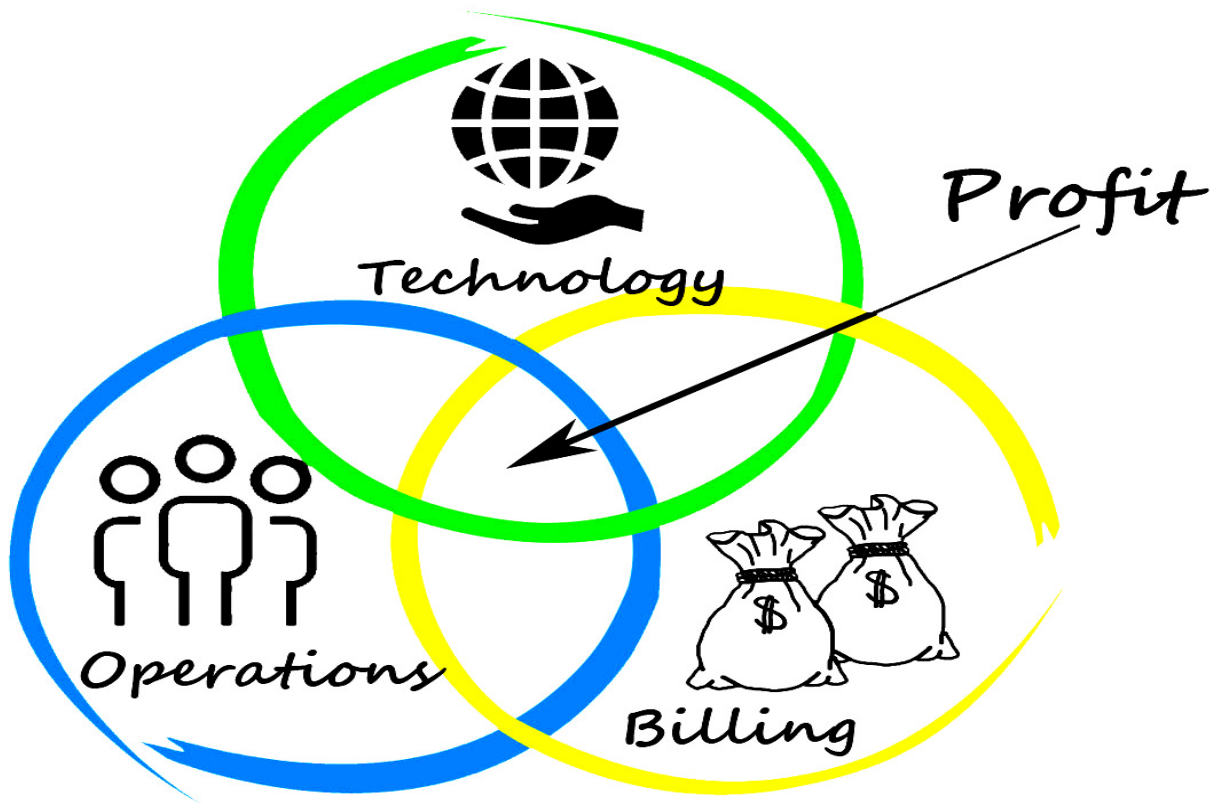


# FINANCE, AUDIT & REVENUE ASSURANCE FOR THE NEXTGEN TELECOM



**GRAPA's Regional Certification Event**

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## FINANCE, AUDIT & REVENUE ASSURANCE MASTER CLASS

### OVERVIEW

This class is a five-day certification workshop designed to provide Revenue Assurance, Audit, Billing, accounting, business, financial controllers and Finance professionals with a comprehensive introduction to the latest trends and best practice in the application of revenue assurance, security, fraud, and risk containment practices in next generation voice, data, cable, fiber, and other Telecoms.

This course includes the new converged GRC (Governance, Risk and Compliance) approach to the containment of risk and the maximization of profit as well as optimizes social responsibility and contribution to the economic welfare of the constituency.

This approach combines the best of breed from the disciplines of revenue assurance, risk management, business continuity, and econometrics to give the professional a more comprehensive understanding of the full consequences of activities, and the best ways to address them in a number of critical operational and technical domains. We will train students in a systematic and comprehensive method for analysing, diagnosing, and containing risks to revenues and profits and reporting measurements via a standardized approach.

Students will be familiarized with financial assurance disciplines including revenue and fraud controls assessment methodology, controls augmentation discipline, and the controls monitoring, reporting, and rapid response framework as applied to a broad range of telecoms technologies, lines of business, revenue streams and systems.

### CERTIFICATION

Candidates with verified work experience with an Information, communications, and technology business, in an I/T, operations, finance, pricing, or financial accounting related area, who pass all exams and attend 40 hours of class will be awarded "Certified Practitioner of Financial Assurance."

### WHO SHOULD ATTEND?

Anyone interested in learning the latest industry standards-based disciplines and the concomitant approach to application of financial risk assessment and profit maximization disciplines to the real-world environment should attend.

Interested attendees have included:

- Members of the financial and managerial accounting teams including those responsible for budgeting, posting, revenue recognition, revenue reporting, pricing analysis, regulatory compliance, and anyone involved in accounting for and assurance of revenues
- Internal auditors looking for insight into the latest innovations in the practice of telecoms audit and the GRAPA standard, compliance-based approach to performing internal audit functions
- Experienced I/T, operations, billing, product development, business development, or other finance /accounting professionals interested in learning how to more effectively have positive impact on the profitability of the company
- Revenue assurance managers and senior analysts who want to deepen their knowledge and appreciation of revenue assurance disciplines to address fundamental financial profitability and risk controls issues
- External auditors hoping to gain a comprehensive and detail based perspective for implementing industry standard controls, assessing risks, and maximizing profits within the complex world of telecoms finance
- Operational managers, finance and accounting personnel looking for better compliance and control over the organization's financial condition



### The "Full Assurance" Revolution ...

#### An Introduction to the Converged xAssurance disciplines for the Information, Communications, and Technology Organization

The Telecoms Industry has always had an interesting relationship with risk. For the most part, Telecoms operators represent some of the boldest and most successful innovators and **risk takers** in the world. But being good at taking risks does not mean that you can afford to function without managing the risk.

The Telecoms industry has created an entire specialized discipline focused on this delicately balanced risk vs innovation posture. Referred to generically under a number of different "Risk Containment Disciplines" (Revenue Assurance, Fraud Assurance, Business Assurance and others), the overall application of these disciplines remains fluid, adaptive, but consistently applied.

This course provides the student with a collection of the latest and best practices across all of these disciplines.

*You can't specialize in the deployment of DISRUPTIVE TECHNOLOGIES and not have to learn how to deal with the ensuing disruptions.*

# REVENUE ASSURANCE FOR THE NEW AGE TELECOM

## The Emerging Role of Revenue Assurance in the New Age Digital Ecosystem

Information, communications and technology companies are reshaping the world as we know it today. More than simple deliverers of technology, carriers are responsible for reshaping the nature of communications, commerce and social interaction as we know it.

But the breakneck pace of disruptive innovation that Telecom providers generate does not come without a price. The very foundational underpinning of financial assurance as we have known it in the industry is suddenly made obsolete and irrelevant as new technologies, new business models and new understanding about how the operator converts capex and capacity into revenue and profit are invented every day.

### Redefining the discipline - The GRAPA "New Age Assurance" Initiative

Since 2007 GRAPA has been instrumental in the continuous improvement and definition of the roles of the internal auditors, financial controls, revenue accounting, revenue assurance, security and fraud management professionals in the Telecoms Industry. In 2015 GRAPA initiated a number of committees focused on the creation of a new set of job descriptions, roles, responsibilities, departmental charters and standard controls templates to better reflect the nature of the Telecoms industry today, and the needs of the new generation of Telecom providers.

### Build Profit Champions in Your Organization

One of the biggest benefits of GRAPA programs is the way our training provides operations, I/T, finance and risk professionals with new insights and approaches to utilize when they face the often daunting complexities of new technologies and radical business models. Our goal is to turn your teams into "Champions of Profit" for your organization.

## Learn from others - case studies and best practices from other carriers

The GRAPA Full Assurance Certification Event is an intensive 5-day exploration of the key ingredients, the "operational DNA" that make Telecoms providers like yours work. After getting a better understanding of the "inner workings" of the operation, participants will be challenged to apply this knowledge to their own operational and commercial objectives.

Ultimately, the miracle of the Telecoms provider is how well all of the pieces work together, and these workshops will help everyone, not only to understand the underlying details that make it happen, but give everyone a better understanding of how to work more synergistically with others and to take better how things work, but how other disciplinesery "collective responsibility" for the profitability and success of the organization overall.

## Get involved in redefining your own role, and the role of your department

GRAPA certification events provide the professional with a unique opportunity to learn, explore, consider, collaborate and take part in the process of "creating" a new professional and organizational reality.

Those who attend our events return to work with measurably greater understanding, tools, and skills to face the challenges of their environment. In fact, we define the success of our training by the increased value our alumni bring to their teams and organizations.

We recognize that no two organizations are exactly alike and that the differences in technical environment, size, geography, and products/services offered can lead to tremendous differences in learning objectives. The program detailed below was developed specifically with your organization's training goals, environment characteristics, and key issues in mind.



## REVENUE ASSURANCE CERTIFICATION AT-A-GLANCE

Session	Day 1	Day 2	Day 3	Day 4	Day 5
<b>Morning Unit (4 hours)</b>	The Revenue Assurance Revolution (An Introduction to New Age Assurance)	Voice Network basics for the finance professional	Billing Assurance: Post Paid, Pre Paid, Data	Interconnect Operations Lifecycles (Business, Technical, Operational)	Principles of Accounting, Profitability and Margin Controls
<b>Afternoon Unit (4 hours)</b>	Mitigating risk while encouraging innovation: The "soft" controls approach to risk management	Monetization of the Internet and Commercial Controls for the Internet Society	Next Generation Wireless Assurance: 3G/4G, LTE, WiFi, HetNets	Roaming Operations Lifecycles (Signaling, Postpaid, CAMEL, USSD)	Margin, Market and New Product Assurance

# DAY 1 - THE ASSURANCE IMPERATIVE : Important Then - Critical Now !

## The New Age Assurance Revolution

Why is assurance *crucial* to the profitability and success of the modern Information, Communications, and Technology company

Learn how the convergence of assurance disciplines is helping operational managers and finance executives to get back in control of profit and risk containment decisions. In this unit, we offer an approach to the complete assurance of products and services that can be conducted in a logical, rational manner. See how, in a world where management decision making seems to have spun out of control against the backdrop of competitive pressure, regulatory scrutiny, and investor demands for higher risk taking managers are delivering greater returns with less planning and fewer controls.

In this unit, we provide the students with an overview of the ways in which the new generation of xAssurance professionals and the new generation of disciplines, tools, and approaches are revolutionizing how telecoms finance professionals do their jobs and increase their effectiveness.

### Unit Objectives:

#### STANDARD PRACTICE

I want to understand why assurance is critical to the success of my company AND to MY DEPARTMENT

#### CONTROL PROFIT, CONTAIN RISK

I want to help make informed decisions regarding profit and risk throughout my area of responsibility

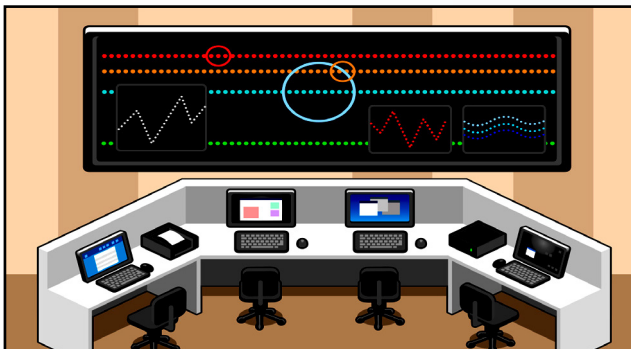


## Managing Risk Without Hampering Innovation

A Soft-Controls Based Approach to Profit Maximization & Risk Management

Over the past several years, the GRAPA organization has been working with finance and risk professionals to develop a controls framework that successfully adapts traditional IFRS/GAAP and other financial disciplines to the hectic and unconventional world of Information, Communications and Technology.

This session overviews the main components of this discipline. It includes the integrated controls hierarchy (technology, line of business, revenue stream, and domain), an inventory of supporting checklists, and the three key methodologies: Standard-Based Controls Audit Methodology (assessment of risk across technologies and business models), Industry Standard Controls Augmentation Approach (cost justification for controls deployment), and a Controls Assignment, Monitoring, Reporting, and Rapid Response Discipline (KPIs for Fraud, RA and Risk professionals).



### Unit Objectives:

#### SPECIFIC SOFT CONTROLS FRAMEWORK

I want a comprehensive control structure that monitors the traditional and unconventional financial risks across my organization in alignment with IFRS and GAAP standards

#### INDUSTRY STANDARD AUDIT CHECKLISTS

I want to utilize the industry standard methods for risk assessment, controls implementation, and controls cost justification

## DAY 2: ASSURANCE FROM THE BOTTOM UP : PRINCIPLES OF NETWORK ASSURANCE

### Voice Network Basics for the Business Professional *Psst...You cannot assure a Telecom without this information*

#### *Briefing 1: Voice & Circuit Network Basics for the Assurance Professional*

Overview of the OSS /Network environment specifically focuses on the information needs of assurance, finance and fraud professionals. In this briefing we will provide attendees with the controls and standards based framework for understanding WHAT NEEDS TO BE ASSURED in the network environment and what can be ignored.

Key leakage and fraud risk profiles for GSM/CDMA wireless networks , as well as traditional wired voice networks (POTS/PSTN) This briefing will focus on the operational, organization and financial metrics most typically required to do a credible job of assurance in the voice network space. This briefing will emphasize, a clear understanding about HOW voice transaction records are generated, and how to verify that no revenue is being lost due to engineering/ I/T negligence, or fraud intent.

Standard controls for voice switches, networks and transactions. Principles for the securing of networks against exposures in the physical and logical architectures reinforcing authentication, authorization and accounting (AAA).



### Monetization of the Internet

#### Profit and Protection of Internet Services

##### *Making data an assure-able ecosystem*

A comprehensive look at the principles and protocols for the financial management and establishment of controls for the data, internet and content ecosystems. The new converged world of information, communication and technology products and services requires a new approach to the tracking and accounting that typifies traditional financial assurance. Billing and assuring policies, bandwidth, service levels, quality of services and best effort bundles is completely different than CDR and volume based billing, and the challenges of assurance are much more complex.



This briefing will provide participants with guidelines for the application of appropriate controls to wired and wireless internet ecosystems including Fiber, Cable, DSL, Wifi, GPRS, LTE, EVDO, Wimax and other major technologies. The underlying principles of AAA as applied to these diverse business models will be explained under the GRAPA standards and Domain Access Methodology framework.

Participants will be familiarized with the concept of “structural” versus “dynamically enforced” policies, and understand the many challenges of crafting services that are not only DELIVERABLE, but ASSURABLE - in terms of quality, bandwidth and expectancy.

## DAY 3: LATEST INNOVATIONS - GREATEST CHALLENGES

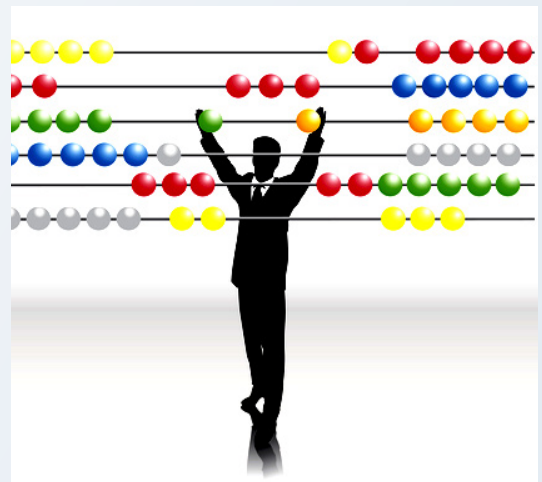
### Billing for Voice (Postpaid, Prepaid, Roaming & Interconnect)

#### **Industry Standard Practices in Billing - How do you Measure Up?**

An operational view of the billing and charging of voice customers. We focus on the two main billing and credit models: postpaid and prepaid - and detail the standard operational models for running both environments. Students will walk away with a thorough understanding of the systems, processes and operational procedures that have become the industry standard method for billing, accounting and charging in telecoms for on-net voice, roaming and interconnect (Domestic and International) .

#### Unit Objectives:

- Protect against the most critical Postpaid Billing Risks
- Understand where the revenue risks are in the postpaid billing environment and implement industry standard controls across this environment
- Utilize pre-paid billing controls and better manage financial risks and profit across the prepaid billing environment
- Develop a standard practice for billing operations and ensure greater financial accuracy and integrity in the financial data and billing procedures
- Master critical billing issues and better perform rate, rating, and credit assurance



### Billing for Policy(PCRF), Rates, and Data

#### **Assurance of 3G, 4G, LTE, VoIP, VoLTE, PCRF, DPI, Radius, Diameter**

The communications industry is driven by innovation and the continuous implementation of newer and more challenging technologies. In this unit, we review several of the major next generation technologies and the key to assuring the revenues they generate. The fundamental organization and commercial controls issue and vulnerabilities associated with GPRS and EVDO, LTE, WiFi, HetNets and other next generation wireless platforms.



#### Unit Objectives:

- Differentiate between the various methods that VoIP (Carrier-Grade, SIP, Consumer, Skype, etc) is delivering to voice networks
- Assure and be able to protect WiFi, GSM /GRPS, EVDO, and WiMax architectures, settlement, and billing techniques
- Improve your approach to wireless migration assurance and better protect your organization's billing, infrastructure, and security as it migrates from 2G to 3G-LTE-4G-PCRF-DPI-Diameter
- Understand the fundamental architectures, business models, AAA, security, and billing protocols for 3G, 4G, LTE, WiFi, WiMax and other wireless technologies

## DAY 4: ROAMING AND INTER CONNECT

### Interconnect Operations Lifecycles (Business, Technical, Operational)

#### *How Does Interconnect Work and is it Really That Complicated?*

Understand the operational, technical and fundamental business model of interconnect. We will specifically focus on the nature of the business, how the environment works, key systems and processes, and the industry standard responsibilities of operational teams. We also spend significant time reviewing how to work with interconnect partners, interconnect agreements and settlement, technical details for trunking, signaling and CDR generation, as well as rate change protocols.

#### Unit Objectives:

- Understand how the interconnect environment works, where the biggest risks to revenue occur, and the industry standard financial, audit, and revenue assurance controls to protect interconnect revenues
- Better assure interconnect partnership agreements, and make sure your organization is not losing money in these relationship
- Implement finance and audit controls throughout the interconnect revenue stream to ensure integrity in the revenue management process



### Roaming Operations Lifecycles (Signaling, Postpaid, CAMEL, USSD)

#### *Understand the Most Complicated Line of Business in Telecoms*

This unit details the operational standard practices for the various roaming environments. In particular, it covers the use of roaming signaling for authentication and authorization, the postpaid business model, and various means of credit management (HUR and NRTDE). Both of the two separate models for prepaid billing - CAMEL and USSD will be discussed, and we will review the life-cycles associated with each of those operational practice areas.



#### Unit Objectives:

- Learn how the roaming environment works and where the biggest risks to revenue occur
- Ensure that your alarms for roaming credit management are calibrated appropriately and that your organization is not losing money from overextending roaming credit to customers
- Get better control over your organization's relationship with the DCH, and make sure that their roaming reports are accurate



## DAY 5: ACCOUNTING, PRICING & PROFIT MANAGEMENT

### Principles of Accounting, Profitability and Margin Controls

Participants will be provided with an overview of the key accounting controls domains and issues that new age fixed and wireless implementations will impact.

The mapping of old accounting functions, reports and responsibilities will be considered against the backdrop of the new environment being created.

In addition, the role of revenue assurance and finance as they relate to marketing and new product development will be diagnosed.

Successful leaders in the new wireless broadband world have learned that they cannot succeed with old same over-simplistic approaches. In the new wireless broadband economy, the carrier that is able to craft a customized solution that meets the specific needs of a well-defined customer segment will experience the greatest market success.

Harnessing the flexibility that your NextGen Policy and Charging Control Infrastructure makes possible will provide no benefit if you are unable to craft the solutions that appeal to your customers.



### Margin, Market and New Product Assurance

#### Stopping the Worst Revenue Losses at Their Source

Make sure your Finance, Audit and RA practices are on the cutting edge and apply core principles to the assurance of markets, the marketing process, as well as the new product development. Learn how successful Finance, Audit and RA teams have put controls in place over those processes to protect the revenue integrity of the organization. Many of the key sources of revenue loss originate from the marketing and new product development processes, so learn the techniques your Finance, Audit and RA team needs to manage this risk.



#### Unit Objectives:

- Utilize industry standard financial assurance and revenue assurance controls for market assurance
- Master the basic forensics, controls design and implementation of margin assurance in a wide range of application areas including interconnect, roaming, and CAPEX planning
- Improve your ability to assure new marketing plans and product launches, and ensure that you know where the biggest risks to revenue emerge in the marketing cycle
- Encourage Finance, Audit and RA involvement in the New Product Development process and prevent major revenue risks from going unnoticed before products launch and there is little time for recovery

# WHY WE ARE LEADERS IN TRAINING TELCO PROFESSIONALS AROUND THE GLOBE

Join the leading provider of fraud-focused certification training events. Featuring exclusive presentations, real-world examples of procedures, solutions, and strategies that have effectively reduced fraud issues for telcos around the world.

After three years of providing best-in-class certification and training workshops to hundreds of telecoms risk professionals around the globe, we are pleased to announce our improved course offering.

## ■ **Depth of knowledge**

The topics and examples are “narrow and deep” rather than broad and vague, presenting you with focused, highly targeted information that adds real value.

## ■ **Tailored content**

Training is adjusted to align the needs of the students to the available material. Students are asked to fill out “GRAPA Benchmark Surveys” to determine the level and nature of the training required. The survey results help us determine how well you know your own systems, and provide clues about what you need help with. The principles and practices taught are also applied to cable, satellite, wireless voice, SMS, MMS, IPTV, and MMDS with equal conviction, detail, and effectiveness.

## ■ **Relevancy**

Class material is based on the foundations of GRAPA. GRAPA members from every geography, type of carrier, major type of technology, and carriers of all sizes review and approve these standard approaches. The material serves as the foundation for an industry standard approach that is applicable to everyone, and yet easily focused to the needs of specific sub audiences.

## ■ **Based on real-world situations**

The majority of the training is experience based “standard practices” in revenue assurance, harvested from the many revenue assurance professionals who participate in “practices surveys,” “strategy sessions,” and other information-sharing events. Clear, specific deliverables are provided that apply to real-world situations. The material is never based on speculation, guesses, or invalidated information.

## ■ **Interactive**

The workshops are more than lecture sessions. RAA classes are participative and interactive and students are expected to pro actively join in discussions, problem solve, and fill out benchmarks. Attendees have opportunity for much interaction with the instructor and other students. Lunch and breaks are devised to facilitate more intimate conversation.

## ■ **Professional development**

Students master vocabulary needed for creating a sense of professional identity and opportunities with other like minded people in the industry that share common goals and issues.



Rob Mattison is a world-renowned expert in telecommunications and the revenue assurance industry. He has 20+ years of hands-on industry experience. Rob is President of GRAPA and author of “The Revenue Assurance Standards - 2009 Edition,” and of “The Telco Revenue Assurance Handbook” which has become the authoritative guide for RA Managers at telecoms firms around the world.

## ABOUT GRAPA

The Revenue Assurance Academy (RAA) is one of GRAPA's training organizations. GRAPA has over 8500 registered members and has distributed more than 5000 copies of its 2009 standards book. Training materials are continuously updated to reflect the latest curriculum offering, providing revolutionary, relevant material. By offering events that combine benchmark development, sharing of standard practices and approaches, as well as delivery of workshops, the Revenue Assurance Academy provides a unique and powerful venue for deployment of standard practices and rapid integration of those practices into the participating telco environments.

We have conducted our training programs for dozens of carriers and services providers around the world. Our workshops are offered in public venues (attended by delegates from many operators and services providers, which promotes the sharing of practices) as well as on-site for a private, more personalized and focused training for a company's staff.



### Telco executives rave about the courses....

“Great strategic approach with practical examples of why revenue assurance needs to lead the way in today’s telecoms world. I found this course gave real knowledge and essential guidance for Management and Revenue Assurance professionals to realize the full impact in the business strategy”

RA Manager,  
Greece

“This is a must-have training for any revenue assurance practitioner. You think you are very excellent at your job, but trust me, this training will open your eyes and mind to a whole new big picture of revenue assurance. With the ever improving and changing technology, one needs to be part of the certified practitioner course for personal and company gain.”

Executive RA Risk & Fraud Manager,  
Uganda

“This is the most practical training I have ever received and it was presented in a very user friendly way. The trainer has an excellent grasp of the domains extensive experience and most importantly, his teaching method was excellent. I would highly recommend the course to others.

Senior RA Specialist,  
Oman