



**International Capital Market Association**

**Operations Certificate Programme**

**Programme Syllabus**

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# 1. Introduction

The ICMA EE's OCP Certificate is a second-level qualification intended primarily for operations practitioners within their first ten years in the industry and secondly, operations managers who would benefit from a broader knowledge of the various operational functions in the industry.

The Certificate places strong emphasis on developing practical skills based on a thorough understanding of the main operational processes for cash markets securities (equities, bonds and equity-linked).

The programme aims to develop the candidate's ability to follow the life-cycle of a securities transaction from clearing & settlement through to asset servicing. Candidates who gain this qualification are therefore recognised to have achieved a level of professional competency that ensures they can quickly adapt and add value to the business of any financial institution.

As a second-level qualification, the OCP Certificate syllabus requires that the candidate should already have some familiarity with:

- Fundamental Numerical Skills
- Basic Accounting Concepts
- Forms and Types of Securities (equities, bonds, convertibles, ADRs/GDRs, warrants)
- The Securities Marketplace (Participants, Regulators, Custodians, etc.)
- Definitions and features of the main types of Corporate Action event

Regulatory and operational risk issues will form an integral part of the course.

## 2. Structure of the OCP Syllabus

The OCP syllabus is organised around five broad subject areas, all of which are concerned with understanding the processes that govern the following pre- and post-trade topics:

1. The Securities Industry in Context
  - 1.1. Participation in the Securities Industry
  - 1.2. The Role of the Front-Office
  - 1.3. The Role of the Middle-Office
2. Life-Cycle of a Trade
  - 2.1. Static Data Management
  - 2.2. The Settlement Life Cycle
  - 2.3. Cash Funding
  - 2.4. Securities Lending & Borrowing
3. Custody of Assets
  - 3.1. Safe Custody
  - 3.2. The Role of the Custodian
4. Asset Servicing
  - 4.1. Corporate Actions
  - 4.2. Income Collection
5. Compliance and Control
  - 5.1. Compliance Issues in Operations
  - 5.2. Reconciliation (Securities & Cash)

Pre-course reading documents will be made available to candidates on Blackboard, ICMA EE's Online Campus, from 1st November 2009.

We will cover the remaining sessions during the course itself together with an operations simulation exercise and presentations from representatives from Euroclear Bank SA/NV, Brussels and Clearstream Banking, Luxembourg.

Listed below are the specific learning objectives (LOs) for each one of the five subject areas covered in the OCP syllabus. The purpose of these LOs is to:

1. Give the candidate, a clear 'road-map' of the competencies that may be required to demonstrate in the Certificate examination. (Every LO is examinable.)
2. Provide a useful checklist for the tutor faculty in preparing candidates for the OCP examination.

Candidates who are genuinely able to meet the LOs should be confident of passing the examination.

## **1. The Securities Industry in Context**

### **1.1 Participation in the Securities Industry**

This session focuses on the various types of organisation that participate in the securities industry. By the end of this session, the candidate will (a) be able to understand what organisations do, why they do it and their relationships with other organisations (external perspective) and (b) see what happens in their own Front- and Middle-Offices (internal perspective).

By the end of the session, the candidate will be able to:

- To understand the different type of organisation that plays a role in the securities industry:
- Sell-Side Organisations (investment banks, market makers, brokers, broker-dealers)
- Buy-Side Organisations (banks, fund managers, insurance companies, pension funds, charities, hedge funds & corporates)
- Other Intermediaries (stock exchanges, alternative trading systems, clearing houses, settlement agents, central securities depositories (CSDs), international CSDs, paying agents, registrars, transfer agents, global custodians and their sub-custodians, common/specialised depositories, payment banks)
- The main roles and responsibilities of the participants

- The inter-relationships amongst the three types of organisation including the expectations of one organisation from another (e.g. why a fund manager splits a bulk trade executed by a broker into many allocations)
- The differences between Proprietary/Own Account and Agency/Client trades

## **1.2 The Role of the Front Office**

Roles & responsibilities of the Front Office and its working relationships with the Operations Department. The aim is to demystify the different Front Office functions.

By the end of the session, the candidate will be able to:

- Understand the ways the Front Office share the responsibilities e.g. Trading versus Sales
- Outline the main market and credit risks faced by an institutional investor
- Describe the key Front Office processing functions involved with the execution of a transaction (proprietary and client)
- Understand how MiFID has affected the pre trade, trade execution & trade capture environment
- Have an appreciation of the relationship with the Operations Department

## **1.3 The Role of the Middle Office**

The role of the Middle Office and the expectations regarding certain operational processes. It should be stressed that firms may or may not utilise a Middle Office within the organisational structure. By the end of the session, the candidate will be able to:

- Appreciate what tasks have to be performed and which ones may be handled by a Middle Office function
- Understand the main principles of product revaluation
- Describe why banks collect collateral and how this is calculated
- Describe the main principles of accounting for financial products (first covered in the pre-course reading)

## **2. Life-Cycle of a Trade**

### **2.1 Static Data Management**

The focus on this session is to look at the different types of data that are required for efficient settlement & asset servicing of securities together with the management of these data.

By the end of this module, the candidate should be able to:

- Know what data are necessary regarding the following:
- A company's own details
- A trading counterparty
- A company's trading books
- Securities (especially equities and bonds) & securities groups
- Currencies
- Customer details
- Standing Settlement Details
- Know the different sources of data
- Understand the ways data are managed and controlled
- Appreciate the consequences of obtaining and using incorrect data and failing to obtain good, valid data
- Understand that the primary role of data management is to achieve Straight Through Processing (STP). Without STP, the alternative approach is "management-by-exception".

### **2.2 The Settlement Life Cycle**

Several operational activities follow the generation of transactions by the Front Office. Within OCP, there are two phases to this.

#### ***2.2.1 Pre-Settlement***

This first phase starts with trade capture from the Front Office followed by the trade enrichment/validation, calculation of cash amounts and the confirmation/affirmation of trade with

counterparties. We then consider the securities settlement conventions employed by market and product type.

By the end of this module, the candidate will be able to:

- Identify the typical risks associated with incomplete or erroneous transaction details
- Know how trades are captured by firms' internal settlement systems
- Understand the data components that are required in order to successfully enrich each transaction and the use of static data defaults
- Calculate the cash amounts for equities and bond transactions.
- Know the purpose of accruing interest and the various calculation conventions
- Calculate accrued interest using the ICMA Rule 251 and local market conventions
- Identify the risks of creating erroneous information and the ways transactions are validated
- Describe the ways two trading counterparties can agree the transaction details with each other and the different approaches adopted for institutional clients
- Identify the securities settlement conventions by both product type and marketplace

### ***2.2.2 Settlement & Fails Management***

This second phase looks at the transaction reporting requirements of the various regulatory bodies, the transmission of transaction delivery/receipt instructions to the clearing systems and the matching of instructions by these systems. We then analyse how transactions are settled and how transaction failures are managed the settlement conventions employed by market and product type.

By the end of this module, the candidate will be able to:

- Identify what information is required for transaction reporting purposes, to whom it should be reported and the consequences of late reporting
- Know the component parts of a delivery instruction, the media by which instructions are transmitted to the clearing systems and the timing constraints

- Understand the process by which the clearing systems match instructions and the subsequent management by the counterparties of both matched and unmatched instructions
- Analyse a clearing system's unmatched report to determine the appropriate course of action within the relevant timing deadlines
- Differentiate between the different types of settlement (e.g. gross settlement, net settlement) and the impact on operational activities
- Define and understand the meaning of the settlement terms: "Delivery versus Payment", "Free of Payment" and other variations plus the concept of "settlement finality".
- Understand the reasons why transactions fail to settle and the financial implications of these
- Know what action can be taken to resolve failed settlements

(There will be a session summarising this topic plus a case study presented by a representative from Euroclear Bank. It will include the ICSDs' perspective on this topic.)

## 2.3 Cash Funding

One of the key stages in enabling securities purchases to be completed without delay is the identification and execution of the funding of the transactions. This session looks at how operations can predict their funding requirements and the choices available to cover them. We consider the methods & importance of managing the cash funding.

By the end of this module, the candidate will be able to:

- Calculate a funding projection using relevant past, present and future operations activities
- Know what situations generate cash inflows and outflows
- Describe the funding choices (i.e. Do Nothing; (Un)secured Cash Borrowing/Lending, Foreign Exchange and Repo)
- Calculate the interest costs of borrowing and income from lending
- Allocate the funding costs/income across internal trading books & clients' accounts

- Appreciate the timing constraints for payments as dictated by payment deadlines (e.g. those of the organisation's Treasury Department, the correspondent bank and the various types of custodian)
- Understand how the custodians manage collateral
- Know the relationship between a credit line and the collateral required to cover it

## 2.4 Securities Lending & Borrowing

One of the key stages in enabling securities sales to be settled efficiently is the identification of securities availability and the execution of appropriate borrowing transactions. This session looks at how operations can predict their securities requirements and the choices available to cover them. We consider the methods & importance of managing the securities positions.

By the end of this module, the candidate will be able to:

- Understand the principles of securities financing and the choices (securities lending & borrowing and reverse repo)
- Identify the risks associated with securities financing
- Identify the situations in which securities financing is used
- Understand the implications of using custodians automated and 'ad hoc' financing services
- Explain the concept of collateral, why it is required and how to manage it (e.g. substitution, corporate actions, etc.)
- Identify suitable types of collateral
- Calculate the collateral requirements
- Know the importance of marking loans and collateral to market (revaluation) and the processes that accompany this
- Understand the links with other operational units (e.g. settlements, reconciliation, reporting, etc.)

## **3. Custody of Assets**

### **3.1 Safe Custody**

This session focuses on the safe custody-related services and carries-on where the session on “The Role of the Custodian” finished. Safe custody services (for clients’ and/or proprietary positions) can be supplied either in-house or externally (e.g. by using an ICSD).

By the end of this module, the candidate will be able to:

- Identify the basic safe custody services that apply to securities and cash
- Distinguish different types of safe custody movement
- Understand the headline points that are covered in a custody legal agreements
- Appreciate the risks of acting on un-authenticated delivery instructions
- Describe the ways safe custody accounts are maintained by the custodians on behalf of their clients
- Calculate the value of a portfolio of securities holdings in both local currency and a client’s base currency
- Appreciate the responsibilities on the custodians regarding the release of assets and the segregation of clients’ assets from those of the custodian

### **3.2 The Role of the Custodian**

The custodian provides a vital link between the market and the industry infrastructure. This session looks at the different types of custodian and their participation in the operational processes.

By the end of this module, the candidate will be able to:

- Define and understand the roles of the different types of custodian. These include:
  - Central Securities Depositories (CSDs)
  - International CSDs and their depositories

- Local Custodians
- Global Custodians and their sub-custodians
- Know the services provided by the custodians and their participation in the operational processes (NB Safe Custody and Corporate Actions will be covered in greater depth – see separate session)
- Understand the similarities and differences between (a) the NCSDs & the ICSDs and (b) the Global Custodians & the Local Custodians
- Appreciate the risks & rewards associated with the role of the custodian

## 4. Asset Servicing

### 4.1 Corporate Actions

This session deals with the operational aspects of corporate action events. (Candidates should be familiar with the definitions & features of the different types of event. Information is available in the pre-course reading.)

By the end of this module, the candidate will be able to:

- Distinguish between the three categories of event, (i.e. benefits, reorganisations and multifaceted actions) and to know which types of event fall into which category
- Understand the distinction between voluntary and mandatory events together with the operational issues
- Determine which events are either predictable or announced
- Calculate entitlements on events
- Determine who is entitled to participate in the events using key dates such as ex-, cum- and record/book close dates
- Appreciate the importance of deadlines and the consequences for late decisions
- Understand the roles and responsibilities undertaken operationally by the investor/custodian/issuer
- Understand the effect of changes brought about by events on securities holdings and trading activities

- Describe the information flows from issuer to investor and from investor to issuer taking into consideration the issuer's agent(s) and investor's custodian
- Decide the appropriate actions that need to be taken in response to situations as they arise (e.g. investor querying an entitlement, missing a Rights Issue, etc.)

## **4.2 Income Collection**

This session deals with the operational aspects of income collection.

By the end of this module, the candidate will be able to:

- Calculate entitlements on income events
- Understand and calculate the rate fixing for Floating Rate Note instruments (FRNs)
- Determine who is entitled to participate in the events using key dates such as ex-, cum- and record/book close dates
- Understand the roles and responsibilities undertaken operationally by the investor/custodian/issuer
- Describe the information flows from issuer to investor taking into consideration the issuer's agent(s) and investor's custodian
- Decide the appropriate actions that need to be taken in response to situations as they arise (e.g. investor querying a dividend or coupon)
- Understand the basics of taxation on income events and the operational requirements associated with Withholding Tax and local Income Tax

(There will be a session summarising this topic plus a case study presented by a representative from Clearstream Banking. It will include the ICSDs' perspective on this topic.)

## **5. Compliance and Control**

### **5.1 Compliance and Regulatory issues in Operations**

The aim of the session is to make participants aware of their own and their firm's responsibilities regarding compliance and regulation, in addition to identifying potential compliance and regulatory issues within Operations.

By the end of the session, the candidate will be able to:

- Understand the compliance and regulatory issues that can arise in Operations
- Identify key steps in identifying and prioritising those issues
- Outline the main regulations that may affect their firms
- Describe the inter-relationship between their individual actions, and the reputation of their firm
- Discuss the generic regulatory issues that need to be managed in an Operations environment

### **5.2 Reconciliation**

Reconciliation is the process by which organisations prove that its books and records are (a) accurate and (b) agree with the records held by external entities such as banks, counterparties and custodians. Organisations with poor reconciliation procedures find it very difficult to trade and to perform all the operational processes to any degree of effectiveness.

Reconciliation is about the comparison of two sets of records; internal ledger records and external statements and cover both cash and, separately, securities.

By the end of this module, the candidate will be able to:

- Explain the terminology used in reconciliations
- Understand the reconciliation methodology
- Appreciate the benefits of efficient reconciliation

- Understand the need for an independent reconciliation function
- Describe the regulatory requirements
- Analyse the external issues affecting reconciliation
- Perform a cash & securities reconciliation
- Analyse the quality of an organisation's operational performance from issues that originate from the reconciliation process

### **3. Examination**

All candidates sit a three-hour examination, which covers the material presented during the various lecture sessions and contained in the pre-course material. The examination consists of 75 multiple-choice questions. The pass mark is 45 correct answers out of 75 questions (i.e. 60%). A distinction is awarded to candidates who score 68 correct answers or more. All successful candidates will receive the ICMA Operations Certificate.

### **4. Pre-Course Materials**

Once course registration and payment of the course fees have been successfully completed, candidates will receive the following items by post:

- The course book - Simmons, Michael (2002), "Securities Operations: A Guide to Trade and Position Management", Wiley Finance. This book is examinable and we recommend candidates should familiarise themselves with the contents.
- A financial calculator, the Texas Instruments, BAI Plus model (this is the only calculator permitted for use in the examination). Candidates should be familiar with the "Format", "Store", "Recall", "Date" and "Bond" functions.
- Hard copy instructions for accessing Blackboard, ICMA EE's online learning management system. (Candidates will additionally be sent these instructions by e-mail.)