

Open Day – Deutsche Börse IT conference 2011

Standard interface protocols supported by Deutsche Börse Group

Hanno Klein

Eschborn, 5 October 2011



Agenda

- n Background on standards
- n Standard interface protocols used for trading and clearing
- n Deutsche Börse trading and clearing interface landscape

Background on standards

What is a standard?


- n convention to do things in a certain manner (products and services)
- n voluntary (e.g. USB) vs. mandatory (e.g. local currency)

Benefits

- n cost reduction for the consumer (e.g. financial services industry)
- n simplify usage

Drawbacks

- n external dependencies for products and services offered
- n competing standards (e.g. VHS vs. Betamax)
- n versions of standards (backward compatibility)



Standardisation of interface protocols for financial services related to trading and clearing is subject to the same issues but has significantly improved over recent years.

Oops, bad example for a standard ...



Is this the answer?



Let's try again ...



not bad, but ...



not bad, but ...







and the winner is ...





































Standard interface protocols for trading and clearing at Deutsche Börse Group

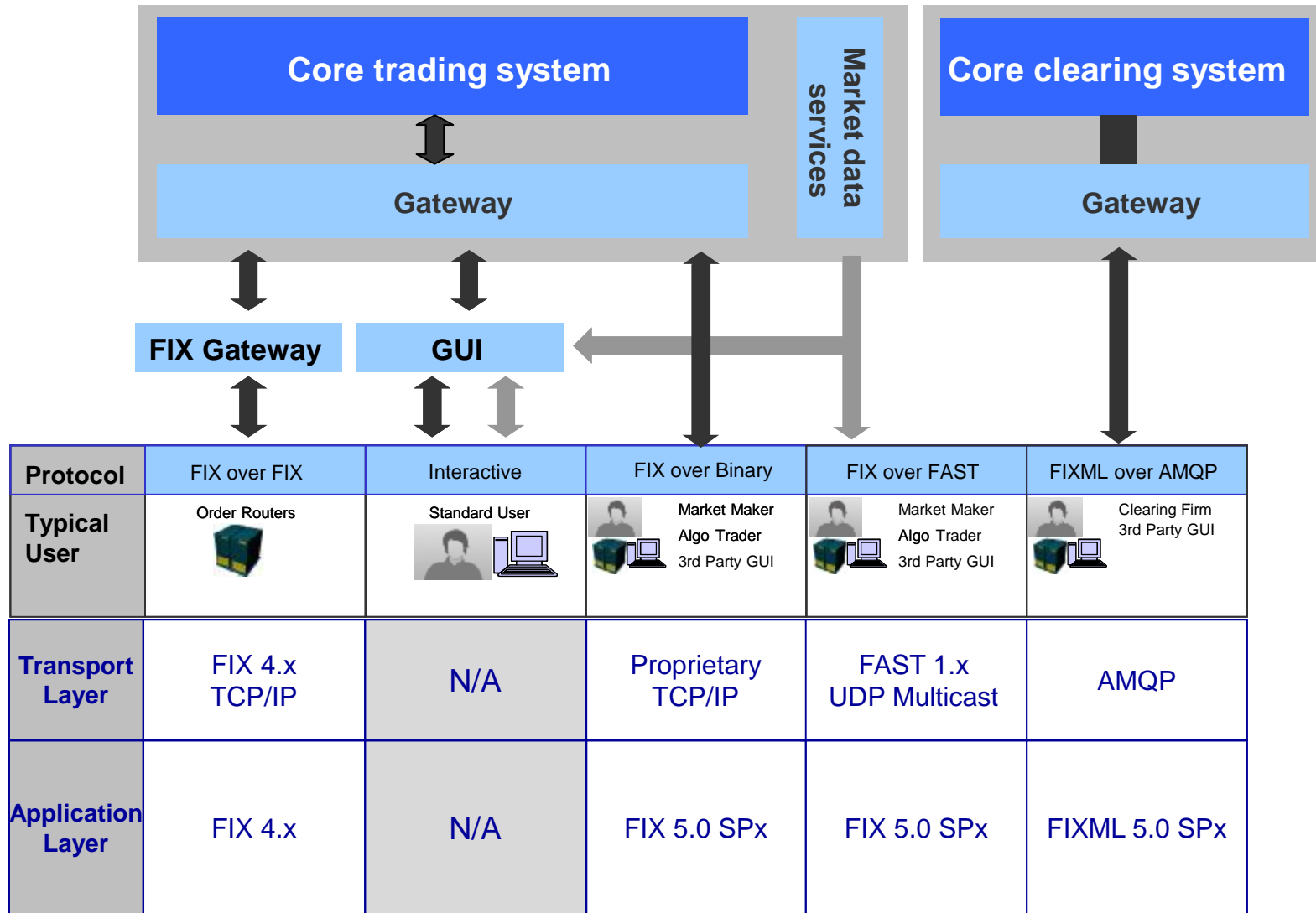
- n SWIFT (Society for Worldwide Interbank Financial Telecommunication)
- n FIX Protocol (Financial Information eXchange Protocol)
- n FIXML (FIX Markup Language)
- n FAST (FIX Adapted for STreaming)
- n FpML (Financial products Markup Language)
- n AMQP (Advanced Message Queuing Protocol)
- n TCP (Transmission Control Protocol)
- n UDP (User Datagram Protocol)

Big picture – investment roadmap

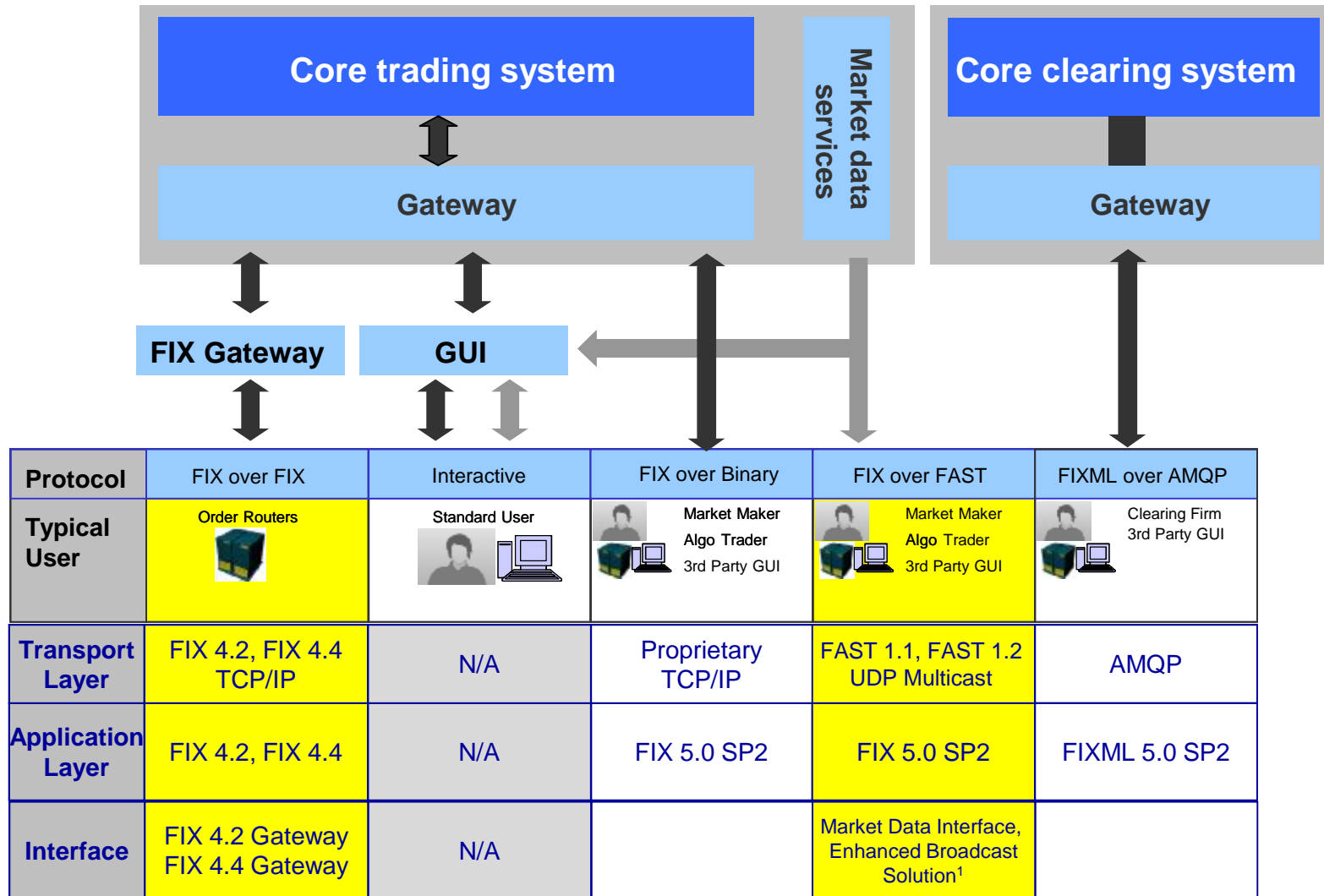
	FIX		ISO (1)
	FpML		XBRL

	Function	Cash Equities & Fixed Income	Forex ⁽²⁾	Listed Derivatives	OTC Derivatives ⁽²⁾	Funds
Issuer	Pre-investment decision		N/A		N/A	
Front Office	Pre-Trade					
	Trade					
Middle Office	Post-Trade	 	 	 		
	Clearing / Pre-Settlement			 		
Back Office	Asset Servicing	 	N/A			 
	Collateral Management	 	N/A	 	 	N/A
	Settlement					
	Pricing / Risk / Reporting	 	 	 	 	 
Investor Supervision	Regulatory Reporting	 	 	 		
Issuer Supervision	Regulatory Reporting		N/A		N/A	

Interface architecture framework

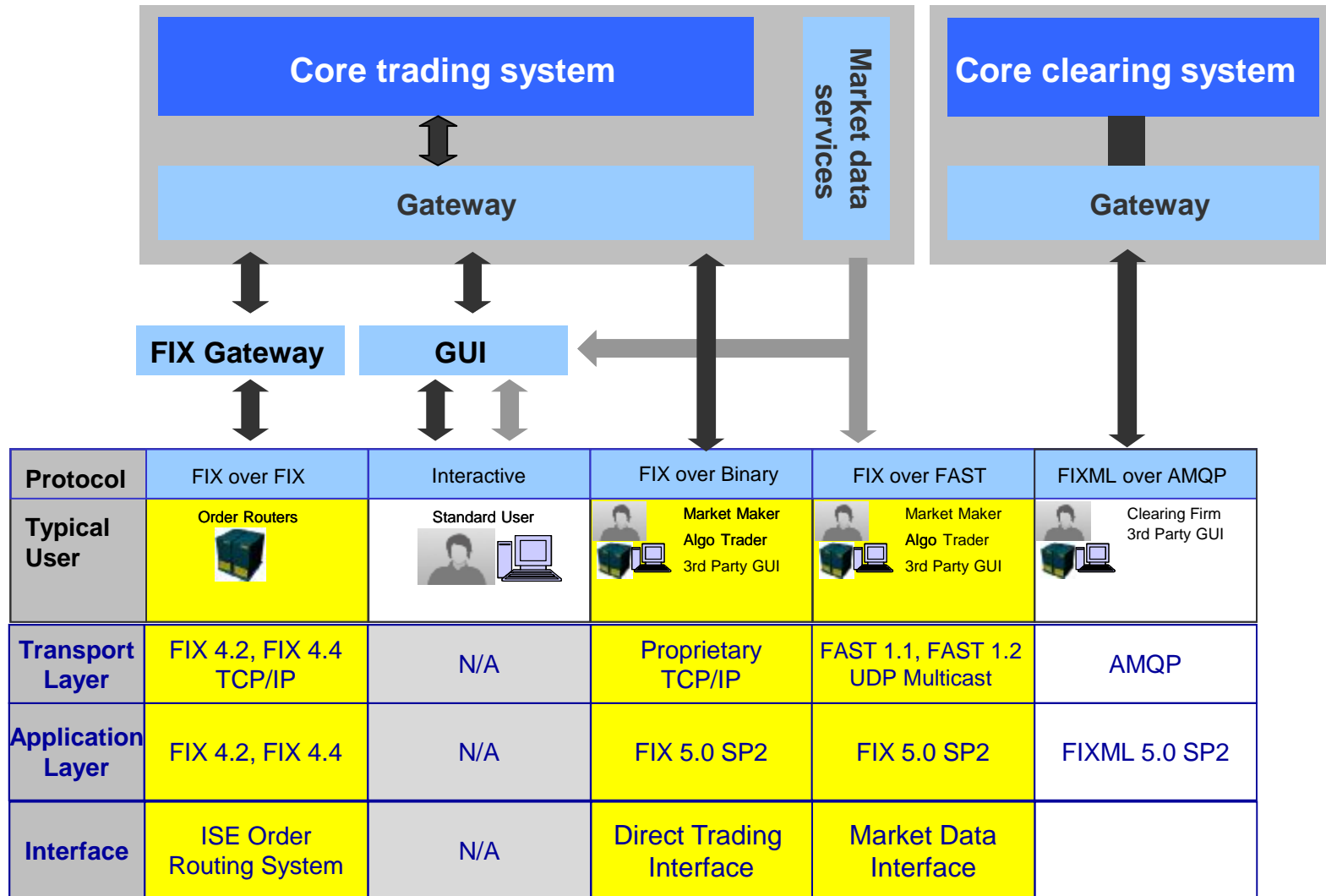


Xetra[®] and Eurex[®] trading interfaces and standards



¹Enhanced Broadcast Solution still has a proprietary application layer

ISE (Optimise) trading interfaces and standards



Deutsche Börse Group standard trading interfaces

Xetra® and Eurex® trading

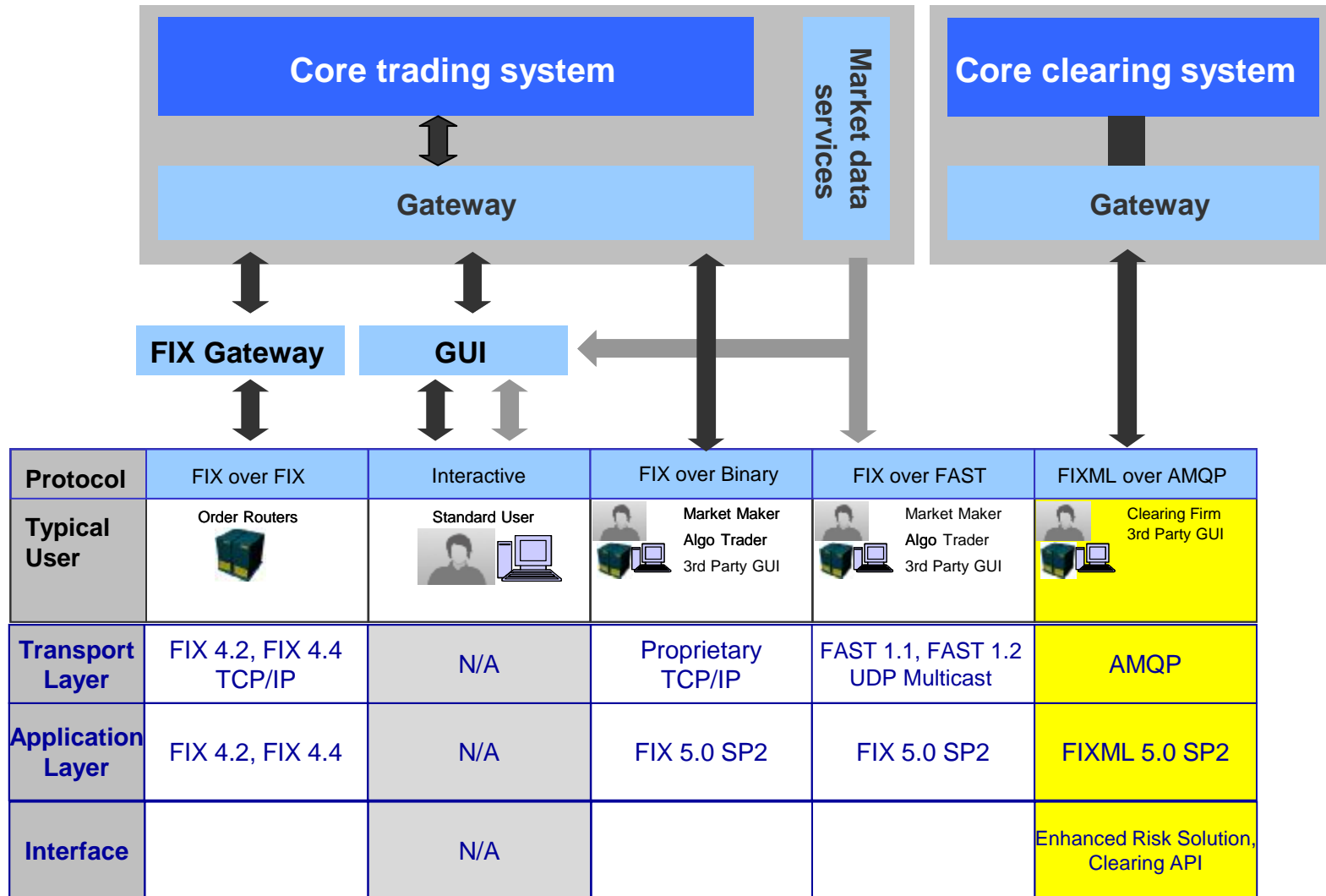
- n FIX Gateway¹⁾ provides complete order routing functionality
- n FIX Gateway for Eurex also provides support for multi-leg instruments
- n Market Data Interface¹⁾ provides netted orderbook data, trades and state changes
- n Enhanced Broadcast Solution provides reference data and real-time orderbook data, trades and state changes

ISE – Optimise

- n ISE Order Routing System (IORS) provides complete order routing functionality for single and multi-leg instruments as well as cross orders
- n Direct Trading Interface provides complete order, quote (market-making functionality) management as well as basic trade management
- n Market Data Interface provides reference data and real-time orderbook data and state changes

¹⁾ To be launched with Xetra Release 12.0 and Eurex Release 14.0

Eurex Clearing interfaces and standards



Deutsche Börse Group standard clearing interfaces

Eurex Clearing

- n Enhanced Risk Solution
 - n margin requirement reports
 - n margin parameter utilisation reports
 - n detailed position reports
 - n risk limit definitions
 - n risk limit reports

- n Clearing API¹⁾
 - n Trade confirmations, adjustments and reversals
 - n Give-up / take-up
 - n OTC block trade entry
 - n Flex trade entry

¹⁾ To be launched with Eurex Release 14.0

Contact

Hanno Klein

Deutsche Börse AG
Mergenthalerallee 61
65760 Eschborn
Germany

Phone +49-(0) 69-2 11-1 80 46
Fax +49-(0) 69-2 11-6-1 80 46
E-mail Hanno.Klein@deutsche-boerse.com

Thank you for your attention!

