

# Compression Services for Listed Derivatives

19 April 2021



# Background and Objectives

Background for the introduction of the compression service is the new higher capital requirements for holding derivatives, especially options under CRD IV

The Current Exposure Methodology (CEM) which is still used by most international banks for risk calculation, limits the risk netting possibilities of opposing positions within one trading strategy, leading to capital constraints.

The recently introduced Standard Approach for Counterparty Credit Risk (SA-CCR) accommodates for some of the limitations set under CEM. However, the valuation approach under SA-CCR is more restrictive by introducing a daily monitoring of the leverage ratio limit compared to a monthly observation in CEM.

In order to avoid leverage ratio conflicts, Clearing Members impose capital limits to their clients thus restricting their trading capacity especially towards month-end expiry. As a result, Market Makers as clients cannot provide the quality of liquidity that they would otherwise show.

- Portfolio compression can be an efficient method to reduce capital constraints by reducing the notional size of a derivative portfolio while keeping the market risk within a pre-defined tolerance level
- Upcoming regulation under Basel III/IV increases clients focus on risk reduction
- Main interest expressed from liquidity providers that currently operate their clearers capital constraints, and from banks under the CEM model that would like to further improve their capital efficiency

# Benefits of Eurex Compression



## Highest efficiency possible

- Eurex offers compression transaction sizes per series according to the regulatory framework
- No minimum size requirements for compression transactions



## Secure processing

- Release only possible after all compression participants approval
- Simultaneous release of all transactions



## Open platform

- Compression services at Eurex can be offered via any approved compression provider

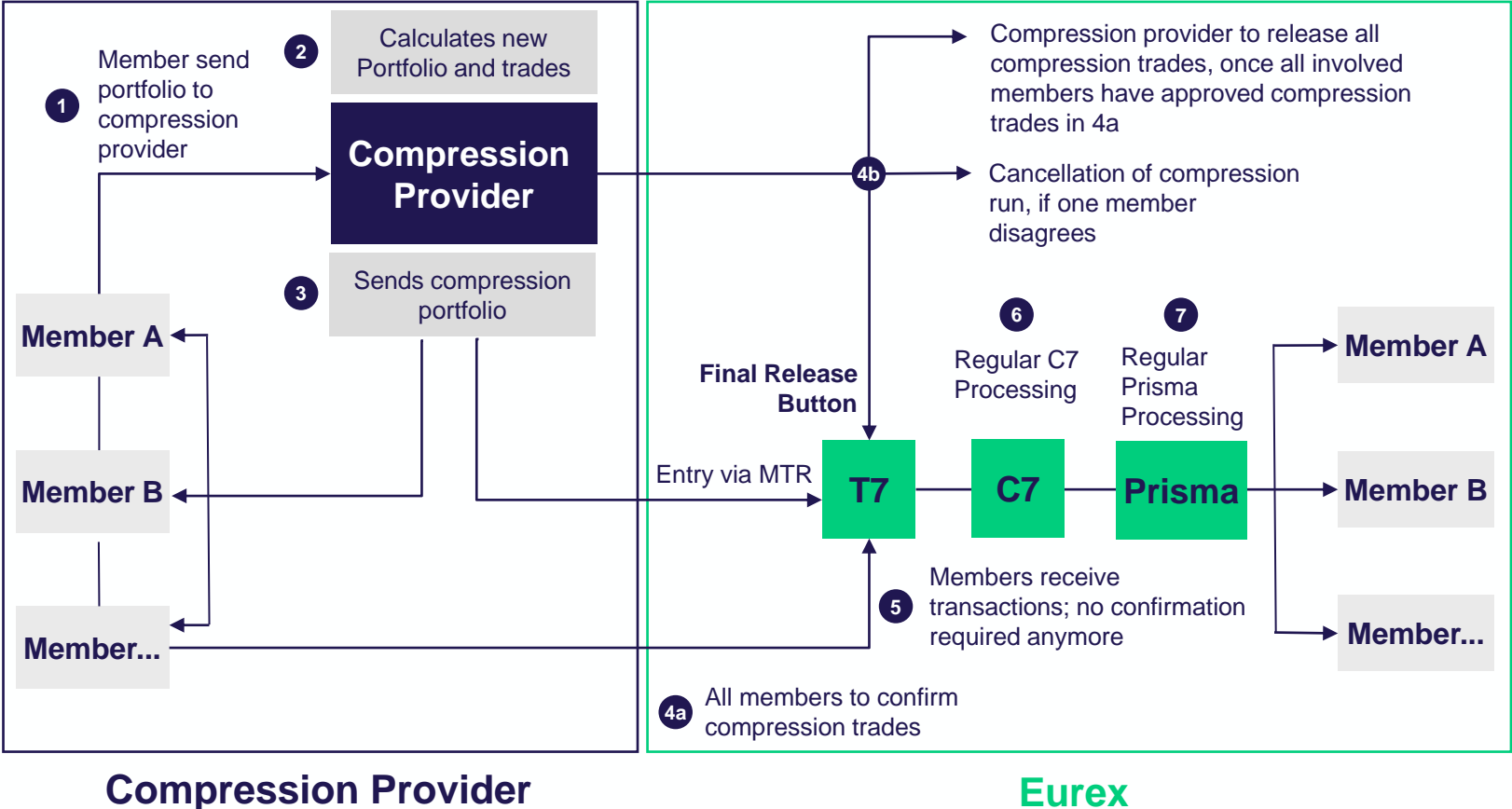
# Compression Service Overview

- Exchange Participants need to engage with Eurex approved compression providers
- Compression trades are entered into the trading and clearing Eurex systems using a special flag within the available trade entry service (TES)
- Release of compression trades is conducted by compression service providers, as soon as all participating members have confirmed their compression trades
- Compression trades can only be entered and released between **09:00 and 14:00 CET**
- The service infrastructure was introduced on **29<sup>th</sup> March 2021**

# Compression Solution Description

<b>Trade process</b>	<ul style="list-style-type: none"> <li>• Enabled to Eurex members via Trade Entry Services (TES) infrastructure</li> </ul>
<b>Compression Service Provider</b>	<ul style="list-style-type: none"> <li>• A specific Eurex participant (not necessarily a Eurex trading participant) who is allowed to submit predefined compression trades in the broker mode</li> <li>• The predefined compression trades are created by compression service provider using open interest initially provided by trading participants</li> <li>• Mass upload of the compression results by the compression provider via Eurex ETI or Eurex T7 GUI</li> <li>• Final release of all compression transactions once all compression service users have approved all trade proposals entered (successful compression run)</li> </ul>
<b>Compression Service User</b>	<ul style="list-style-type: none"> <li>• Eurex trading participant who is requested to approve all predefined compression trades of a compression run in which he is counterparty</li> <li>• Automatic notification to members via the usual TES broadcast of pending approval of compression trades</li> <li>• By approving his compression trades, the compression service user gives consent to the results of the compression run and to the compressed positions resulting from the impact of the compression trades</li> </ul>
<b>Frequency</b>	<ul style="list-style-type: none"> <li>• Possible once per day per product</li> <li>• Compression provider to schedule compression runs in advance</li> </ul>
<b>Main changes</b>	<ul style="list-style-type: none"> <li>• New TES Type</li> <li>• Final release button</li> <li>• GUI Adaptations regarding mass approval</li> <li>• Implementation of requirements in T7 Release. 9.0, C7 Release. 7.0.1, Prisma Release. 10.1</li> </ul>
<b>Scope</b>	<ul style="list-style-type: none"> <li>• Euro STOXX 50 index options</li> <li>• Further products possible on demand</li> </ul>
<b>Pricing</b>	<ul style="list-style-type: none"> <li>• Compression service user             <ul style="list-style-type: none"> <li>– Fee per contract: EUR 0.10 note: a fee holiday is offered until December 2021</li> </ul> </li> <li>• Compression provider : A fee holiday is offered until 30 June 2021             <ul style="list-style-type: none"> <li>– Monthly fee (incl. one compression run): EUR 3,000</li> <li>– Each additional compression run: EUR 1,000</li> </ul> </li> </ul>

# Compression Flow



- Compression provider interacts with Eurex members via bilateral agreements
- Eurex member send their compression portfolio to the compression provider (1)
- Compression provider calculates compression trades and sends results back to members (2) (3)
- Compression provider send compression trades to TES using the MTR (3)
- Eurex member to affirm all compression trades (4a)
- Compression provider oversees affirmation by all participating members (4b)
  - Release of all compression trades if all participating members affirmed within the given time frame
  - Cancellation of the compression run if at least one trade is not affirmed or rejected
- Regular processing of compression trades identical regular TES trades, including Eurex risk management by Prisma (6) (7)

# Minimum Requirements and Limitations

## 1 Portfolio compression requirements

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<b>Compression provider</b>	<ul style="list-style-type: none"><li>• Must be admitted by Eurex</li></ul>
<b>Compression service user</b>	<ul style="list-style-type: none"><li>• Must be active Eurex Exchange Participant with TES type eligibility "Compression"</li></ul>
<b>Allowed products</b>	<ul style="list-style-type: none"><li>• EURO STOXX® 50 index options (OESX)</li></ul>
<b>Allowed accounts</b>	<ul style="list-style-type: none"><li>• Proprietary accounts only</li></ul>
<b>Frequency</b>	<ul style="list-style-type: none"><li>• One compression run per day and allowed product</li></ul>
<b>Portfolio compression time</b>	<ul style="list-style-type: none"><li>• 09:00 – 14:00 CET</li></ul>

## 2 System requirements

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- Start and end of compression run must be during product specific TES trading hours, i.e., Schedule event must be Activity State: ON
- Any limitation in trading hours on expiry day or holiday must be considered
- Compression runs shortly after T7 / C7 releases will be avoided

## 3 Operational requirements

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- Eurex Operations team to be informed on Wednesdays prior to each compression run in order to plan accordingly
- Extraordinary runs might be possible with prior approval by the risk team on short notice. In such case, the information on the compression run date, participating members and volumes is required.

# Product Description - Planned Set-up

## Planned changes to Eurex Trading and Clearing Systems

System	Main changes	Description	Timeline
T7	<ul style="list-style-type: none"> <li>▪ New TES Trade Type</li> <li>▪ Final Release Button</li> <li>▪ GUI Adaptations regarding Mass Approval</li> </ul>	<ul style="list-style-type: none"> <li>▪ New TES type for compression trades required               <ul style="list-style-type: none"> <li>• Identification</li> <li>• Reporting</li> <li>• Pricing</li> </ul> </li> <li>▪ Functionality for Compression Service Provider to release compression trades simultaneously</li> <li>▪ Ability to approve all compression trades with one approval to reduce operational efforts</li> <li>▪ For more information: <a href="https://www.eurex.com/ec-en/technology/t7/release9">https://www.eurex.com/ec-en/technology/t7/release9</a></li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Simulation:</b> <ul style="list-style-type: none"> <li>– Focus days were offered on 03<sup>rd</sup> and 10<sup>th</sup> December 2020 to enable compression participants test their technical readiness and connectivity to Eurex</li> <li>– Additional focus days are planned in alignment with the respective compression provider</li> </ul> </li> <li>▪ <b>Technical Go Live:</b> 29<sup>th</sup> March 2021</li> <li>▪ <b>Production:</b> <ul style="list-style-type: none"> <li>– First compression run planned on <b>22<sup>nd</sup> April 2021</b></li> </ul> </li> </ul>
C7	<ul style="list-style-type: none"> <li>▪ New TES Trade Type</li> </ul>	<ul style="list-style-type: none"> <li>▪ New TES type for compression trades required               <ul style="list-style-type: none"> <li>• Identification</li> <li>• Reporting</li> <li>• Pricing</li> </ul> </li> <li>▪ For more information: <a href="https://www.eurex.com/ec-en/find/initiatives/c7-release-701">https://www.eurex.com/ec-en/find/initiatives/c7-release-701</a></li> </ul>	



# Key contacts

	Key Contacts	When to contact
<b>Market Supervision</b>	<a href="mailto:eurextrading@eurex.com">eurextrading@eurex.com</a>	<ul style="list-style-type: none"> <li>• First point of contact</li> <li>• Registration of a compression run</li> <li>• Customer support</li> </ul>
<b>Clearing Data Control</b>	<a href="mailto:clearingdata@eurex.com">clearingdata@eurex.com</a>	<ul style="list-style-type: none"> <li>• T7 entitlement setup: using active Trader id and Member Id</li> <li>• The Entitlement setup is required for compression providers and participants. The setup have to be done once at the first participation in a compression cycle.</li> <li>• Participants can directly contact Clearing Data Control team to verify their setup.</li> </ul>
<b>Key Account Managers</b>	<a href="mailto:Client.services@eurex.com">Client.services@eurex.com</a>	<ul style="list-style-type: none"> <li>• Customer support</li> </ul>
<b>Equity &amp; Index Product Design</b>	<b>Tobias Ehinger:</b> <a href="mailto:tobias.ehinger@eurex.com">tobias.ehinger@eurex.com</a>	<ul style="list-style-type: none"> <li>• Back-up support in case of specific questions</li> </ul>
<b>Trading Design</b>	<b>Kai Zimmermann:</b> <a href="mailto:kai.zimmermann@eurex.com">kai.zimmermann@eurex.com</a>	<ul style="list-style-type: none"> <li>• Back-up support in case of specific questions</li> </ul>

# Thank you!

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