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## ACI Diploma

### ORGANISATION SHEET

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#### Objective

The ACI Diploma builds on the ACI Dealing Certificate and the ACI Operations Certificate and is designed to ensure that candidates acquire a superior theoretical and practical knowledge of the foreign exchange and money markets, their related instruments, and the linkages that exist between those markets and the practice of risk management.

Candidates are expected to have acquired a solid grounding in the core subject areas and have the requisite skills in financial mathematics prior to matriculating for the Diploma.

#### Methodology

The course is a combination of self-study and face-to-face learning. Two months before the start of the course the students will receive the course material and a study guide. The students are required to follow the instructions in this guide to make sure that they are familiar with the basic principles that will be discussed during the course. During the course, all topics will be discussed in more detail.

#### Target group

Front-office staff of treasury / financial markets divisions of banks and other financial institutions.

To be eligible for the ACI Diploma, **candidates must have passed either the ACI Dealing Certificate exam or the Operations Certificate + Model Code exam.**

#### Language

English

#### Participants

Maximum 15 participants selected among candidates from the following invited countries: Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Cape Verde, China, Croatia, Czech Republic, Egypt, El Salvador, Estonia, Georgia, Hungary, Kazakhstan, Kosovo, Latvia, Lebanon, Lithuania, Macedonia, Moldova, Mongolia, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Tunisia, Turkey and Ukraine, and countries from the West African Economic and Monetary Union.

#### Expert

Lex van der Wielen is a Dutch trainer who has worked in the dealing room with ABN AMRO, ING and the Dutch State Treasury Agency. He has a large experience in training and has written a number of test books on Treasury, Derivatives and Corporate Finance.

#### Dates

From Friday 6 to Friday 13 November 2015

*Arrival date: Thursday 5 November 2015*

*Departure date: Saturday 14 November 2015*



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### CONTENT

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#### **Day 1: Interest Calculations & Money Market, Fixed Income & Bond Futures**

- Money Market Paper
- Repos and Sell buy backs
- Trading on the Money Market
- Relationship between Spot Rates and Strip Forward Rates
- Review FRAs
- Calculation of the Effective Interest Costs with an FRA
- Synthetic FRAs
- Bond pricing
- Zero-Coupon Rates
- Duration and Basis Point Value

#### **Day 2: Foreign Exchange**

- Time Options
- NDFs
- Valuation of an FX forward position
- Calculation of theoretical swap points
- Liquidity effects with rolling over FX forwards
- Adjustment of the swap points when concluding FX swaps at off-market prices
- FX rates for value today/tomorrow
- Calculations of the effect on the result of rolling over an FX spot position
- Pricing FX swaps out of today/tomorrow
- Calculate break-even rates for forward positions in FX swaps
- Valuation of an FX swap position
- Covered Interest Arbitrage
- Calculate the price of a synthetic loan through an FX swap
- Arbitrage between FX swaps and FRAs
- Composition and price of synthetic FRAs

#### **Day 3: Linear OTC Interest Rate Derivatives**

- Features of STIR Futures
- Basis with STIR Futures
- Hedging Imperfections
- Spread Trading including Butterfly and Condor
- Features of Bond Futures
- Cheapest to deliver
- Arbitrage between Repos and Bond Futures
- Calculation of Interest Amounts of Overnight Index Swaps
- Valuation of an IRS
- Arbitrage Opportunities between FRAs, Money Market Futures and IRS
- Basis swaps
- Cross Currency Interest Rate Swaps
- Hedging a CRS
- Covered Interest Arbitrage with a CRS





#### **Day 4: Options**

- Features of Options
- Conceptual Explanation of the Black-Scholes Model
- Risk Parameters of Options, the Greek Parameter
- Call-Put Parity
- Determination of a Forward Price by using Prices of Options
- Delta hedging
- Trading Strategies: Butterfly, Condor and other Spreads
- Interest Rate Options: Cap, Floor and Swaption
- Review Day 1

#### **Day 5: Risk Management**

- Risk Management Organization
- Types of Credit Risk
- PD, LGD and EAD
- Netting types
- The role of a central counterparty
- Diversified and undiversified VaR
- Calculation of single VaR with the parametric method
- Convert year volatility into month, week or day volatility
- Regulatory capital and economic capital
- Basel Accords
- Calculation of capital requirements for financial instruments
- Review Day 2

#### **Day 6: Review and Trial Exams**

