

Trade Confirmation System (TCS) Migration Guidelines for the new protocols

Scope of the migration

TCS services cover the following:

- Regulated off-market trades
- MiFID trade reporting and publication service
- Euronext Funds Service

On 13 March 2010, TCS services will be accessible through the new protocols UTP-Direct and FIX 4.2. This document describes the steps customers will have to take to migrate the SLE sessions to the new protocols after this date.

Impact

The migration of the TCS platform itself has no impact on any of the following access means:

- TCS services through SLE sessions
- e-TCS access
- TCS Web.

The migration is not a big bang and customers do not have to take any technical action to be ready on the migration date. Customers can continue to use their regular access solution after the migration to trade or report trades on the TCS platform. They can do so for an undefined period of time for the following services:

- e-TCS access
- TCS Web.

However customers using SLE to access the TCS platform are required to use the new UTP-Direct or FIX 4.2 protocols before the end of March 2010.

Timeline

The migration of TCS services to the new protocols will be done on 13 March 2010 to be effective in production on 15 March 2010.

Customers are not required to do anything on this date. The migration of TCS services is totally transparent to the members. After the migration, the current SLE sessions in MMTP and FIX Euronext protocols will continue to be supported until the decommissioning date. Members will be able to send orders or report trades using the current protocols. They will also have the ability to use the new UTP-Direct and FIX 4.2 protocols. Customers are required to migrate to these new protocols before the legacy decommissioning date.

Customers willing to test their legacy protocols on the TCS platform can do so by connecting to the External User Acceptance (EUA) test platform. The EUA platform has been migrated to the Universal Trading Platform since December 2009.

Migration overview

Once the migration of the TCS services is effective in production, customers may start to migrate their current sessions to the new protocols.

Steps

1. Customers are required to develop and support the TCS messages in the new protocols.
2. To test their API, customers have to order a dedicated TCS session in EUA by sending a CCG form to the Service Desk.
3. After the API is fully developed, customers can contact the Universal Trading Platform Support Desk to schedule a conformance test.
4. To connect to the production environment, customers have to order a dedicated TCS session in production by sending a CCG form to the Service Desk.
5. Once the conformance test is passed, customers may schedule a Go-Live test with the Service Desk for the SLE session they will use in production to inject TCS orders or trade reports.
6. Customers will follow a different migration scenario depending on their needs, eg:
 - Customers using trades report services only
 - Customers trading on the Euronext Funds Service only
 - Customers using trade reporting and publication services and trading on Euronext Funds Service

Customers using trade reporting and publication services only

The migration is straight through.

Once a Go-Live test has been passed with a new session, members can start using the new session and stop using the legacy one.

Example: a customer reports trades until 8 pm on Day 1 using the legacy SLE session. At the end of Day 1, after 7 pm CET, the customer takes the Go-Live test with the new session. If everything works as it should, the customer starts using the new session the following day (Day 2) and stops using the legacy session.

There is no order book migration and no change to make on NYSE Euronext's side. On Day 2, the customer simply reports trades using the new protocol and therefore uses the new message types.

Customers trading on Euronext Funds Service only

The following two solutions are available:

- Customers are able to route TCS messages through two different SLE sessions. Customers opting for this solution can use the legacy SLE connection and the new SLE connection concurrently for a limited period of time (1 week maximum).

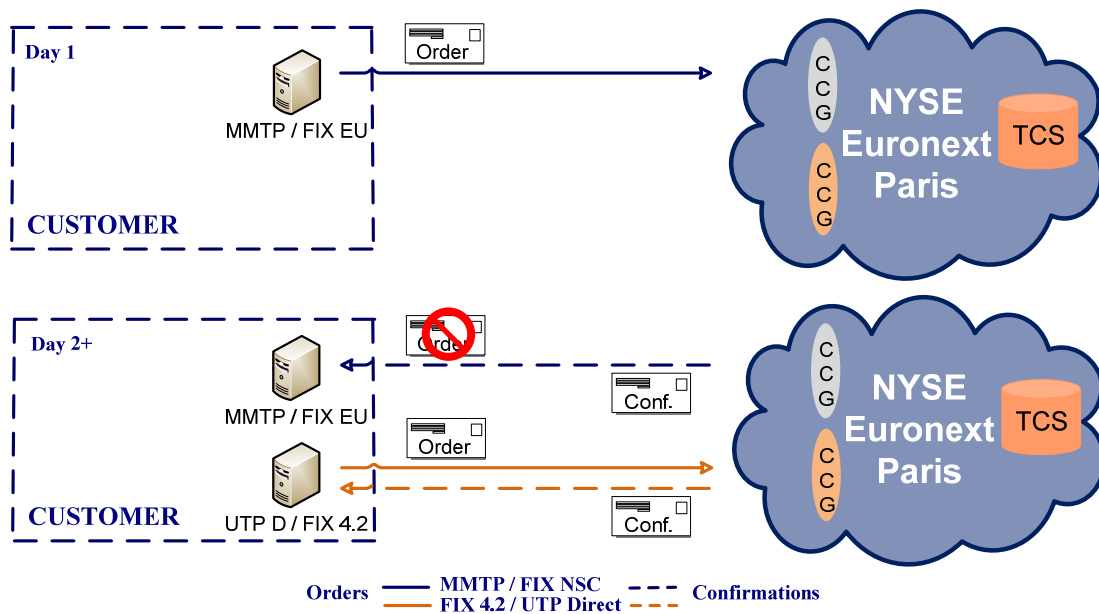
- Customers decide to migrate the legacy SLE to the new session overnight.

1. Use of two concurrent sessions

This solution can be chosen by customers waiting for daily or weekly notifications. This solution does not apply to customers trading quarterly funds. In the latter case, customers have no other choice than to migrate their SLE sessions.

Customers willing to use two sessions at the same time can start injecting orders on the new session after passing the Go-Live test and while continuing to receive daily and weekly notifications on the legacy SLE session. Customers should stop injecting new orders on the legacy SLE session as soon as they start using the new session. The legacy session should only be kept in order to receive acknowledgements and notifications of trades that can be made for a short period of time only (2 weeks maximum).

Constraint: customers need to be able to manage two different sessions at the same time for a few days.



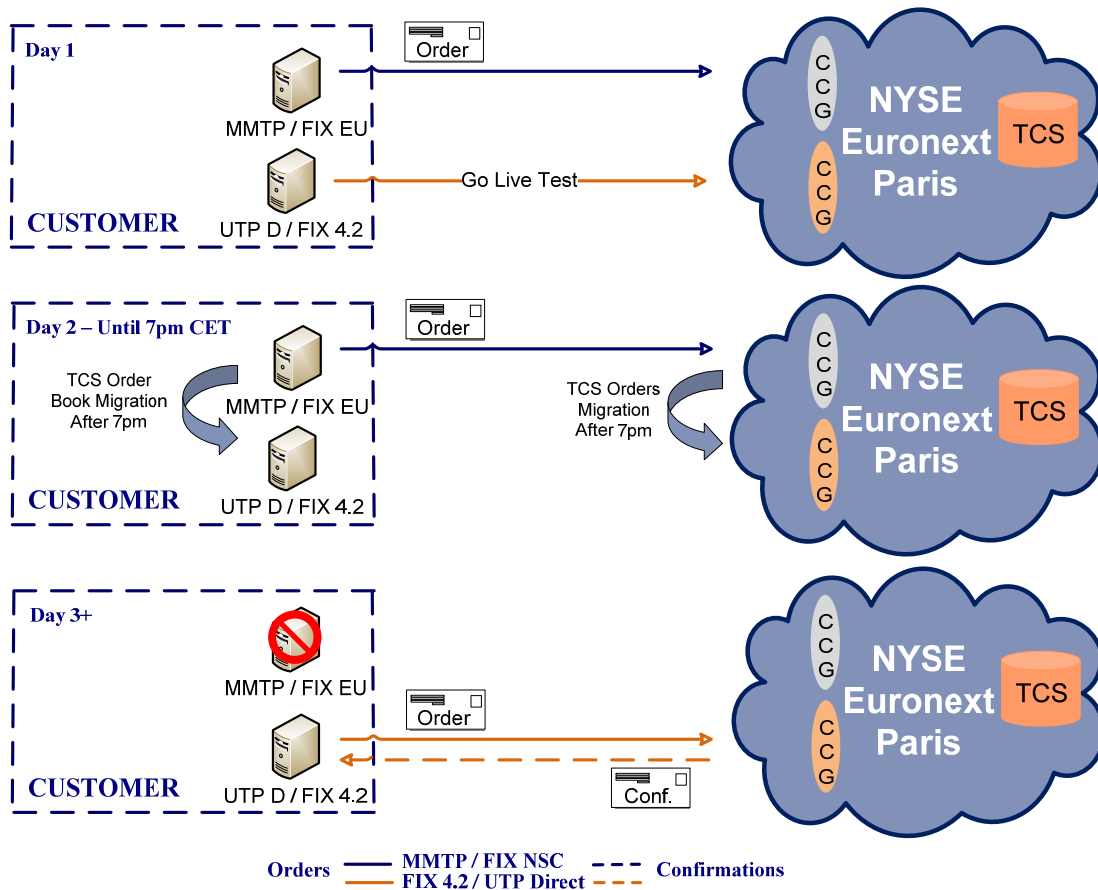
2. Migration of the legacy SLE session to the new SLE session

Example: a customer takes and passes the Go-Live test on Day 1. The test is to be scheduled with the Service Desk.

On Day 2, the customer schedules the migration of its Euronext Funds Service order book by calling the Structured Products Desk. The customer may enter orders until 7 pm CET that day. After 7 pm CET, two concurrent tasks have to be performed and need be coordinated:

- The Structured Products Desk migrates the customer's TCS book from the legacy SLE session to the new SLE session
- At the same time, the customer migrates its internal book from the legacy SLE session to the new SLE session

On Day 3, the legacy session is deactivated. The customer can only use the new SLE session to trade and receive confirmations. On Day 3, the customer will receive the daily confirmations of any trades entered before 4 pm on Day 2. All notifications for orders sent between 4 pm and 7 pm CET on Day 2 will be received on the new SLE session on Day 4.



3. Customers using trades report services and trading on Euronext Funds Service

If customers want to use two concurrent sessions for a short period of time, then the process is identical to the one described above. On top of the Euronext Funds Service orders, customers may enter OTC trade reports on the new session as soon as it is available.

In the case of an overnight migration, OTC trades may be reported on the legacy session until 7 pm CET on Day 2, the day of the Euronext Funds Service Order Book migration. For customers willing to report trades after this time, it is recommended that they migrate in two phases as follows:

- Firstly, use the new UTP-Direct or FIX 4.2 session to report trades right after the Go-Live test
- Then migrate the Dutch funds activity the following day.

Particular case of existing SLE sessions

SLEs used for the TCS activity are segregated and connected to dedicated CCGs that can support access to both TCS and the regulated markets.

Customers migrating from a legacy session to a new UTP-Direct or FIX 4.2 session need to follow the steps described earlier.

Customers who are already using some UTP-Direct or FIX 4.2 sessions to trade on equities, bonds, warrants, certificates or ETFs and who have kept legacy sessions for their TCS activity may choose to regroup their SLE sessions into one.

To do so, customers need to go through two migrations:

- Migrate the existing UTP-Direct or FIX 4.2 session to a new UTP-Direct or FIX 4.2 session supporting both regulated markets access and TCS services. This operation may require an order book migration. This can be done by scheduling the migration with the Structured Products Desk.
- Then at a later stage, migrate the legacy session supporting TCS to the new combined session. Customers may refer to the steps described above for this procedure.

When to migrate?

Customers must order their SLE sessions in the EUA and production environments and pass their conformance test **before 13 March 2010**.

Customers may then start to migrate their SLE sessions the week of 15 March. Customers will have until the legacy protocols decommissioning date to migrate all their sessions.

Ordering the SLE

Access to TCS services is available through specific SLE sessions. These sessions need to be ordered in both the EUA and production environments. Customers are required to fill in the CCG form for each environment and mail the forms back to the Service Desk.

Customers using only one or two sessions maximum for their trading activity on NYSE Euronext Cash platforms will be migrated to one or two combined sessions in the new protocols UTP-Direct or FIX 4.2. Through these sessions, customers will be able to trade on the regulated markets and use the TCS services. Customers are entitled to order one TCS drop copy session as well.

Customers currently using more than two SLE sessions on the regulated markets and TCS have two choices:

- Either migrate two sessions maximum out of their pool of existing SLEs to combine SLEs supporting access to both the regulated markets and TCS services

- Or order two dedicated sessions to be used only for TCS activity only. Both sessions will be limited to 10msgs/sec, will be restricted to access the TCS services and will be free of charge.

Note: In the latter case all non TCS sessions will be unable to trade or report trades on TCS. Those sessions will not receive unsolicited messages. A drop copy session used for the regulated markets will not be able to receive TCS messages. Therefore a new drop copy session dedicated to TCS will need to be ordered.

Invoicing

New SLE sessions will be charged only after the Go-Live test has been successfully completed. If for any reason, you need to disable a live session, please contact the Service Desk. For the pricing structure, please refer to the new pricing model Info-Flash of 30 June 2009. The charges do not apply to the new SLE sessions dedicated to TCS and limited to 10msgs/sec. These sessions are free of charge and are limited to customers who have more than two live sessions already and wish to separate the TCS activity from the regulated markets.

The legacy SLE sessions will remain active until a request to deactivate them has been received. To avoid dual charges, please send the decommissioning form for the SLE sessions or the infrastructure in the five days following the migration.

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