

Co-location Infrastructure Updates 2026

The logo for OpenDay 2026 features a stylized, glowing blue circuit board pattern in the background. A dashed blue circle is positioned to the left of the text. The text "OpenDay" is in a large, white, sans-serif font, and "2026" is in a slightly smaller, white, sans-serif font below it.

OpenDay
2026

Current Improvements and Data Center Move

24 September 2026

Agenda

- Improved Colo 2.0 Cable Normalization
- Updated Insights into Trading System Dynamics Presentation
- Fairness of Access Layer Switches
- DC Move – High-Level Project Timeline & Technical Approach

Improved Colo 2.0 Cable Normalization

Colo 2.0 Background

Colo 2.0 Environment

- Introduced in 2017 and originally designed for a smaller number of customer connections
- 10 Gbit/s Ethernet single-mode fiber connectivity, separated by service (Order Entry / Market Data) and market (Eurex/EEX / Cash)
- Continuous customer growth and infrastructure expansion over time

Evolution of Trading Dynamics

- Enhancements to the T7 trading platform have resulted in deterministic system behavior
- Trading competition has shifted to the Colo 2.0 network level infrastructure, where every nanosecond counts
- Customer focus on latency optimization has driven a growing number of connectivity changes and sophisticated setups
- Further information can be consulted in the Insights into Trading System Dynamics presentation



Improved Colo 2.0 Cable Normalization

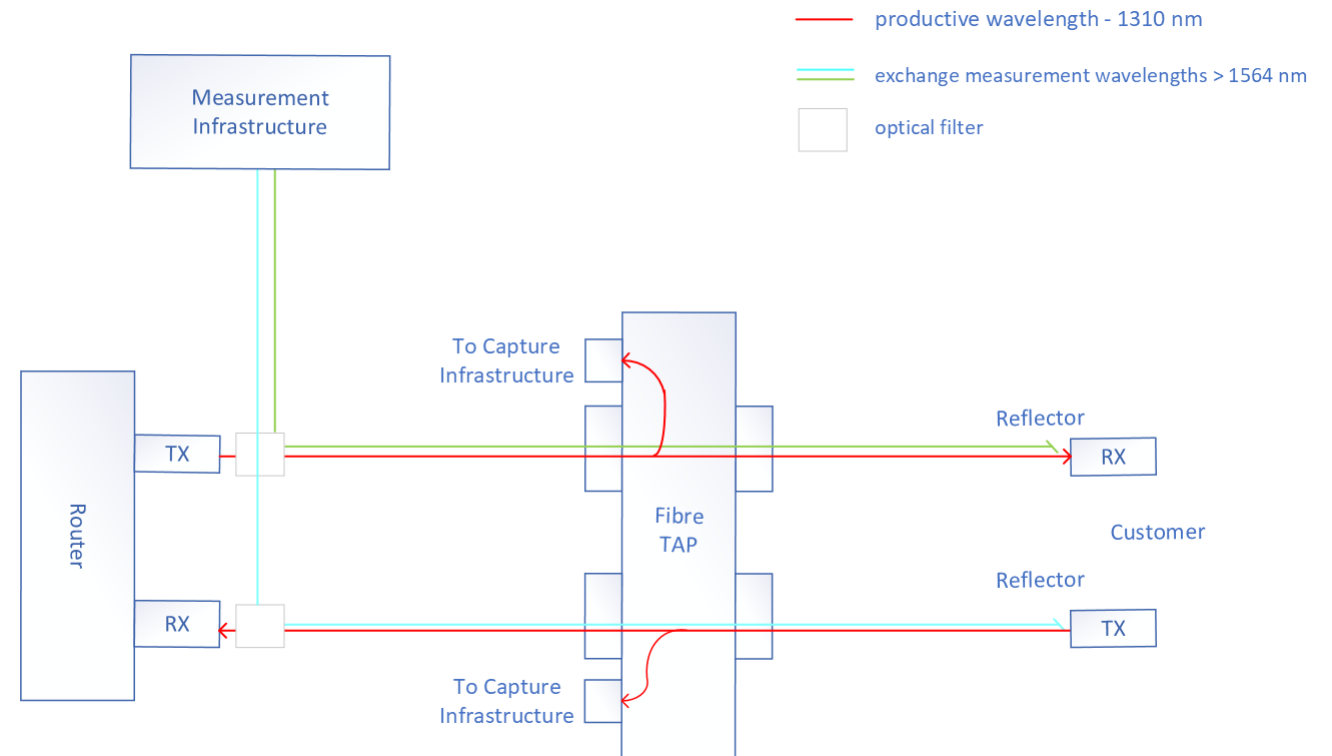
Main objectives

- Reduce cable-length variation to $< \pm 10\text{cm}$ across customer connections (from currently $< \pm 35\text{cm}$)
- Enable continuous monitoring of connection integrity
- Improve detection and troubleshooting of physical connection issues

Implementation approach

- Installation of dedicated measurement components across the Colo 2.0 infrastructure
- Replacement of cables on the capture infrastructure and on the Access Layer switches to support the measurement setup
- Measurement and documentation of all existing customer connections
- Adjustment of connections cable lengths against a defined reference
- Participants are invited to visit the lab setup and learn more about the measurement solution and its operation

Simplified schema for one customer line



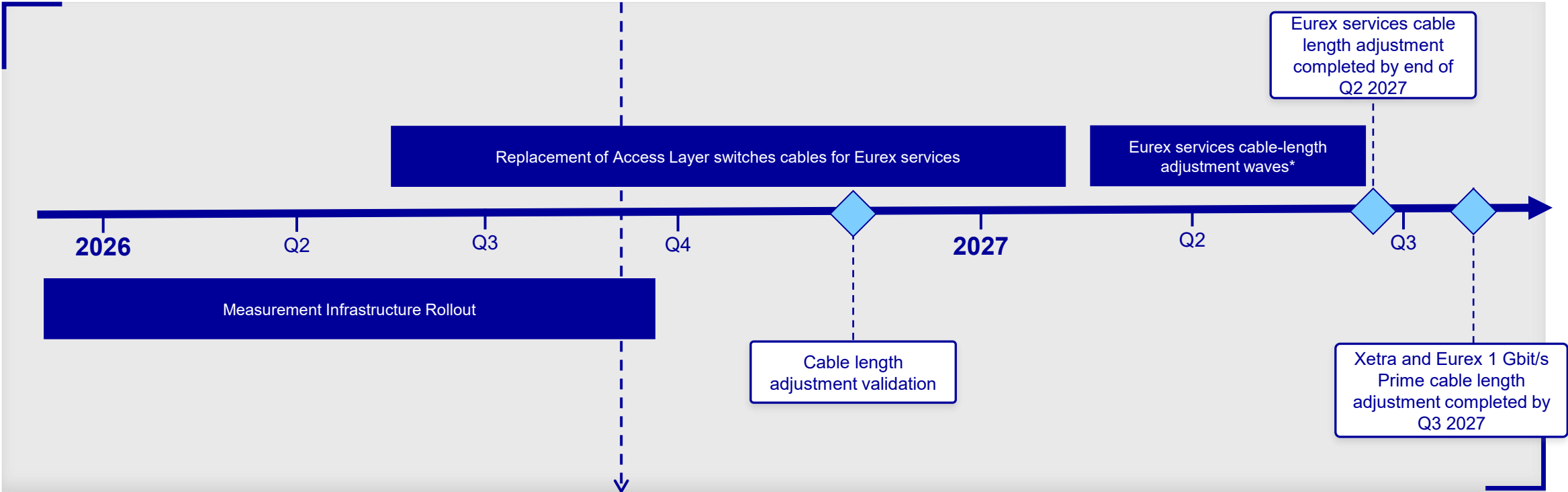
Cable Normalization Roadmap

Progress to Date

- Replacement of Access Layer switches cables ongoing for Eurex services
 - Order Entry expected to be completed mid-October 2026
 - Market Data rollout planned to start end of October 2026
- Detailed planning for the target length adjustments ongoing

Next Steps

- Limited validation of the cable length adjustment on selected Xetra Order Entry connections in Q4 2026
- Implementation waves for Eurex services planned in Q1 and Q2 2027
- Customer-impacting activities to be communicated in advance and executed during planned maintenance windows



* Order in which the services will be adjusted to be defined

Updated Insights into Trading System Dynamics Presentation

Updated Insights into Trading System Dynamics Presentation

The Insights into Trading System Dynamics presentation provides an overview of Deutsche Börse's T7 trading architecture and the technical principles behind the trading environment.

Topics covered

- T7 architecture and partition design
- Internal trading system topology
- Order Entry and Market Data networks
- Market data dissemination and transparency concepts
- High-Precision Timestamp services
- Network and trading system dynamics
- Practical recommendations for low-latency connectivity

Key Updates since last Version

- T7 Release 14.1 delivered
- Continued rollout of Cable Normalization activities
- Distribution Layer optimization for Eurex Order Entry completed
- Extended timestamping and transparency capabilities
- Updated measurements and analysis of production data
- Preparations for T7 Release 15.0 (November 2026)

The updated presentation can be found at [Insights into Trading System Dynamics - Deutsche Börse's T7®](#).

Fairness of Access Layer Switches

Different Topologies for Market Data and Order Entry

Market Data

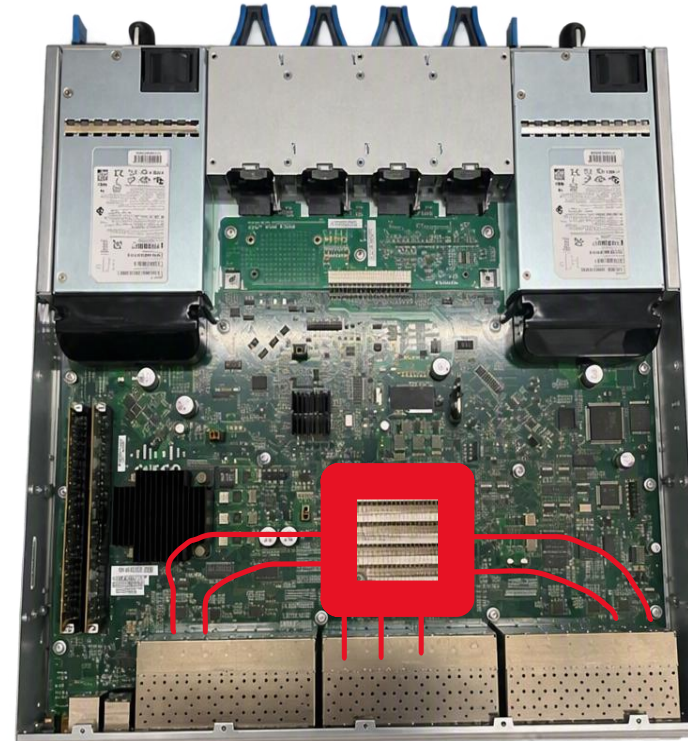
- Distribution Layer (Cisco 3548XL)
- Mid-Layer (Cisco 3550T)
- Access Layer (Cisco 3550T)

Order Entry

- Distribution Layer (Cisco 3548XL)
- Access Layer (Cisco 3548XL)

Trace Length Dependencies on the Switch

- Trace length refers to the physical distance that a signal travels on the printed circuit board inside the switch
- Different port locations result in different signal path lengths and therefore different latencies



Market Data

Multicast Sources

3548XL

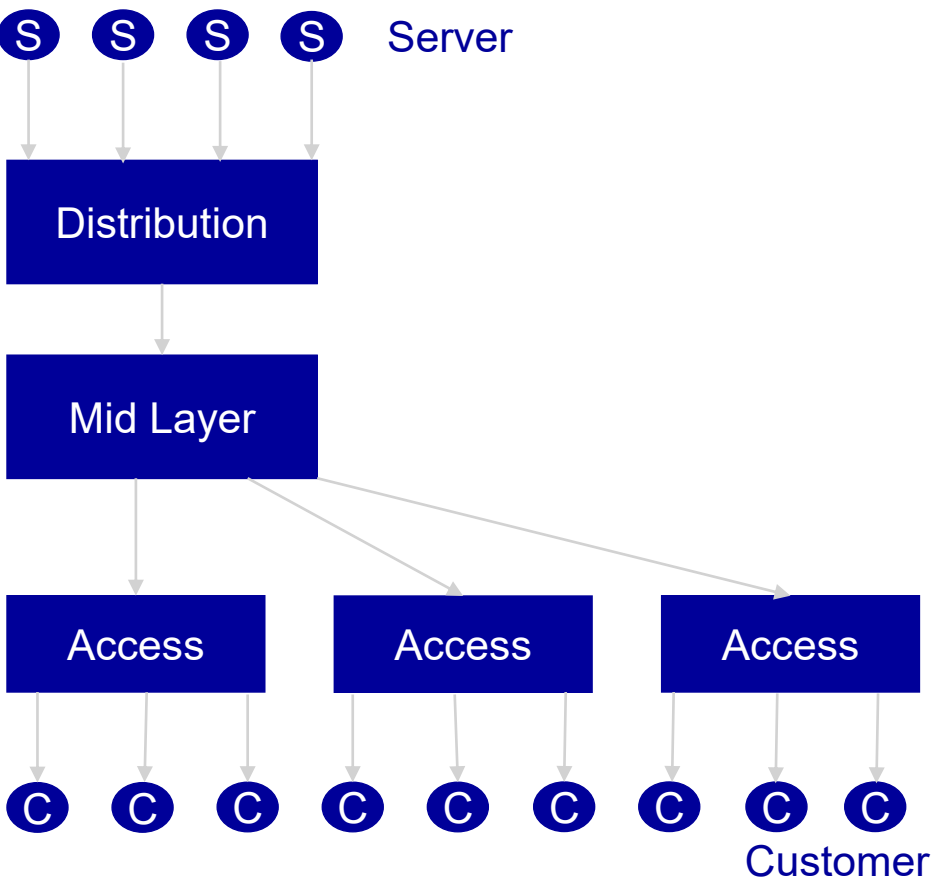
3550T outgoing
equalization-delay

Same Cable length

3550T outgoing
equalization-delay

Cable-Normalization

Customer



Order Entry – Distribution Layer to Access Layer

- A-side optimization implemented on 01 August
- B-side optimization implemented on 15 August

Gateway

3548XL

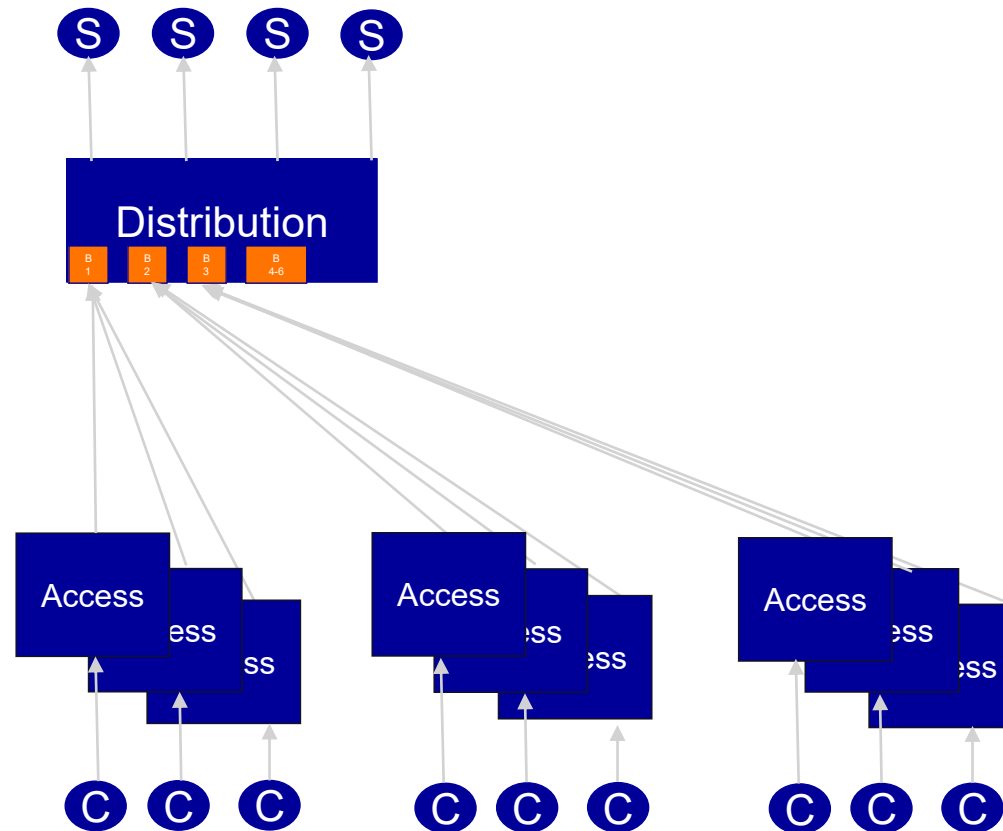
Distribute the AL ports
evenly across blocks

Same cable length +
Trace length

3548XL

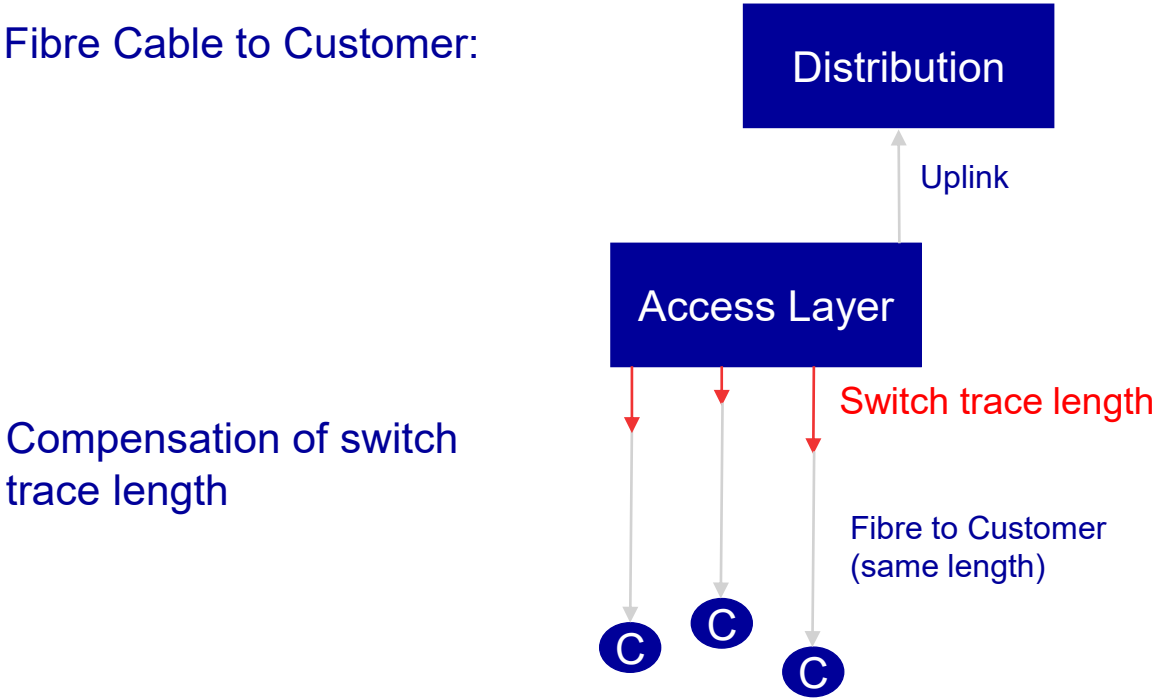
Fibre to Customer

Customer



Order Entry Access-Layer Trace Length

Planned Trace Length Compensation



Data Center Move: High-Level Project Timeline & Technical Approach

Data Center Move

Deutsche Börse is planning the move of its Data Center and Co-location infrastructure to a new facility in the Frankfurt area.

Why are we moving?

- **Capacity & Growth**
 - Support future customer and business growth beyond the capacity limitations of the current environment
 - Provide the space, power capacity and flexibility required for future trading-system expansion
 - Establish a scalable foundation for the future evolution of Deutsche Börse's co-location services
- **Reliability & Compliance**
 - Enhance reliability and support long-term service stability for customers
 - Support compliance with evolving resilience, security and regulatory requirements

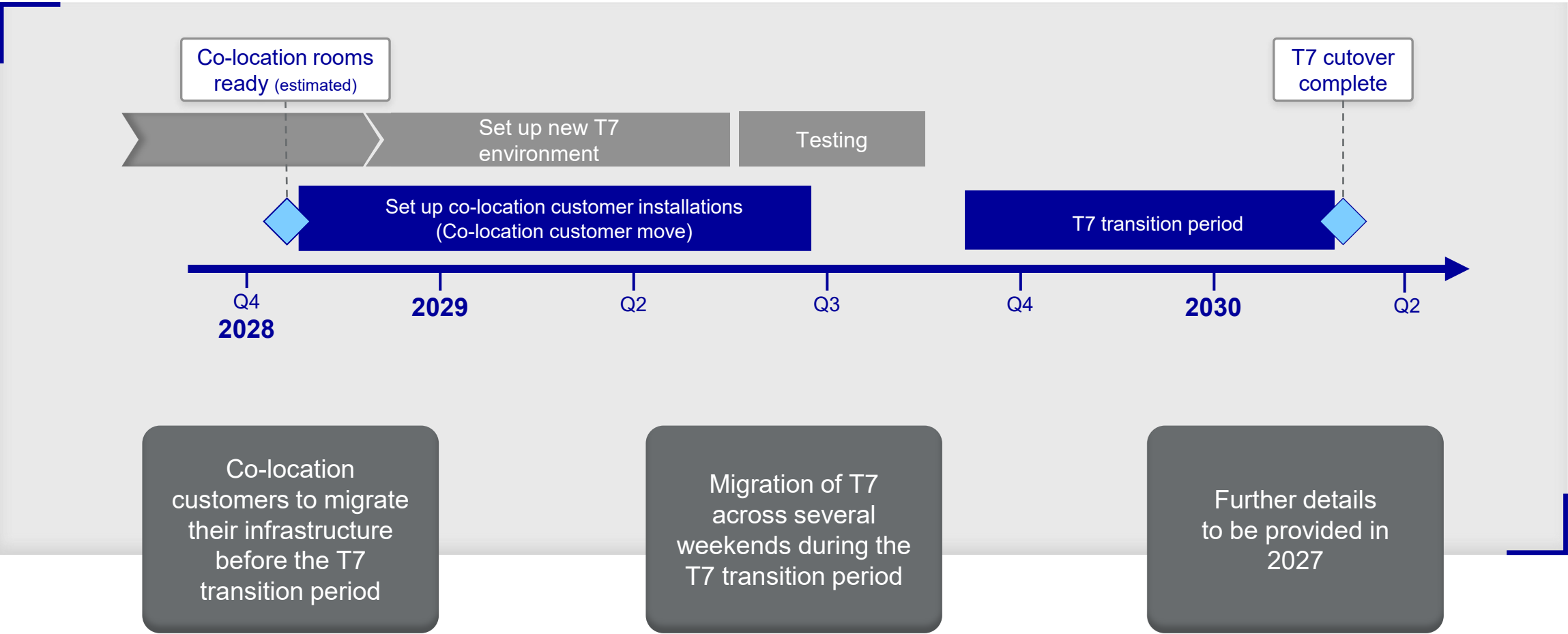
What remains unchanged?

- Existing connectivity and connection offerings within the co-location environment remain unchanged
- Deutsche Börse continues to own and operate its IT infrastructure

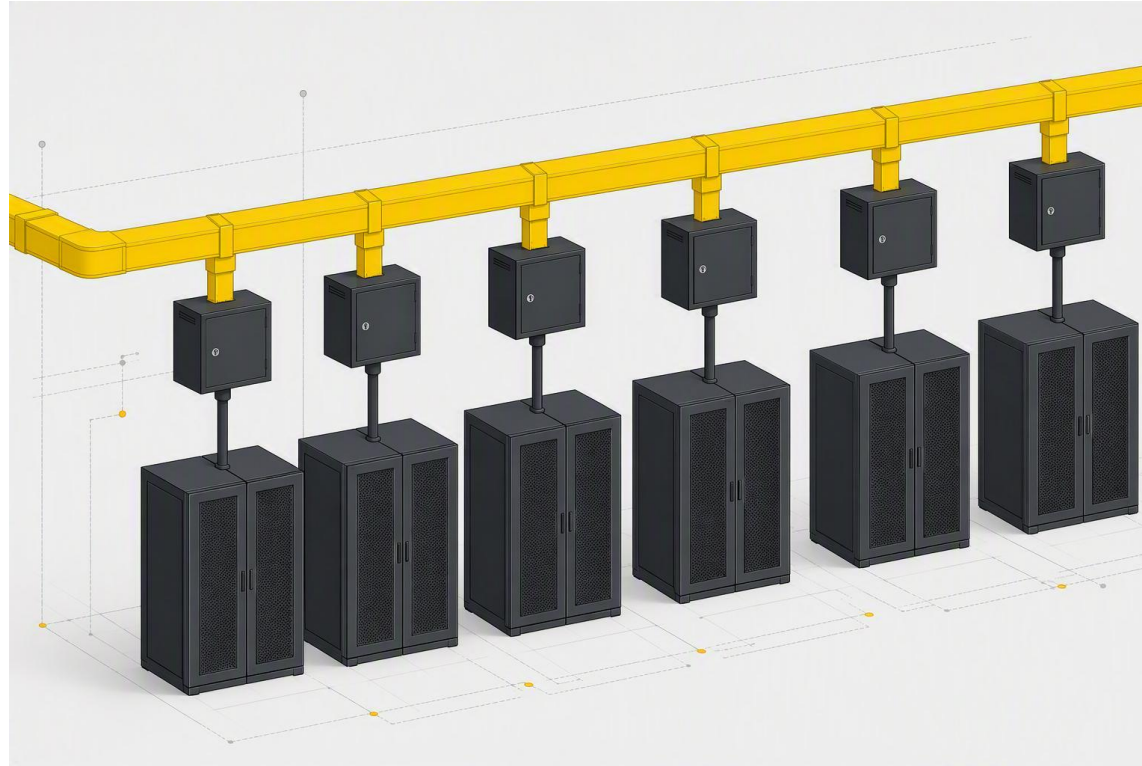
Customer Transition Support

- Deutsche Börse is committed to supporting customers throughout the transition to the new Data Center. Together with the future infrastructure partner, we are currently evaluating services and support measures to facilitate customer migration and ease the transition process.

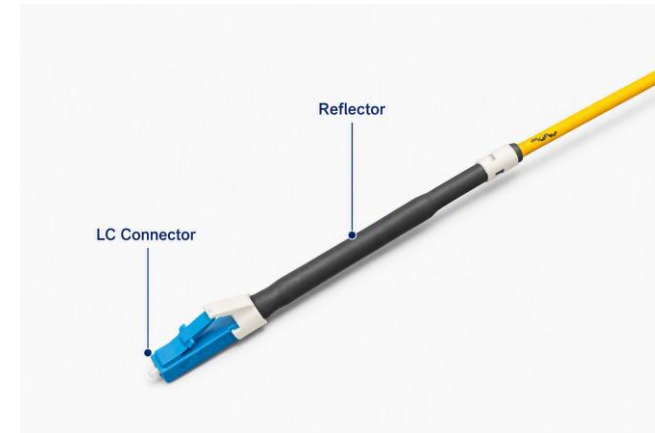
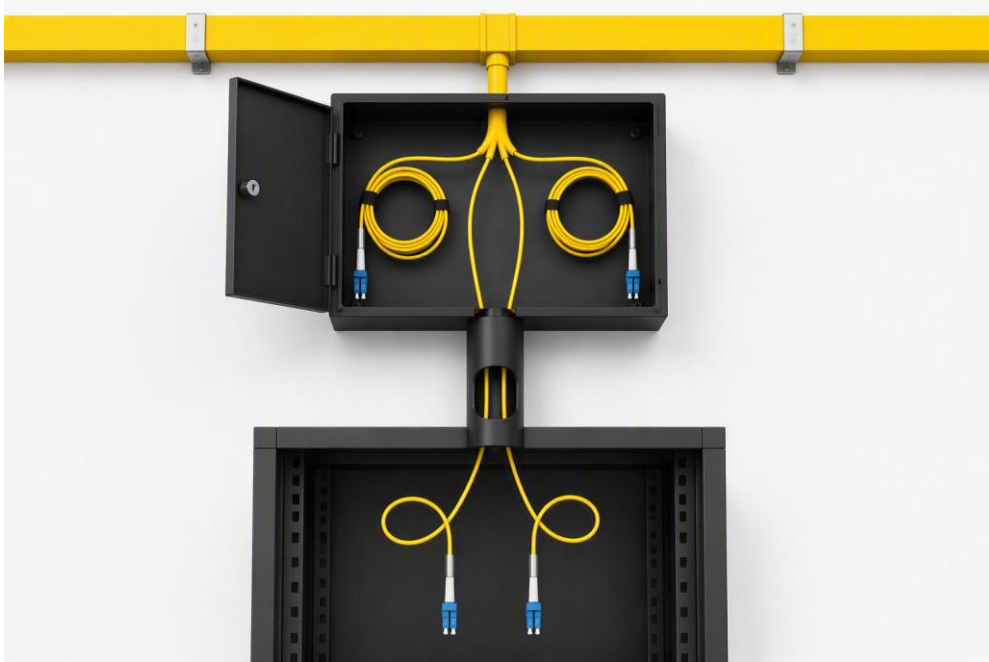
High-Level Project Timeline



Technical Approach – Customer Rack Overview



Technical Approach – Overhead Box Overview



Thank you!

Questions & Discussion

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