and ISIN)
AT02		Input ATI for validation only
		1. Input an valid ATI with "Preparation Date" empty.
AT03		Input ATI with error
		1. Input an ATI with duplicate "Participant Transaction Reference" PTR.
		2. Input an ATI with insufficient available quantity.
AT04	Input Mass ATI	Input Mass ATI
		1. PSS input Mass ATI.
AT05		Input Mass ATI for validation only
		1. Input Mass ATI with "Preparation Date" empty.
AT06		Input Mass ATI with error
		1. Input Mass ATI with duplicate "Participant Transaction Reference" PTR.
		2. Input Mass ATI with "To Account Number" not existed.
		3. Input Mass ATI with record already existed.
AT07	Change Mass ATI	Change Mass ATI
		1. PSS changes Mass ATI.
AT08		Change Mass ATI for validation only
		1. Input Mass ATI with "Preparation Date" empty.
AT09		Change Mass ATI with error
		1. Change Mass ATI with duplicate "Participant Transaction Reference" PTR
		2. Change Mass ATI with Timestamp error.
AT10	Enquire Mass ATI	Enquire Mass ATI
		1. PSS enquire Mass ATI.
AT11		Enquire Mass ATI with error
		1. PSS enquire Mass ATI with record-not-found error.
AT12	Cancel Mass ATI	Cancel Mass ATI
		1. PSS cancels Mass ATI.
AT13		Cancel Mass ATI with error
		1. Cancel Mass ATI with duplicate "Participant Transaction Reference" PTR
		2. Cancel Mass ATI with Timestamp error.



Ref No.	Business Functions	Test Scenarios			
AT14	Enquire ATI	Enquire ATI			
		1. PSS enquire ATI			
4. Main	4. Maintain Stock Segregated Account Transfer Instruction				
ST01	Input STI	Input STI successfully			
		1. PSS input an STI to CCASS/3 (only input Stock Code, no ISIN)			
		2. PSS input an STI to CCASS/3 (no Stock Code, only input ISIN)			
		3. PSS input an STI to CCASS/3 (input both Stock Code and ISIN)			
ST02		Input STI for validation only			
		1. Input a valid STI with "Preparation Date" empty.			
ST03		Input STI with error			
		2. Input an STI with duplicate "Participant Transaction Reference" PTR.			
		3. Input an STI with insufficient available quantity.			
ST04	Enquire STI (Single)	Enquire STI (Single)			
		1. PSS enquire STI.			
ST05		Enquire STI with error			
		1. PSS enquire STI with record-not-found error.			
ST06	Enquire STI (Multiple)	Enquire STI (Multiple)			
		1. PSS enquire a page with no record.			
		2. PSS enquire a page with a single record.			
		3. PSS enquire a page with 2 records.			
		4. PSS enquire a page with maximum number of records.			
		5. PSS enquire next page using the "Enquiry Key".			
ST07	Revoke STI	Revoke STI successfully			
		1. PSS revoke a STI.			
ST08		Revoke STI with error			
		1. PSS revoke a STI with Timestamp error.			
		2. PSS revoke a STI with duplicate "Participant Transaction Reference" PTR.			
		3. PSS revoke a STI with Transferred status.			
<u>5. Main</u>	5. Maintain Settlement Instruction (SI)				



Ref No.	Business Functions	Test Scenarios
SI01	Input SI	Input SI successfully
		1. PSS input a receiving FOP SI to CCASS/3 (only input Stock Code, no ISIN).
		2. PSS input a receiving DVP SI to CCASS/3 (no Stock Code, only input ISIN).
		3. PSS input a delivering FOP SI to CCASS/3 (input both Stock Code and ISIN).
		4. PSS input a delivering DVP SI to CCASS/3 (use Part ID to specify counterparty).
		5. PSS input a receiving RDP SI to CCASS/3 (use BIC to specify counterparty).
		 PSS input a delivering RDP SI to CCASS/3 (with "SI Linkage Reference", "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account").
		 PSS input a delivering FOP SI to CCASS/3 (without "SI Linkage Reference", "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account").
SI02		Input SI for validation only
		1. Input a SI with "Preparation Date" empty.
SI03		Input SI with error
		1. Input a SI with duplicate "Participant Transaction Reference" PTR
		2. Input a SI with an invalid counterparty id.
SI04	Change SI	Change SI successfully
		 PSS change a SI (with "SI Linkage Reference", "Internal Transaction Reference", "Remarks", "Client Name", "Client Account" and "Purpose of SI").
		 PSS change a SI (without "SI Linkage Reference", "Internal Transaction Reference", "Remarks", "Client Name", "Client Account" and "Purpose of SI").
SI05		Change SI for validation only
		1. PSS change a SI without "Preparation Date".
SI06		Change SI with error
		1. PSS change a SI with Timestamp error.
		2. PSS change a SI with duplicate "Participant Transaction Reference" PTR.
		3. PSS change a SI with record-not-found error.
SI07	Cancel SI	Cancel SI successfully
		 PSS cancel a SI (with "SI Linkage Reference", "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account").
		 PSS cancel a SI (without "SI Linkage Reference", "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account").
SI08		Cancel SI with error
		1. PSS cancel a SI with Timestamp error.
		2. PSS cancel a SI with duplicate "Participant Transaction Reference" PTR.
		3. PSS cancel a SI with record-not-found error.
SI09	Revoke Matched SI	Revoke SI successfully
		 PSS revoke a SI (with "SI Linkage Reference", "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account").
		 PSS revoke a SI (without "SI Linkage Reference", "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account").



Ref No.	Business Functions	Test Scenarios
SI10		Revoke SI with error
		1. PSS revoke a SI with Timestamp error.
		2. PSS revoke a SI with duplicate "Participant Transaction Reference" PTR.
		3. PSS revoke a SI with unmatched status.
SI11	Enquire SI (Single)	Enquire SI successfully
		1. PSS enquire a receiving FOP SI.
		2. PSS enquire a receiving DVP SI.
		3. PSS enquire a delivering FOP SI.
		4. PSS enquire a delivering DVP SI.
		5. PSS enquire a receiving RDP SI.
		 PSS enquire a delivering RDP SI (with "SI Linkage Reference", "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account").
		 PSS enquire a delivering FOP SI (without "SI Linkage Reference", "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account").
SI12		Enquire SI with error
		1. PSS enquire a SI with record-not-found error.
SI13	Enquire SI (Multiple)	Enquire Multiple SI(s) successfully
		1. PSS enquire with all optional selection criteria missing.
		2. PSS enquire with all optional selection criteria present.
		3. PSS enquire a page with no record.
		4. PSS enquire a page with a single record.
		5. PSS enquire a page with 2 records.
		6. PSS enquire a page with maximum number of records, i.e. 10.
		7. PSS enquire next page using the "Enquiry Key".
SI14	Enquire SI	Enquire SI Unmatched Reason successfully
	Unmatched Reason	1. PSS enquire unmatched SI reason with all optional selection criteria missing.
		2. PSS enquire unmatched SI reason with all optional selection criteria present.
		3. PSS enquire unmatched SI reason a page with no record.
		4. PSS enquire unmatched SI reason a page with a single record.
		5. PSS enquire unmatched SI reason a page with 2 records.
		6. PSS enquire unmatched SI reason a page with maximum number of records.
		7. PSS enquire unmatched SI reason next page using the "Enquiry Key".
SI15	Change Hold Matched SI	Change Hold Matched SI successfully
		 PSS change Hold Matched SI indicator (From Hold Matched SI positive to negative).
		PSS change Hold Matched SI indicator (From Hold Matched SI negative to positive).
SI16		Change Hold Matched SI for validation only
		1. PSS change a Hold Matched SI without "Preparation Date".



Ref No.	Business Functions	Test Scenarios		
SI17		Change Hold Matched SI with error		
		1. PSS change a Hold Matched SI with Timestamp error.		
		 PSS change a Hold Matched SI with duplicate "Participant Transaction Reference" PTR. 		
		3. PSS change a Hold Matched SI with record-not-found error.		
<u>6. Enq</u> ı	6. Enquire Settlement Account/Status			
ES01	Enquire	Enquire Due/Overdue Position successfully – Summary List		
	Due/Overdue	1. PSS enquire a page with no record.		
		2. PSS enquire a page with a single record.		
		3. PSS enquire a page with 2 records.		
		4. PSS enquire a page with maximum number of records.		
		5. PSS enquire next page using the "Enquiry Key".		
ES02		Enquire Due/Overdue Position successfully – Position Detail		
		1. PSS enquire a page with no record.		
		2. PSS enquire a page with a single record.		
		3. PSS enquire a page with 2 records.		
		4. PSS enquire a page with maximum number of records.		
		5. PSS enquire next page using the "Enquiry Key".		
		6. PSS enquire a page with CNS position.		
		7. PSS enquire a page with IT position.		
		8. PSS enquire a page with SI position.		
		9. PSS enquire a page with ISI position.		
ES03	Enquire Stock	Enquire Stock Account Balance – By Account		
	Account Balance (By Account)	1. PSS enquire a page with no record.		
		2. PSS enquire a page with a single record.		
		3. PSS enquire a page with 2 records.		
		4. PSS enquire a page with maximum number of records.		
		5. PSS enquire next page using the "Enquiry Key".		
		6. PSS enquire a stock account without any on-hold share.		
		7. PSS enquire a stock account with on-hold shares.		
ES04	Enquire Stock	Enquire Stock Account Balance – By Stock (Enq Type = TSBA)		
	Account Balance (By Stock)	1. PSS enquire a page with no record.		
	,	2. PSS enquire a page with a single record.		
		3. PSS enquire a page with 2 records.		
		4. PSS enquire a page with maximum number of records.		
		5. PSS enquire next page using the "Enquiry Key".		



Ref No.	Business Functions	Test Scenarios	
ES05		Enquire Stock Account Balance – By Stock (Enq Type = STAB)	
		1. PSS enquire a page with no record.	
		2. PSS enquire a page with a single record.	
		3. PSS enquire a page with 2 records.	
		4. PSS enquire a page with maximum number of records.	
		5. PSS enquire next page using the "Enquiry Key".	
		6. PSS enquire a stock account without any on-hold share.	
		7. PSS enquire a stock account with on-hold shares.	
ES06	Enquire Stock	Enquire Stock Account Movement – By Account	
	Account Movement (Bv Account)	1. PSS enquire a page with no record.	
		2. PSS enquire a page with a single record.	
		3. PSS enquire a page with 2 records.	
		4. PSS enquire a page with maximum number of records.	
		5. PSS enquire next page using the "Enquiry Key".	
ES07	Enquire Stock	Enquire Stock Account Movement – By Stock	
	Account Movement (By Stock)	1. PSS enquire a page with no record.	
		2. PSS enquire a page with a single record.	
		3. PSS enquire a page with 2 records.	
		4. PSS enquire a page with maximum number of records.	
		5. PSS enquire next page using the "Enquiry Key".	
ES08	Enquire Settlement	Enquire Settlement Activity	
	Activity	1. PSS enquire a page with no record.	
		2. PSS enquire a page with a single record.	
		3. PSS enquire a page with 2 records.	
		4. PSS enquire a page with maximum number of records.	
		5. PSS enquire next page using the "Enquiry Key".	
		6. PSS enquire a page with CNS position.	
		7. PSS enquire a page with IT position.	
		8. PSS enquire a page with ISI position.	
		9. PSS enquire a page with receiving FOP SI position.	
		10. PSS enquire a page with receiving DVP SI position.	
		11. PSS enquire a page with delivering FOP SI position.	
		12. PSS enquire a page with delivering DVP SI position.	
ES09	Enquire Money Position	Enquire Money Position	
		1. PSS enquire money position for HKD.	
		2. PSS enquire money position for USD.	
7. Asyı	7. Asynchronous Message		



Ref No.	Business Functions	Test Scenarios	
AM01	Asynchronous Message	Asynchronous Message	
		1. Retrieve all Broadcast/Notification Messages.	
		2. Retrieve Broadcast Messages starting from a sequence number.	
		3. Retrieve Notification Message starting from a sequence number.	
<u>8. Repo</u>	ort Download		
RP01	Overnight Report	Overnight Report Download	
	Download	1. All the required reports are not yet available for download.	
		2. Only one required report is available for download.	
		3. Two required reports are available for download.	
		4. All required reports have been downloaded previously.	
RP02		Overnight Report Download Exception	
		1. The CCASS date (in the request message) has been bumped to the next day in CCASS/3.	
RP03	Online Report	Online Report Download successful	
	Download	1. Download a single report.	
		2. Download multiple reports from different market.	
		3. Download multiple reports (both data image and report text)	
		4. Download multiple reports from different market with data image and report text	
RP04		Online Report Download with error	
		1. Download a single report which is unavailable.	
		2. Download multiple reports with one of the reports unavailable.	
		3. Download a single report with invalid CCASS Date	
RP05	Update Report Profile	Update Report Profile successfully	
		1. Update report profile successfully for Global Market.	
		2. Update report profile successfully for HK Market.	
RP06		Update Report Profile with error	
		1. Update report profile with duplicate "Participant Transaction Reference" PTR.	
		2. Update report profile with one report id missing.	
		3. Update report profile for 1 report only.	
RP07	Enquire Report	Enquire Report Profile	
	Profile	1. Enquire report profile successfully for Global Market.	
		2. Enquire report profile successfully for HK Market.	
RP08	Enquire Report Available List	Enquire Report Available List	
		1. No report is available.	
		2. Only one report is available.	
L		3. More than one report is available.	
9. Mai	9. Maintain Delivery Instruction (DI)		



Ref No.	Business Functions	Test Scenarios	
DI01	Input DI	Input DI successfully	
		1. PSS input a DI to CCASS/3 (CNS position, fully settled)	
		2. PSS input a DI to CCASS/3 (CNS position, partial settled)	
		3. PSS input a DI to CCASS/3 (IT position, fully settled)	
		4. PSS input a DI to CCASS/3 (IT position, partial settled, Free-of-payment)	
		5. PSS input a DI to CCASS/3 (SI position, non-RDP)	
		6. PSS input a DI to CCASS/3 (SI position, RDP)	
		7. PSS input a DI to CCASS/3 (ISI position)	
DI02		Input DI for validation only	
		1. PSS input a valid DI with "Preparation Date" empty.	
DI03		Input DI with error	
		1. PSS input a DI with duplicate "Participant Transaction Reference" PTR.	
		2. PSS input a DI with insufficient available quantity.	
		3. PSS input a DI already settled.	
		4. PSS input a DI, RDP with delivery account changed.	
DI04	Change DI Required	Change DI Required successfully	
		1. PSS change a DI required indicator of IT position	
		2. PSS change a DI required indicator of SI position	
		3. PSS change a DI required indicator of ISI position	
		4. PSS change a DI required indicator from 'Y' to 'N'	
		5. PSS change a DI required indicator from 'N' to 'Y'	
DI05		Change DI Required for validation only	
		1. PSS input a valid DI with "Preparation Date" empty.	
DI06		Change DI Required with error	
		1. PSS change a DI required with duplicate "Participant Transaction Reference" PTR.	
		2. PSS change a DI required from 'N' to 'N'	
		3. PSS change a DI required from 'Y' to 'Y'	
		4. PSS change a DI required with Timestamp error.	
DI07	Enquire DI	Enquire DI	
		1. PSS enquire DI	
DI08		Enquire DI Required with error	
		1. PSS enquire DI already settled	
<u>10. Ge</u> i	10. General File Transfer		



Ref No.	Business Functions	Test Scenarios
FT01	SI File Transfer	SI File Transfer successfully
		1. PSS input SI file to CCASS/3 with one record only
		2. PSS input SI file to CCASS/3 with more than one record
		3. PSS input SI file to CCASS/3 using Part ID in the header record
		4. PSS input SI file to CCASS/3 using BIC code in the header record
		5. PSS input SI file to CCASS/3 specifying stock code only in the record
		6. PSS input SI file to CCASS/3 specifying ISIN only in the record
		7. PSS input SI file to CCASS/3 specifying both stock code and ISIN in the record
		 PSS input SI file to CCASS/3 with delivering DVP SI to CCASS/3 (with "SI Linkage Reference", "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account" and "Purpose of SI").
		 PSS input SI file to CCASS/3 with receiving RDP SI to CCASS/3 (without "SI Linkage Reference", "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account" and "Purpose of SI").
FT02		SI File Transfer with error
		1. PSS input SI file to CCASS/3 with wrong Part ID
FT03	ATI File Transfer	ATI File Transfer successfully
		1. PSS input ATI file to CCASS/3 with one record only
		2. PSS input ATI file to CCASS/3 with more than one record
		3. PSS input ATI file to CCASS/3 using Part ID in the header record
		4. PSS input ATI file to CCASS/3 using BIC code in the header record
		5. PSS input ATI file to CCASS/3 specifying stock code only in the record
		6. PSS input ATI file to CCASS/3 specifying ISIN only in the record
		7. PSS input ATI file to CCASS/3 specifying both stock code and ISIN in the record
		8. PSS input ATI file to CCASS/3 with remarks inputted
FT04		ATI File Transfer with error
		1. PSS input ATI file to CCASS/3 with wrong Part ID
FT05	ISI File Transfer	ISI File Transfer successfully
		1. PSS input ISI file to CCASS/3 with one record only
		2. PSS input ISI file to CCASS/3 with more than one record
		3. PSS input ISI file to CCASS/3 using Part ID in the header record
		4. PSS input ISI file to CCASS/3 using BIC code in the header record
		5. PSS input ISI file to CCASS/3 specifying stock code only in the record
		6. PSS input ISI file to CCASS/3 specifying ISIN only in the record
		7. PSS input ISI file to CCASS/3 specifying both stock code and ISIN in the record
		 PSS input ISI file to CCASS/3 with delivering DVP SI to CCASS/3 (with "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account" and "Purpose of ISI").
		 PSS input ISI file to CCASS/3 with receiving RDP SI to CCASS/3 (without "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account" and "Purpose of ISI").



Ref No.	Business Functions	Test Scenarios	
FT06		ISI File Transfer with error	
		1. PSS input ISI file to CCASS/3 with wrong Part ID	
11. Mai	intain Investor Settler	nent Instruction (ISI)	
ISI01	Input ISI	Input ISI successfully	
		1. PSS input a receiving FOP ISI to CCASS/3 (only input Stock Code, no ISIN).	
		2. PSS input a receiving DVP ISI to CCASS/3 (no Stock Code, only input ISIN).	
		3. PSS input a delivering FOP ISI to CCASS/3 (input both Stock Code and ISIN).	
		 PSS input a delivering DVP ISI to CCASS/3 (use Part ID to specify counterparty). 	
		5. PSS input a receiving RDP ISI to CCASS/3 (use BIC to specify counterparty).	
		 PSS input a delivering DVP ISI to CCASS/3 (with "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account" and "Purpose of ISI"). 	
		 PSS input a delivering FOP SI to CCASS/3 (without "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account" and "Purpose of ISI"). 	
		8. PSS input a delivering DVP ISI to CCASS/3 with ISI on-hold indicator equals to 'Y'	
ISI02		Input ISI for validation only	
		1. Input an ISI with "Preparation Date" empty.	
ISI03		Input ISI with error	
		1. Input an ISI with duplicate "Participant Transaction Reference" PTR	
		2. Input an ISI with an invalid counterparty id.	
ISI04	Change ISI	Change ISI successfully	
		 PSS change an ISI (with "Internal Transaction Reference", "Remarks", "Client Name", "Client Account" and "Purpose of ISI"). 	
		 PSS change an ISI (without "Internal Transaction Reference", "Remarks", "Client Name", "Client Account" and "Purpose of ISI"). 	
ISI05		Change ISI for validation only	
		1. PSS change a ISI without "Preparation Date".	
ISI06		Change ISI with error	
		1. PSS change an ISI with Timestamp error.	
		2. PSS change an ISI with duplicate "Participant Transaction Reference" PTR.	
		3. PSS change an ISI with record-not-found error.	
ISI07	Cancel ISI	Cancel ISI successfully	
		1. PSS cancel an ISI (with "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account", "Purpose of ISI").	
		2. PSS cancel a SI (without "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account", "Purpose of ISI").	



Ref No.	Business Functions	Test Scenarios
ISI08		Cancel ISI with error
		1. PSS cancel an ISI with Timestamp error.
		2. PSS cancel an ISI with duplicate "Participant Transaction Reference" PTR.
		3. PSS cancel an ISI with record-not-found error.
ISI09	Enquire ISI (Single)	Enquire ISI successfully
		1. PSS enquire a receiving FOP ISI.
		2. PSS enquire a receiving DVP ISI.
		3. PSS enquire a delivering FOP ISI.
		4. PSS enquire a delivering DVP ISI.
		5. PSS enquire a receiving RDP ISI.
		 PSS enquire a delivering RDP ISI (with "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account", "Purpose of ISI").
		 PSS enquire a delivering FOP ISI (without "Internal Transaction Reference", "Remarks", "Client Name" and "Client Account", "Purpose of ISI").
ISI10		Enquire ISI with error
		1. PSS enquire an ISI with record-not-found error.
ISI11	Enquire ISI (Multiple)	Enquire Multiple ISI(s) successfully
		1. PSS enquire with all optional selection criteria missing.
		2. PSS enquire with all optional selection criteria present.
		3. PSS enquire a page with no record.
		4. PSS enquire a page with a single record.
		5. PSS enquire a page with 2 records.
		6. PSS enquire a page with maximum number of records, i.e. 10.
		7. PSS enquire next page using the "Enquiry Key".



II. TEST SCENARIOS EXECUTION NOTES

Participant should pay attention on the following execution notes in order to ensure a smooth scenario execution.

- The data in C/3 testing host are different from those of Production. For example, a stock code (or Participant id) in C/3 testing host may not refer to a real stock (participant) in production.
- Only a pre-defined list of Participant IDs should be used as SI Counterparty. HKEX will provide the list later.
- Only a pre-defined list of Stock Codes should be used for the whole test. HKEX will provide the list later.
- HKEX will prepare a separate set of test data for each participant. For example, the shares in the stock accounts and the counterparty SIs. The information will be provided to participant later.
- Participant should set up a <u>testing C3T</u> to connect to the test C/3 host. The testing C3T serves to verify the data in C/3 testing host after performing an updating function via PSS or to compare the enquiry results from PSS.
- The test scenarios do not include those for dual PG configuration. Instead, participants should design their own test scenarios and acquire the necessary hardware for dual PG configuration and test them during the End-to-End Test..
- It is not necessary to execute the scenarios by the order as listed in this document. However, participants should record the exact time of the execution of each scenario for filling in the Execution Checklist.
- For all input functions, participant should verify all the fields are inputted by PSS correctly by verifying the same information via C3T and/or CCASS report.
- For all enquiry functions, participant should verify all the fields are interpreted by PSS correctly by verifying the same information via C3T and/or CCASS report.