

# Focus Call - Mandatory Interface Encryption

Session will start soon!



DEUTSCHE BÖRSE  
GROUP



# Mandatory Interface Encryption

## Focus Call

16 March 2023



DEUTSCHE BÖRSE  
GROUP

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# Agenda

1. Overview Encryption

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2. Rollout Approach for Simulation & Production

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3. Communication & Publications

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4. Prepared Q&As

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5. Live Q&As

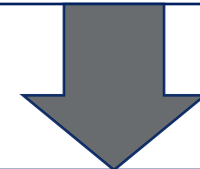
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# 1 Overview Mandatory Encryption



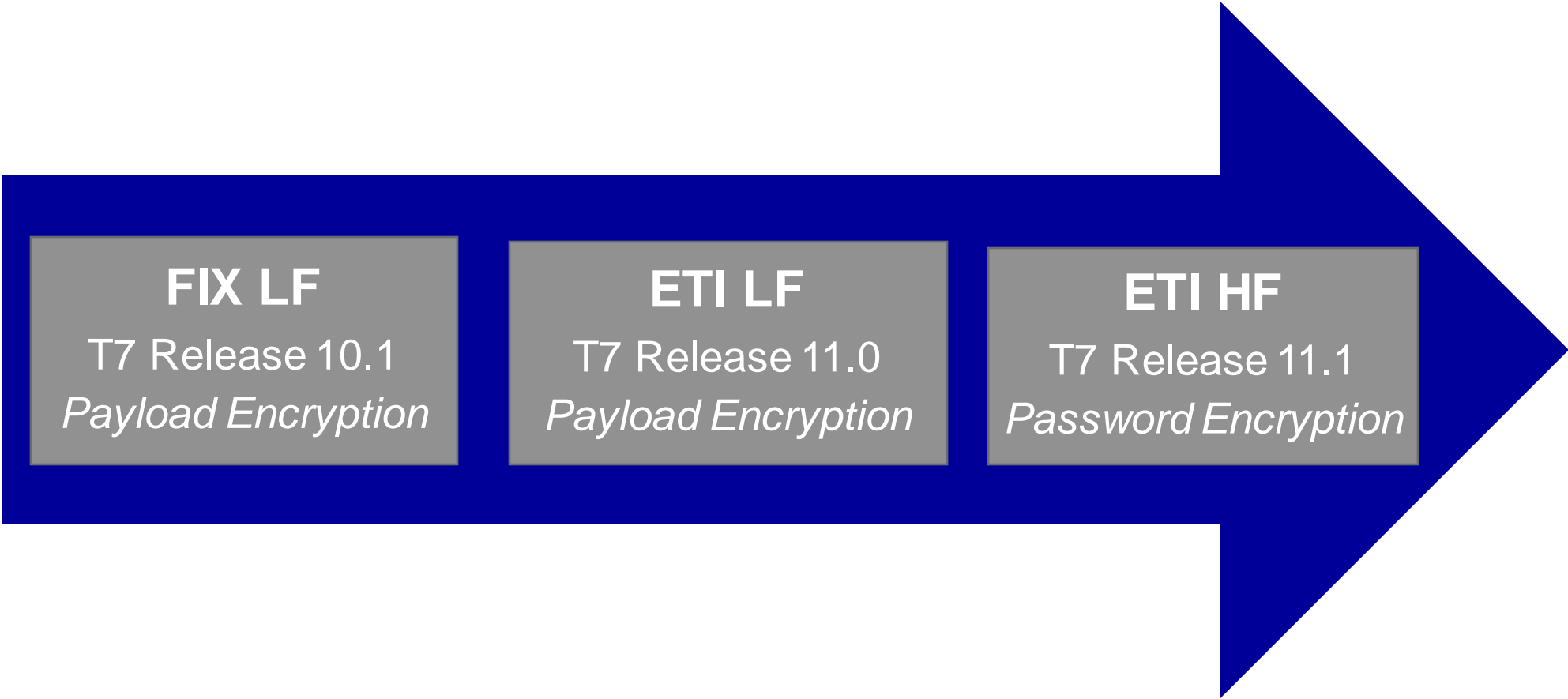
# Why Mandatory Interface Encryption?

- Regulation on Critical Infrastructures (**KRITIS**) enforced by Federal Office for Information Security (Bundesamt für Sicherheit in der Informationstechnik BSI) specifies that **Deutsche Börse needs to adhere to requirements, which include encryption of data during transfer via public networks resp. encryption of credentials in all networks**



- Changes are **improving information security** transmitted via communication networks to further reduce risk of unauthorized interception / manipulation / misuse

# High Level Encryption Roadmap



# Payload Encryption for FIX LF & ETI LF



- Mandatory payload encrypted connectivity option via OpenSSL (TLS 1.2 – restricted cipher-suites)
- Use of FQDN strongly recommended
- TCP Connect => TLS Handshake => Application Data
- DigiCert Intermediate Certificate



## **2 Rollout Approach for Simulation and Production**





# Rollout Approach for Simulation & Production

Interface	T7 Release	Availability in Simulation	Mandatory in Simulation	Availability in Production	Mandatory in Production
FIX LF*	10.1	02.05.22	10.03.23	27.06.22	<b>08.05.23</b>
ETI LF*	11.0	12.09.22	04.08.23	21.11.22	<b>23.10.23</b>
ETI HF**	11.1	23.03.23	24.11.23	22.05.23	<b>11.12.23</b>

Event	Environment	T7 Release	Decommissioning date
Ordering of HF Session outside the Equinix FR2 facility in the Member Section	Production	11.1	21.08.23
Usage of HF Sessions outside the Equinix FR2 facility	Production	11.1	23.10.23

# 3 Communication & Publications



# Dedicated Support Page *Mandatory Interface Encryption*

## Eurex

<https://www.eurex.com/ex-en/support/initiatives/project-readiness>

### Readiness for projects

#### Overview of content

Next Generation ETD Contracts  
Regulatory Reporting Solution (RRS) 1.1 for non-MIFIR firms

T7 Disaster Recovery Test  
[Mandatory Interface Encryption](#)

### Mandatory Interface Encryption

As a trading venue operator, Eurex needs to adhere to requirements regarding encryption of data during transfer via networks on public ground and the encryption of credentials during transfer via networks on non-public ground (Critical Infrastructure KRITIS regulation).

Eurex has implemented mandatory changes regarding data transmission via the T7 trading interfaces. These changes have been made to improve the security of information transmitted via communication networks to further reduce the risk of unauthorized interception, manipulation, or misuse.

To support Trading Participants with the implementation of their security requirements, Eurex offers additional connectivity options to implement Transport Layer Security (TLS) for sensitive data in critical business areas.

The following steps will be carried out during 2023:

Interface	T7 Release	Availability in Simulation	Mandatory in Simulation	Availability in Production	Mandatory in Production
FIX LF	10.1	02.05.22	10.03.23	27.06.22	08.05.23
ETILF	11.0	12.09.22	04.08.23	21.11.22	23.10.23
ETI HF	11.1	04.04.23	24.11.23	22.05.23	11.12.23

Event	Environment	T7 Release	Decommissioning date
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[Supporting Documents](#)   [Circulars](#)   [Migration Status](#)

[Transport Layer Security \(TLS\) and Password Encryption - FAQs](#)

## Cash Market

<https://www.xetra.com/xetra-en/technology/t7/mandatory-interface-encryption>

Technology

- T7 trading architecture
  - Access
  - Interfaces
  - Publications
  - Orders
  - System documentation
  - Cloud Simulation
  - Mandatory Interface Encryption**
  - T7 GUI Launcher
  - Emergency procedures
- Vendor
- Financial Markets Solutions
- Market
- Implementation News
- Service-Status
- Co-location Services

Share - 0

### Mandatory Interface Encryption

As a trading venue operator, Deutsche Börse needs to adhere to requirements regarding encryption of data during transfer via networks on public ground and the encryption of credentials during transfer via networks on non-public ground (Critical Infrastructure KRITIS regulation).

Deutsche Börse has implemented mandatory changes regarding data transmission via the T7 trading interfaces. These changes have been made to improve the security of information transmitted via communication networks to further reduce the risk of unauthorized interception, manipulation, or misuse.

To support Trading Participants with the implementation of their security requirements, Deutsche Börse now offers additional connectivity options to implement Transport Layer Security (TLS) for sensitive data in critical business areas.

**Timeline**

Interface	T7 Release	Availability in Simulation	Mandatory in Simulation	Availability in Production	Mandatory in Production
FIX LF	10.1	02.05.22	10.03.23	27.06.22	08.05.23
ETI LF	11.0	12.09.22	04.08.23	21.11.22	23.10.23
ETI HF	11.1	04.04.23	24.11.23	22.05.23	11.12.23

**Event**

Event	Environment	T7 Release	Decommissioning date
Ordering of HF Session outside the Equinix FR2 facility in the Member Section	Production	11.1	21.08.23
Usage of HF Sessions outside the Equinix FR2 facility	Production	11.1	23.10.23

**Participation Requirements**

Feature/Enhancement	Details	Action Item
Mandatory implementation of FIX LF TLS	Support for FIX LF connectivity option without TLS will cease in Production on 8 May 2023 (only FIX LF TLS connectivity possible).	Existing application must be adapted at the earliest point in time.
Mandatory of ETI TLS	Support for connectivity option without TLS for Production will cease on 23 October 2023 (only ETI TLS possible).	Existing application must be adapted at the earliest point in time.
Mandatory password encryption for ETI HF sessions	Password encryption will become mandatory on 11 December for Trading participants using ETI HF sessions.	Application must be adapted at the earliest possible point in time.
Replacement of ETI HF with ETI LF sessions (only for Prod)	Use of Prod ETI HF outside of Deutsche Börse's Equinix FR2 will cease on 22 October (opening of Prod HF session for non-Equinix installations ends on 21 August 2023).	Trading participants must replace ETI HF with ETI LF or transfer session to installations within Deutsche Börse's Equinix FR2.

**Contact**

Technical Key Account Management  
[ts@deutsche-boerse.com](mailto:ts@deutsche-boerse.com)

**Further information**

- ↗ Circular 008/2023: Updated information for the implementation of mandatory interface encryption to strengthen the protection of critical information infrastructure.
- ↗ Circular 043/2023: T7 connectivity options: Implementation of additional options to strengthen the protection of critical information infrastructure.

**Related topics**

- ↗ [R4D: Transport Layer Security \(TLS\) and Password Encryption \(Circulars: RDR 170/08/18\)](#)

# T7 System Documentation Release 11.0\*

## Eurex

<https://www.eurex.com/ex-en/support/initiatives/t7-release-11-0>

**EUREX** Markets Trade Clear Data Support Rules & Regs Find

Eurex > Support > Initiatives & Releases > T7 Release 11.0

### T7 Release 11.0

With T7 Release 11.0 Eurex introduced the following functional enhancements:

- Pre-Trade Risk Limits enhancements for options
- Eurex Total Return Futures for French Government Bonds
- Publication of Herfindahl-Hirschman Index via Market Data
- Monday and Wednesday Weekly Option Contracts
- Tag 1031 "custOrderHandlingInst" Usage Adaptions
- Introduction of non-recoverable Eurex EnLight Quotes
- Off-book trades via T7-EOBI
- Message Encryption for ETI Low Frequency Gateways

Please note that T7 Release 11.0 will not provide backwards compatibility for ETI or FXL.

**Simulation start: 12 September 2022**  
**Production start: 21 November 2022**

tdb Jul	12 Aug	12 Sep	tdb Sep	11 Nov	19 Nov	21 Nov
Documentation Publication of documentation - initial version	Cloud Simulation The release is now available in the cloud simulation	Available in simulation The release is now available in simulation	Documentation Publication of documentation - final version	Readiness Statement Deadline for submission: 11 Nov 2022	Connection test Connection test is performed	Available in production The release is now available in production

System Documentation | Circulars | Readiness Statement | Readiness Videos

- Overview and Functionality
- Trading Interfaces
- Market & Reference Data Interfaces

## Cash Market

<https://www.xetra.com/xetra-en/technology/t7/system-documentation/release11-0>

**XETRA** Cash Market Börse Frankfurt Contact Member Section Rules & Regulations Deutsch

21 February 2023 10:15:31 AM CET

Instruments Trading Clearing & Settlement **Technology** Newsroom

Xetra > Technology > T7 trading architecture > System documentation > Release 11.0

### Release 11.0

This section provides an overview of the available system documentation.

- Overview of content
  - Overview and Functionality
  - Enhanced Trading Interface
  - FIX LF
  - Market and Reference Data Interfaces
  - GUI Solutions
  - Network Access
  - Reports
  - Simulation
  - Production

Overview and Functionality

07.11.2022	T7 Release 11.0 - Market Model for the Trading Venue Xetra (Download, PDF, 929.29 kB) This document describes the principles of order handling, order matching and price determination as offered by the different trading forms typically available on the trading venue Xetra: auction and continuous trading.
07.11.2022	T7 Release 11.0 - Market Model Continuous Auction (Download, PDF, 386.02 kB)



# 4 Prepared Q&As



# A. Encryption

1. Is a client certificate required?
2. Are new sessions required for TLS encryption?
3. Does Deutsche Börse recommend to use Fully Qualified Domain Names (FQDNs) for the connection to the encrypted ports instead of using IP addresses?
4. Will encryption apply to LF sessions that are hosted in co-location?
5. Will encryption become mandatory also for EEX, Vienna and other Partner Exchanges?

# 5 Live Q&As



# Thank you!

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If you have any further questions, please contact your Technical Key Account Manager or send an e-mail to [cts@deutsche-boerse.com](mailto:cts@deutsche-boerse.com)





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