



B #:	1572-14
Date:	August 27, 2014
To:	All Clients
Category:	Settlement
From:	Settlement Product Management
Attention:	Managing Directors/Vice Presidents/Managers
Subject:	Settlement Matching – Progress to Date and Next Steps

Settlement Matching represents the most fundamental shift in many years in the way securities are settled at the Depository Trust Company (DTC). Since announcing the initiative in November 2012, DTC has helped educate clients on the need to eliminate reclaim risk and the importance of intraday settlement finality. Clients, in turn, have educated DTC on the effects that Settlement Matching introduces to their settlement processes. Collectively, we have developed an implementation plan that strikes a balance between DTC's goals of mitigating risk and improving intraday finality while allowing clients sufficient time to make the changes necessary to provide receiver approval on a timely basis intraday and prior to settlement.

DTC has achieved significant progress to date and attributes the initiative's success to unprecedented levels of industry outreach, industry coordination and, most importantly, industry cooperation. The magnitude of our collective accomplishments has been substantial. Today, approximately 92% of the value and 64% of the volumes¹ processed through DTC's settlement system are routed to the Receiver Authorized Delivery (RAD) system where they await receiver approval prior to settlement. Once settled, these transactions are considered final intraday and no longer pose credit or liquidity risk to DTC, our clients, or the larger financial industry as a whole. Appendix A of this important notice shares some key settlement statistics regarding Settlement Matching and provides an industry view of what has been accomplished, what is left to address and how efforts to date have impacted two key settlement metrics – intraday transaction throughput and matched reclaim processing.

DTC is currently targeting January 2015 to implement the final phase of the Settlement Matching initiative when all affirmed institutional deliveries² (ID) will be subjected to receiver approval prior to settlement. DTC recognizes that many clients consider subjecting an affirmed trade to a settlement match is redundant and, as such, will continue with plans to implement the matching requirement in a manner that promotes straight-through-processing (STP) by allowing clients to leverage the affirmation process (the trade match) as their settlement approval for their affirmed ID receives (the settlement

¹ Does not include transactions processed free of payment.

² Transaction type "MITS" in IMS representing any affirmed ID delivery received by DTC from Omgeo prior to noon of S-1.

match). This will be accomplished via the use of an “ID Receiver Authorization Profile.” DTC will maintain a profile setting for each client’s account. Clients electing to leverage the trade match as their authorization for settlement will not be required to explicitly create a profile as the default setting will be passive. However, clients requiring additional time to perform applicable credit verifications will be required to override the passive setting in favor of an active setting.

The original phase 4 processing model proposed that DTC would model the new ID receiver update capabilities after the existing ID deliverer authorization and exemption (ANE) functionality by allowing ID receivers to use the Omgeo control number to update the status, e.g., exempt, authorized, etc. of their ID receives in RAD. Since that time, DTC, with significant input from our clients, has developed a simpler model providing clients with the protections they need while allowing them to leverage the automation work already completed in advance of RAD zero to reduce development. DTC anticipates that the reduction in development and testing required under the new model, coupled with a recent increase in clients accelerating the phase 4 matching requirement by subjecting their ID receives to receiver approval through the “ID Trades Profile,”³ will push other clients towards early adoption and possibly negate the need for an industry-wide coordinated implementation. DTC will monitor uptake over the next few months and publish a revised implementation plan based on the status of early adopters. The remainder of this important notice focuses on the new phase 4 model and begins with a summary of the key changes being made.

Key Changes for the New Model:

1. Clients will use the RAD Sequence Number to provide updates for their ID receives in RAD instead of the Omgeo control number. It is important to note that DTC will continue to provide the Omgeo control number in the comments field of RAD output as we do today and that the new model simply removes the ability to use the Omgeo control number to provide RAD updates.
2. The concept of receiver exemptions will no longer be supported. There is no difference from a processing perspective between a receiver exemption and an item that did not receive receiver approval, i.e., neither status results in a matched instruction. The original reason for providing receivers with exemption capabilities was to allow passive users with a protection mechanism against approving an ID receive in error. With the old model, receivers had a choice of proactively exempting an item prior to their authorization being granted or reactively reversing their approval post authorization. These protections are afforded to clients in the new model as follows;
 - a. **Proactive protection:** DTC will create the ability in the Settlement Web that will allow a receiver to withhold specific receives from being approved prior to the application of their passive profile setting at 5:00 p.m. EST on S-1. The new IMS screen will show clients a list of their ID receives for a given settlement date and receiving clients will be allowed to select certain ID receives (flag) for which they do not want to passively authorize. Any flagged receive will override the receiver’s passive approval profile meaning that DTC will not approve the item from RAD on your behalf. Instead, the transaction will remain unapproved in RAD awaiting further action.

³ As a reminder, the ID Trades Profile was introduced in 2011 as a mechanism to allow receiving clients to route their ID receives to RAD where they await approval prior to settlement.

- b. **Reactive protection:** A reversal command was created as part of the phase 3 implementation to allow clients to manually rescind (reverse) their approval of a specific NDO receive. Reversals are accepted from the point of receiver approval through the start of the night cycle. NDO receives that are approved in error and reversed prior to the night cycle are no longer considered matched and therefore are not routed to the night cycle for settlement. DTC will extend this capability to ID receives and additionally extend the functionality to include automated reversal input as opposed to manual input only. Clients will leverage the RAD sequence number to provide automated reversals. Once a receive is reversed it will remain unapproved in RAD where it will await further action.
- c. **Automatic Profile Setting Switch:** As a final means of protection, the new model will automatically switch all passive receiver profile settings to active once DTC's night cycle process begins at approximately 8:45 p.m. EST on S-1. This "day-side" active setting switch will effectively route any ID deliverer authorized deliveries that occur on settlement day (not S-1) to RAD protecting the receiving client from passively approving an item in error. DTC will automatically switch profiles back to passive for the following settlement cycle.

It should be noted that the receiver "exemption" changes outlined above apply to ID receives that are slated for passive approval only. Items slated for passive approval include all ID receives for clients with a passive profile setting and all ID receives that carry a settlement value that is less than the passive threshold set within an active client's ID receiver profile. As a reminder, active clients may opt to set a passive threshold within their active profile. Many active clients have expressed an interest in this hybrid profile as it allows them to route higher valued ID receives to RAD where they will await further action while allowing lesser valued ID receives to benefit from STP.

- 3. The ability to provide global authorizations and exemptions currently available to ID deliverers in DTC's ANE system will be available to ID receivers in the form of profile applications. A passive ID receiver profile setting will serve as the global authorization and an active receiver profile setting will serve the same functionality as a global exemption. Intraday bulk updates for approvals and reversals will be allowed via existing grid functionality in RAD to assist clients with updating a large number of records post profile application.
- 4. DTC will begin to route ID receives to RAD for receiver approval at 5:00 p.m. on S-1. The prior model proposed to send ID receives to RAD upon deliverer authorization. The issue raised with this approach was that it didn't allow sufficient time for deliverers to manage their ID deliveries and that receivers would be allowed to act on a receive only to have the deliverer exemption negate their action. The new model reduces the amount of potential rework by routing deliverer authorized ID deliveries to the receiver's RAD at 5:00 p.m. on S-1 when the majority of deliverer updates have already been submitted to DTC.

Phase 4 Matching Perspectives:

Deliverer Perspective

Very little is changing from the perspective of the ID deliverer with Matching. Deliverers of ID will continue to manage their ID delivery authorizations and exemptions through DTC's ANE system as they

do today. DTC will continually accept deliverer updates from the point the instruction is received from Omgeo through settlement. The key changes from the ID deliverer's perspective include;

- **End of day processing:** DTC will no longer warehouse for 21 business days ID deliveries ending the day in an exempted or unprocessed state. Instead, DTC will drop the delivery from IMS and require delivering clients to submit new deliver instructions if applicable.
- **Deliverer exemption message in RAD:** Some deliverers use exemptions to reverse a previously approved delivery as a means of instructing DTC to refrain from making delivery. Deliverer exemptions are accepted by DTC at anytime during the settlement process. With the new model, DTC will route all deliverer authorized deliveries to the receiver's RAD as early as 5:00 p.m. EST on S-1. If the deliverer submits an exemption for a previously authorized ID delivery that has already been posted to the receiver's RAD, then DTC will honor the deliverer instruction and remove the item from RAD. If the receiver already authorized the receive, their approval will be negated and the item will be removed from RAD. If the receiver has not taken an action, the item will be removed from RAD. Either way, DTC will not put the item back to the receiver's RAD unless the deliverer subsequently authorizes their delivery. This deliverer exemption process will be managed through the ANE system, but after 5:00 p.m. EST on S-1 output reflecting the status of the deliverer exemption will be communicated through RAD output. Deliverers interested in consuming this message status must subscribe to RAD output to receive the update.
- **Receiving a second "awaiting approval message":** The initial output message DTC will generate for all deliverer authorized ID deliveries is that the item is awaiting receiver approval. As mentioned above, receivers have the ability in the new model to reverse a previously approved ID receive by using the RAD sequence number. When this occurs, DTC will generate a second awaiting approval message to reflect the reversal. Deliverers interested in consuming this message status must subscribe to RAD output to receive the update.

Receiver Perspective

Changes from the receiver's perspective are more extensive and depend largely on your strategy for managing the ID receives approval process. As previously mentioned, DTC will support ID receiver authorization profiles for both a passive and active approval approach. Similar to the ID deliverer authorization profile, DTC will apply your receiver profile setting to all ID receives in an unprocessed state that were previously authorized by the deliverer. Unlike the ID deliverer profile which DTC applies at noon of S-1, the ID receiver profile will be applied at approximately 5:00 p.m. EST on S-1. The window between the deliverer and receiver profile application was created because this is the timeframe when most deliver side updates are received by DTC and waiting until 5:00 p.m. EST to apply the receiver profile reduced the amount of potential rework inherent with the previous model.

Regardless of the approval approach chosen, DTC will begin to make RAD output reflecting the status of any deliverer authorized delivery available to RAD output subscribers at approximately 5:00 p.m. EST on S-1. The initial message generated by DTC is that the ID delivery is awaiting receiver authorization in RAD. This is where the settlement process splits depending on whether you've elected a passive or active approval strategy.

Passive Profiles:

A passive profile setting provides receiving clients with an STP option from the point of Omgeo affirmation through DTC settlement. DTC, as outlined above, has created various safeguards to protect

clients from providing a passive approval for an item that they do not want to settle. The bullets below highlight key points in the settlement process for passive users (all times are approximate).

- Manual receiver flagging of specific ID receives will be supported through 5:00 p.m. EST on S-1
 - No client development is needed. Flagging capabilities will be available in the Settlement Web only. Flagging permissions will be incorporated into any core role containing update capabilities, e.g., if you can update a RAD transactions, you will be allowed to flag an ID receive.
- The application of the passive setting will occur at 5:01 p.m. EST on S-1
 - No client development needed as this is the default setting
- Subsequent receiver authorizations, cancelations and reversals will be accepted immediately following the profile application through to the start of the night cycle at 8:45 p.m. EST
 - Clients must prepare to use the RAD sequence number to provide reversals and cancelations for automated RAD command messages
- With the start of the night cycle, DTC will switch your profile setting from passive to active to further protect from any passive approval from any “day-side” deliverer authorizations.
 - No client development needed

DTC will generate a RAD output message for any receiver update that occurs after 5:00 p.m. EST on S-1 and make it available to all subscribers.

Clients should consider the benefits of passive authorizations, especially the cost benefit it brings with turning around inventory received in the night cycle for night cycle CNS short covers.

Active Profiles:

An active profile setting provides clients with additional time to perform the applicable credit verifications required by routing all ID receives to RAD where they await further action. For active users, matching of your ID receives is the same as it is today, i.e., you’ll manage your approvals via RAD and the timing of your approval will determine whether settlement occurs in the night cycle or on the following day. The key changes for active clients include:

- Establishing an active ID receiver authorization profile. The ability to do so will be incorporated into the existing “limits configuration” component of the Settlement Web and updates capabilities will follow existing provisioning rules.
- Prepare to use the RAD sequence number to provide receiver reversals. Selecting an active profile does not mean that RAD approvals are restricted to settlement day only. Active approvals may be granted as early as 5:00 p.m. EST on S-1. Similar to a passive approval, any active approval may be reversed prior to the start of the night cycle on S-1.

Active with a Passive Global Limit:

Clients will be permitted to set a global limit within their active ID profile. This hybrid approach provides clients with increased flexibility with managing their ID receive approvals by allowing them to route higher valued ID receives to RAD (active) and allowing lesser valued ID receives to benefit from STP (passive global threshold). Processes with this profile type will depend on the limit chosen. For example, client ABC elects an active profile, but decides that they don’t want receives with a settlement value less than \$50,000 to go to RAD. The settlement timelines and key processes outlined above would both apply, i.e., see the passive write-up for receives with a settlement value less than \$50,000 and the active write-up for receives with a settlement value equal to or greater than \$50,000.

Matching/Settlement Timeline:

Regardless of how an ID transaction is matched (deliverer authorized plus receiver approval - active or passive) the process flow for settlement is the same, i.e., DTC will only attempt to settled matched transactions. It is the timing of the match that determines whether the ID transaction is attempted for settlement in the night cycle on S-1 or on S during the day cycle. The bullets below provide a detailed outlined of the entire settlement process highlighting the timeframes available for both deliverer and receiver actions (all times are approximate).

- DTC will continually support deliverer updates to ID deliveries via ANE from the point it receive the instruction from Omgeo through 3:00 p.m. EST on settlement day.
- **At noon of S-1**, DTC will continue to apply the client's ID deliverer authorization profile and update the deliverer status accordingly.
- Clients with ID receives slated for passive authorization will be able to manually flag specific ID receives that they want withheld from the passive approval process up to 5:00 p.m. EST on S-1.
- **At 5:01 p.m. on S-1**, the following will occur;
 - All deliverer authorized deliveries will be routed to RAD and generate the initial output message reflecting that the transaction is awaiting receiver approval
 - The ID receiver profile setting will be applied to any deliverer authorized delivery that was not flagged by the receiver
 - The window for receivers to manually flag an ID receive⁴ will close
- **Between 5:02 P.M. on S-1 and the start of the night cycle (approximately 8:45 P.M. EST)** DTC will accept subsequent deliverer and receiver RAD updates and make output reflecting those updates available in real-time to all subscribers. Below is a list of valid updates and the impact of each:
 - **Receiver Approvals** will generate a receiver approval message
 - **Receiver Cancellations** will generate a receiver cancellation message.
 - **Receiver Reversals** will negate the previous approval and revert the transaction status back to awaiting receiver approval
 - **Deliverer Authorizations** will route the item to the receiver's RAD and generate an awaiting receiver approval message. From this point, processing will follow the same flow outlined immediately above at 5:01 p.m. EST on S-1
 - **Deliverer Exemptions** will remove the transaction from RAD regardless of whether the receiver provided approval or not and generate a deliverer exemption message
 - **Deliverer Cancellations** will generate a deliverer cancellation message
- **At 8:45 p.m. on S-1**, the following will occur:
 - The night cycle will begin processing matched transactions
 - DTC will switch profile setting for any passive clients to active offering further protection from any ID deliverer authorization occurring on settlement date
 - Processing rules for unmatched transactions will follow existing same-day RAD processing rules and cutoffs
- **At 3:30 p.m. on settlement day**, the following will occur:
 - IMS will drop any ID deliveries that remain in an unmatched status, i.e., DTC will no longer support the 21 day exemption process
 - DTC will reinstate passive approval parameters

⁴ At this time, receivers will need to perform a reversal command to reverse an approval.

Client Testing:

Changes outlined in this important notice will be available for testing beginning September 22 and continue through implementation. DTC plans to copy production data⁵ over to the test region on the following business day allowing clients to perform stress testing as well as the new functionality and message flows. DTC will set each client's ID Deliverer Authorization profile to passive in the test region to ensure deliveries are authorized and routed to the receiver's RAD as quickly as possible⁶.

The file specifications for the new model have been modified and are available via the link below.

CCF File Specifications: <http://www.dtcc.com/asset-services/settlement/ccf-new-settlement.aspx>

ISO15022 File Specifications: <http://www.dtcc.com/asset-services/settlement/iso-15022-settlement.aspx>

Clients interested in testing in DTC's UTOR test region should contact the Participant Interface Planning Group at pirequests@dtcc.com or 888-382-271 option 5 then option3.

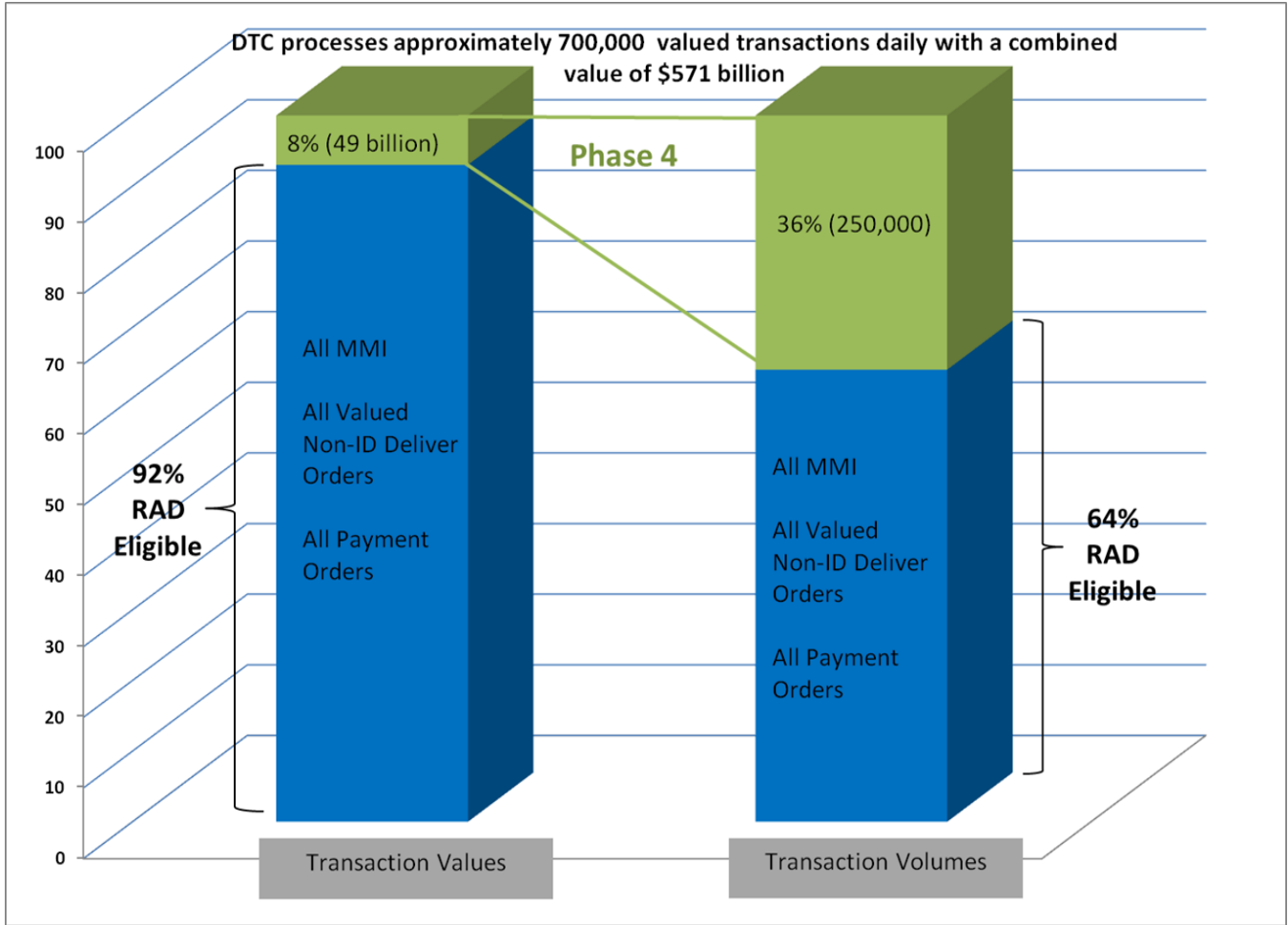
Questions regarding this important notice or anything related to the settlement matching initiative may be directed to your Relationship Manager or the Client Account Representative Team at 212-855-4270 (option 2) or rmsupport@dtcc.com.

⁵ Affirmed Omgeo Deliveries (IMS Transaction Type of MITS) received by DTC prior to noon of S-1.

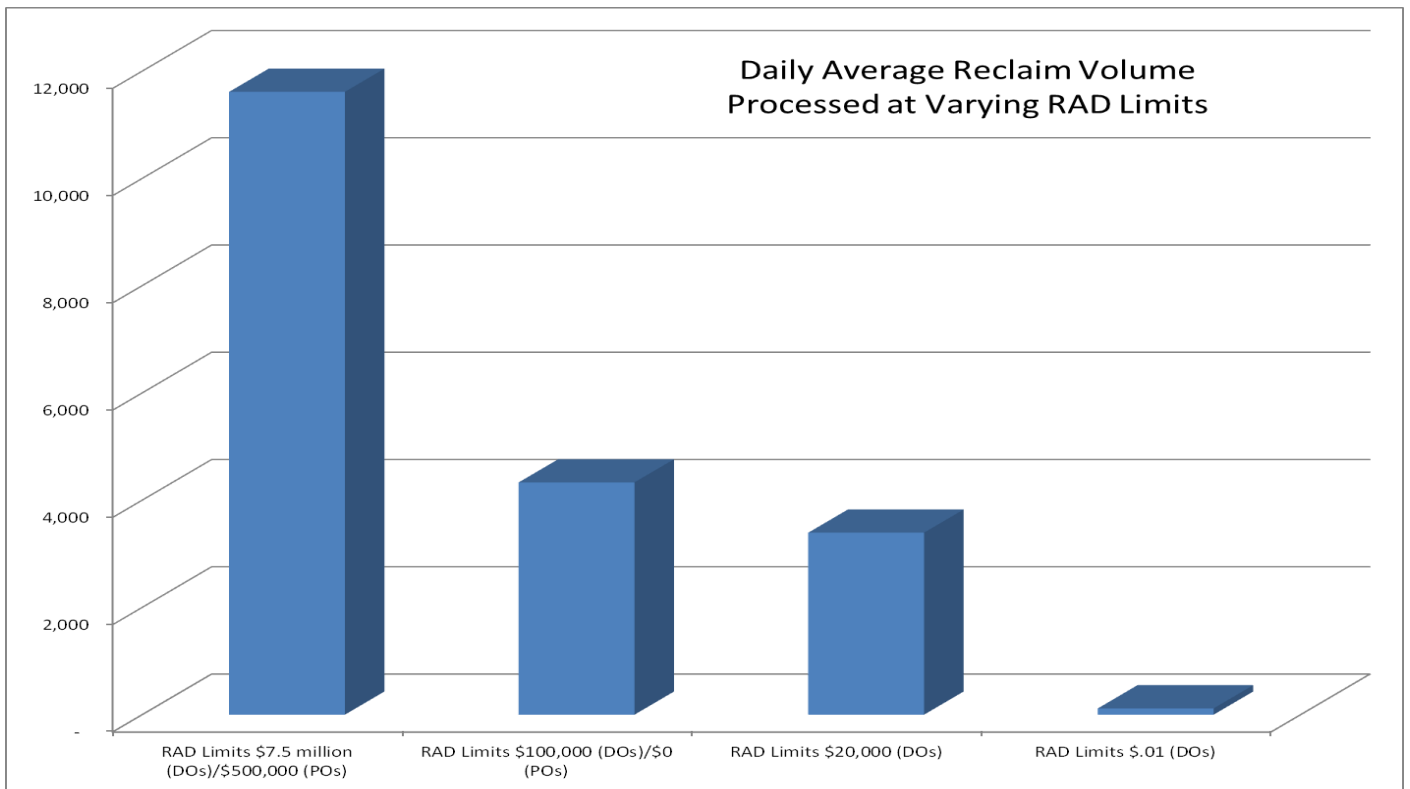
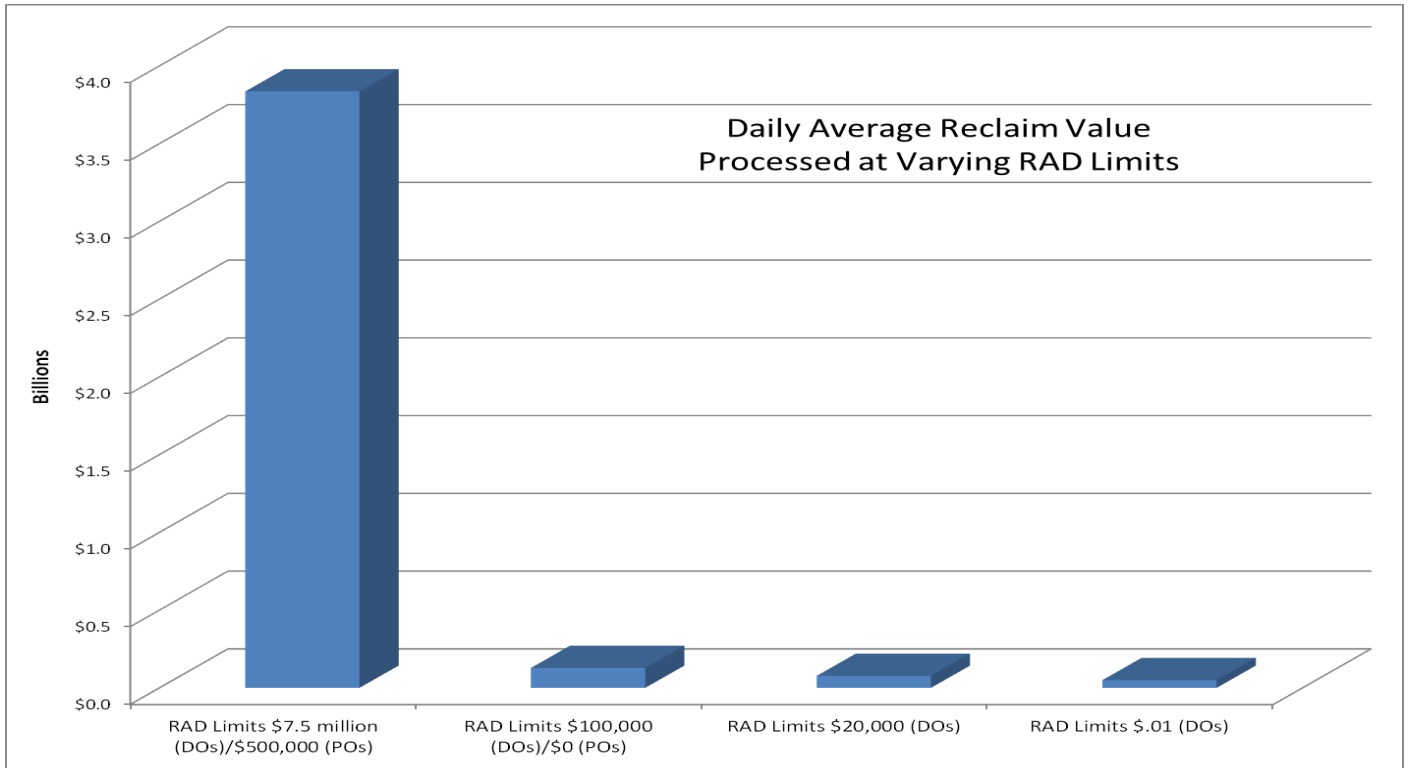
⁶ Clients will be allowed to override this setting in favor of an active approval if needed.

Appendix A:

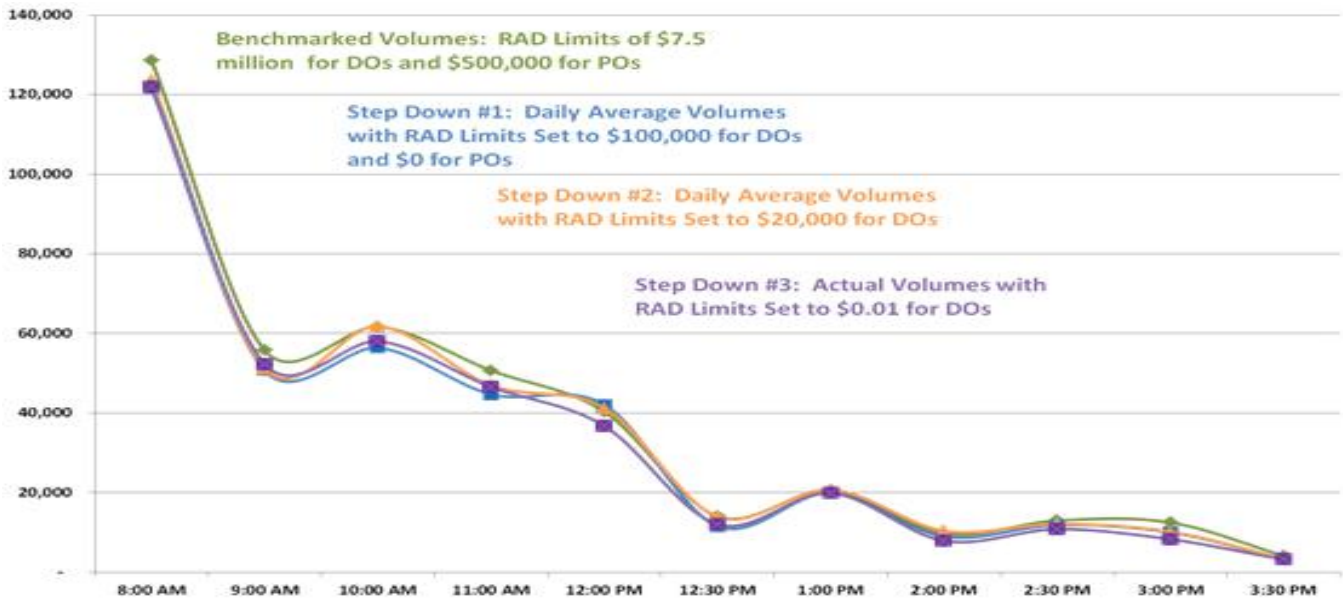
Clients collectively settle approximately 700,000 valued transactions with a combined value of \$571 billion each day. With the conclusion of phase 3, approximately 92% of the value and 64% of the volumes processed through DTC's settlement system are subjected to RAD. These transactions are considered final upon settlement and no longer pose risk to DTC, our clients or the larger financial industry.



The increase in RAD eligible activity has effectively reduced the value and volume of reclaims processed through DTC's settlement systems by more than 99%.



We've been able to accomplish this without significant shifts in settlement throughput.



The key to maintaining settlement throughput levels was industry cooperation and the understanding that timely RAD updates were crucial to the settlement process. Today more than 90% of RAD eligible items are received by clients that have automated their RAD and/or opted to maintain their own RAD limits compared to a mere 60% for pre-settlement matching when RAD volumes were less than 15,000 per day.

