A#: 7573 P&S#: 7143

DATE: JANUARY 25, 2013 TO: ALL PARTICIPANTS

ATTENTION: MANAGING PARTNER/OFFICER; OPERATIONS

PARTNER/OFFICER; MANAGER P&S DEPARTMENT; MANAGER

DATA PROCESSING; CASHIER

FROM: PRODUCT MANAGEMENT

SUBJECT: EXCHANGE TRADED FUNDS PARTICIPANT TESTING – MARCH

2013

As announced in Important Notice A 7429 P&S 6999, dated May 24, 2012, NSCC plans to implement a new Exchange Traded Funds (ETF) system on the evening of processing date *May* 9, 2013. This enhancement was originally scheduled for implementation in Q1 2013, but was delayed due to Hurricane Sandy. The new system will enhance NSCC's Portfolio Composition File (PCF) reporting and the ETF Create / Redeem processes. NSCC will continue to support the legacy input and output file formats until the end of Q3 2014 after which, with prior notice, NSCC will retire the legacy application and support enhanced ETF formats and functionality only.

In preparation for this implementation, beginning *March 11, 2013*, NSCC will provide participants the ability to test the new file formats and functionality in the Participant Services Environment (PSE) region. Participants can also request canned test data for enhanced data file and print image output.

This Important Notice provides participants with information on:

- A) Changes that will apply to all ETF participants on the evening of May 9, 2013, including those that are subscribed to the legacy application:
 - NSCC will implement a web based self-service relationship management facility for participants to establish, monitor and maintain the ETF Agent and Authorized Participant (AP) relationships.
 - Enhanced print image file format output will be implemented for Create/Redeem Instruction Detail (Blotter) Report and Receipt/Reject Reporting for PCFs & Creates/Redeems to accommodate new fields and record types on the enhanced input files. Legacy Machine-Readable input and output formats will not be impacted.

All participants should review the enhanced print image file formats prior to the May implementation to ascertain what, if any, impact the new system may have on their existing systems and operational procedures.

- Enhanced PCF submission process will be implemented for all portfolios. NSCC will allow multiple PCF submissions for primary /Trade Date -1 & supplemental or Trade Date submission cycles; supplemental submissions will be accepted for all portfolio types except for foreign portfolios that are submitted in the legacy format. ETF Agents will be able to submit supplemental PCFs as early as Midnight on Trade Date. In addition, NSCC will validate each individual file submission in real time.
- Additional considerations for participants who subscribe to the legacy PCF and Create/Redeem data file output which will not include new fields and values as noted in Section A4 on page 4.
- B) Instructions on conditional and production parallel testing for the following functions:
 - Enhanced formats for PCF and Create/Redeem input and output files and reports.
 - Web Based Interface for PCF reporting and portfolio subscriptions.
 - Use of Universal Trade Capture (UTC) system to distribute the results of bursted create and redeem ETF output.

Participants must notify the User Acceptance Test Support group at <u>uat@dtcc.com</u> of satisfactory test results before converting to the new input and output formats.

The key objectives are detailed on the following pages:

A Changes impacting all ETF Participants including legacy subscribers

1 Self-Service Web Interface for ETF Agent AP Relationship (Self-Service for Trading Relationship)

- Effective the evening of May 9, 2013, NSCC will implement an online self-service Relationship Management facility. All adds, updates and deletes to relationships on or after the go-live date must be managed through the online facility.
- *No action is necessary for participants existing ETF Agent- AP relationships*: NSCC will establish all existing relationships as of the evening of May 9, 2013.
- **Please visit** <u>DTCC Learning</u> for detailed instructions on using the ETF Relationship Management tool.
- Please contact msupport@dtcc.com or webimplementation@dtcc.com to request Super ACs entitlement to the Relationship Management tool.

2 Enhanced Legacy Print Image Reports

Effective the evening of May 9, 2013, NSCC will produce the below listed *print image reports* in enhanced format only; legacy formats will be discontinued. Additionally, a single enhanced PCF receipt/reject print report will be generated for all portfolios; the current process has separate outputs for domestic, foreign and supplemental portfolios.

- Enhanced Create Redeem Instruction Detail (Blotter) Report AutoRoute # 02260291 (the legacy AutoRoute # is maintained)
- Enhanced ETF Create Redeem Receipt/Reject Report (ETF Agents only) AutoRoute # 02120098 (the legacy AutoRoute # is maintained)
- Enhanced Consolidated Portfolio Receipt/Reject Report (*ETF Agents only*) AutoRoute # 02260421 (the AutoRoute # for legacy PCF receipt/reject report for domestic portfolio).

The legacy PCF receipt/reject report for foreign portfolios (AutoRoute # 02120270) and supplemental domestic portfolios (AutoRoute # 02290253) will be discontinued on the evening of May 9th and will be included in the enhanced consolidated Portfolio Receipt/Reject Report.

Once implemented, all ETF Agents and APs who subscribe to their respective legacy print reports will receive the enhanced format print outputs.

To access / view the enhanced formats:

- Please visit the <u>DTCC website</u> for sample enhanced print reports
- Subscribe to the following test outputs (Please see section B for instructions on testing):
 - AutoRoute 02980291- Enhanced ETF Create and Redeem Instruction Output (Blotter) Report (ETF Agents and APs)
 - AutoRoute 02980098- Enhanced ETF Create Redeem Receipt/Reject Report (ETF Agents only)
 - AutoRoute 02980421- Enhanced Consolidated Portfolio Receipt/ Reject Report (ETF Agents only)

⁽a) Super ACs have the ability to create both end users and AC roles for DTCC products that they administer at their firms using DTCC's Customer Registration Service (CRS) dashboard.

Enhanced PCF Submission:

Effective the evening of May 9th, as noted in the Important Notice <u>A 7429 P&S 6999</u>, dated May 24, 2012, NSCC will:

- Enable ETF Agents to submit multiple primary (T-1) and supplemental (T) PCF submissions.
- Allow supplemental submissions for all portfolios except for foreign portfolios in the legacy format; the supplemental PCF submission and reporting for foreign portfolios can be accomplished through the enhanced format PCF input and output reports only.
- Enable ETF Agents to submit supplemental PCFs from 12:00 am (Midnight) through noon on T. NSCC will edit each submission in real time and send the Enhanced Consolidated Portfolio Composition Receipt Reject in print (AutoRoute # 02260421) and/or new MRO format (AutoRoute # 02261255) to the ETF Agent for each individual PCF file submission.

4 Additional considerations for participants who subscribe to the legacy PCF data file output:

- The legacy PCF output will not report:
 - New fields and record types that are only available on the enhanced input and output formats, which includes components identified as cash-in-lieu or as a short position only and components that are not identified with a CUSIP for domestic portfolios & CUSIP/ISIN for foreign portfolios.
 - The additional component identifier codes that will be on the enhanced PCF input/output formats and increased field size that will prevent data truncation issues that occurred infrequently on the legacy foreign PCF output.
- Effective the evening of May 9th, similar to the legacy PCF output for foreign portfolios, the portfolio details reported on the legacy PCF output for standard domestic and custom portfolio may contain one or more components with the same component identifier (CUSIP).

The following section outlines the participant testing prerequisites, instructions and DTCC contacts. Participants should allow for sufficient lead time to ensure all pre-requisites are complete prior to their planned start of testing.

<u>Please note</u> participants must get ETF Web Interface access in the PSE region in order to receive production parallel and conditional PCF output in the enhanced format (AutoRoute 02981256); enhanced PCF output will only contain portfolios subscribed via ETF Web Interface.

В	Participant Testing Guidelines		
#	Task	Actions	
1	Participant testing for enhanced input and output formats (effective March 11, 2013) Request files & establish/confirm	Pre-requisite: Contact rmsupport@dtcc.com to ensure/request access to the PSE region and to subscribe to the enhanced input and/or output test products listed below, which will be available to the participants beginning March 11th. Test Product ID#:	
	access to the PSE region		cipant Input to NSCC
	region		conditional test data- ETF Agents only)
		Test DATATRAK ID#	Report Name Enhanced Consolidated Portfolio
		41301	Composition Input Data File
		41300	Enhanced ETF Create and Redeem Instruction Input Data File
		MRO Output from NSCC (for conditional and parallel test output)	
		Test AutoRoute ID#	Report Name
		02981256	Enhanced Consolidated Portfolio Composition Output MRO (all ETF participants)
		02981255	Enhanced Consolidated Portfolio Composition Receipt/Reject MRO (ETF Agents only)
		02981254	Enhanced ETF Create and Redeem Instruction Output MRO (ETF Agents and APs)

В	Participant Testing Guidelines		
#	Task	Actions	
		Print Image Output from NSCC (for conditional and parallel test output)	
		Test AutoRoute ID#	Report Name
		02980421	Enhanced Consolidated Portfolio Receipt/ Reject Report (ETF Agents only)
		02980291	Enhanced ETF Create and Redeem Instruction Output (Blotter) Report (ETF Agents and APs)
		02980098	Enhanced ETF Create Redeem Receipt/Reject Report (ETF Agents only)
		Test schedule: Production Parallel PCF and Create/Redeem Testing: Schedule: Monday (unless it is a holiday then Tuesday) of each week beginning March 11th, NSCC will provide the previously described enhanced MRO and print image output with the previous Friday's (unless it is a holiday then Thursday's) processing date primary & supplemental PCFs and Create/Redeem production parallel data using existing transmission protocols. Production parallel output for PCFs will also be made available via ETF Web Interface. Create / Redeem production parallel output is not provided through the PCF Web Interface. Conditional Testing: Monday – Thursday of each week beginning March 11th	
		11:30 am – 2:30 p Please note the follow – Test create redeen current day's trade create redeem inst	PCF submission: m (ET) F submission: m (ET) bmission (T, T+1 and T+2 for as-ofs): m (ET)

В	Participant Testing Guidelines		
#	Task	Actions	
		submission was submitted on Monday).	
		 Supplemental test PCFs will overlay the primary test PCFs; Monday's supplemental test submissions will overlay production parallel data from Friday evening. 	
		 NSCC will carry forward the conditional PCF submissions for five business days. 	
		 When submitting PCFs, ETF Agents must assign a different DATATRAK header sequence number to each primary or supplemental PCF that is submitted to NSCC on the same business day. 	
		 APs who would like to utilize conditional test data may contact the ETF Agent(s) you have agreements with. NSCC is not responsible for conditional test data conditions. 	
		 Test Output: Enhanced format output (MRO and print reports) will be provided to the participants about a half hour after the close of the respective submission cycle. Conditional test PCFs will also be made available via ETF Web Interface. Test IDs- Participants should use existing NSCC's Instruction CUSIPs when submitting test PCF and Create/Redeem instructions during conditional testing. The underlying ETF portfolio details can differ from the portfolio components of production data. 	
		Assistance on transmission and technical details for testing:	
		Please contact:	
		Business Support Testing	
		1-888-382-2721 Option 6,7,3	
		Option 0,7,5	
		Assistance on ETF business application of testing:	
		Please contact:	
		Peter Smith @212-855-7621 or uat@dtcc.com	
2	ETF Web Interface	Pre-requisite:	
	testing (effective March	Contact webimplementation@dtcc.com or rmsupport@dtcc.com	
	11, 2013)	to confirm /request access to the PSE region and for Super AC's	
	• Establish/confirm access to the PSE	entitlement to the 'Exchange Traded Funds' Web Interface. Detailed Instructions on using PCF Web Interface:	
	region		
		Please visit DTCC Learning for PCF Web Interface User Guide and	
	1		

В	Participant Testing Guidelines		
#	Task	Actions	
	Request/confirm Super ACs	Webcast for information on how to navigate the web interface.	
	entitlement to the	Scope of testing:	
	ETF Web Interface in the PSE region	Effective March 11th, participants can test all ETF Web functionality	
	the FSE region	 including: PCF Subscription: Subscribe to select portfolios individually or all portfolios using 'Auto Subscription' option. 	
		View/download Production Parallel PCF output for subscribed portfolios: Monday of each week, beginning March 11th, NSCC will provide the previous Friday's PCF production parallel data in the enhanced format. This data will be maintained on the ETF Web until Thursday of that week.	
		View/download Conditional PCF output for subscribed portfolios: Monday through Thursday of each week, beginning March 11th, approximately half hour after the close of the submission cycle (see conditional testing instructions for submission times - page 6), NSCC will process and upload conditional PCF submissions submitted by an ETF Agent (received through DATATRAK 41301) to the ETF Web Interface. Conditional PCF output will be maintained for five business days.	
		• Contact Management: Input email address to receive alerts for updated /supplemental portfolios. In the test region, the email alerts will be generated for conditional PCF output only; no alerts will be generated for production parallel PCF output.	
		Assistance on transmission and technical details for ETF Web Testing: • Please contact: Business Support Testing 1-888-382-2721 Option 6,7,3 Assistance on ETF business application details for ETF Web	
		Testing: • Please contact: Peter Smith @212-855-7621 or uat@dtcc.com	
3	Participant testing for create and redeem output reporting through Universal Trade Capture (UTC)	Pre-requisite: Contact rmsupport@dtcc.com to ensure/request access to the PSE region and to subscribe to the below listed UTC MRO test product or to receive test UTC Contract in FIX or MQ Format	

В	Participant Testing Guidelines		
#	Task	Actions	
	(effective March 11, 2013)	Test Product ID# 02981673 – UTC Contract MRO ETF create and redeem data will be reported under new Market Code '920' on the UTC Contract MRO, UTC FIX and MQ format outputs.	
		 Please contact: Business Suppor 1-888-382-2721 Option 6,7,3 Assistance on ETF Please contact: 	t Testing business application of testing: 2-855-7621 or uat@dtcc.com
4	Canned Test Output (effective July 31, 2012) Request Files & establish/confirm access to the PSE region	As announced in Important Notice A # 7459, dated July 31, 2012, participants can obtain canned test data for PCF and Create/Redeem instruction files in the enhanced format Pre-requisite: Contact rmsupport@dtcc.com to subscribe to the below listed canned test products:	
		Canned Test Product ID#:	
		Test AutoRoute ID#	Report Name
		02991256	Enhanced Consolidated Portfolio Composition Output MRO
		02991255	Enhanced Consolidated Portfolio Composition Receipt/Reject MRO
		02991254	Enhanced ETF Create and Redeem Instruction Output MRO
		The canned test data for enhanced input and output reports is also available in a text version on the DTCC website .	

Additional Information

- New file formats: Please visit DTCC website for enhanced input and output formats.
- <u>User Guide:</u> Please visit <u>DTCC Learning</u> for detailed description of the ETF product services and new functionality, including ETF Web Interface, Contact Management and ETF Agent–Authorized Participant relationship management tool.

For questions about the ETF rewrite, please contact your Relationship Manager or the undersigned at Abhardwaj@dtcc.com.

Anuja Bhardwaj Product Management