



Revenue Protection Essentials: Billing and Loss Reduction

12 – 23 September 2027
Cape town



Revenue Protection Essentials: Billing and Loss Reduction

Ref: 103600593_77415 **Date:** 12 – 23 September 2027 **Location:** Cape town **Fees:** 6400 Euro

Course Overview:

This 10-day masterclass provides an immersive, hands-on learning experience for utility professionals aiming to reduce non-technical losses and strengthen revenue protection. Participants will explore advanced metering technologies, electricity and water theft detection, smart meter deployment, and regulatory compliance. Through practical exercises, case studies, and interactive workshops, attendees will develop strategies for identifying revenue leakage, optimizing field operations, and building cross-functional teams. The course emphasizes real-world applications, utility data analytics, strategic partnerships, and consumer engagement. By the end of the program, participants will have actionable skills to implement robust revenue protection frameworks within their organizations.

Target Audience:

- Smart Meter Project Managers
- Deployment Coordinators for Smart Meters
- Business Analysts in Utilities
- Meter Asset Coordinators
- Operational Field Managers
- Electrical / Water Engineers
- Water Supervisors

Targeted Departments:

- Utility Operations
- Billing and Revenue Management
- Regulatory Compliance
- Customer Service
- Field Operations

Targeted Industries:

- Energy and Utilities
- Water Management
- Municipal Services
- Regulatory Bodies

Course Offerings:

Participants will be able to:

- Detect and mitigate non-technical losses
- Apply smart metering strategies to prevent theft
- Analyze utility data for revenue leakage insights
- Implement regulatory-compliant revenue protection frameworks
- Design and optimize back-office and field processes
- Develop strategic partnerships and consumer engagement plans

Training Methodology:

- Formal lectures and presentations
- Case study analysis and discussion
- Interactive group work and workshops
- Field exercises and simulations
- Data analytics exercises for practical skill application

CourseToolbox:

- Workbooks and practical manuals
- Regulatory compliance and legislation materials
- Case study database and real-world examples
- Templates and checklists for field and back-office procedures
- Smart Metering and IoT integration guides



Course Agenda

Day 1: Fundamentals of Revenue Protection

- **Topic 1:** Course Introduction and Objectives
- **Topic 2:** Non-Technical Losses in Utilities
- **Topic 3:** Identifying Electricity and Water Theft
- **Topic 4:** Global Practices in Revenue Protection
- **Topic 5:** Regulatory Frameworks & Supplier Licence Conditions
- **Topic 6:** Theft Risk Assessment Schemes TRAS
- **Reflection & Review:** Discuss fundamentals and practical implications

Day 2: Traditional Metering & Theft Prevention

- **Topic 1:** Overview of Traditional Metering Systems
- **Topic 2:** Vulnerabilities and Theft Methods
- **Topic 3:** Countermeasures for Traditional Metering
- **Topic 4:** Field Audits and Preventive Inspections
- **Topic 5:** Back-office Process Integration
- **Topic 6:** Case Studies on Meter Tampering
- **Reflection & Review:** Best practices in traditional systems

Day 3: Smart Metering & Technology Integration

- **Topic 1:** Introduction to Smart Meters
- **Topic 2:** AMI and IoT Integration
- **Topic 3:** Smart Meter Rollout Case Studies
- **Topic 4:** Tamper Detection and Alerts
- **Topic 5:** Smart Meter Analytics for Loss Reduction
- **Topic 6:** Data-driven Theft Detection Techniques
- **Reflection & Review:** Review and apply smart metering concepts



Day 4: Developing a Revenue Protection Function

- **Topic 1:** Strategic Importance of Revenue Protection
- **Topic 2:** Structuring Teams and Assigning Roles
- **Topic 3:** Designing Back-office Processes
- **Topic 4:** Optimizing Field Operations
- **Topic 5:** Enhancing Cross-department Collaboration
- **Topic 6:** Best Practices in Implementation
- **Reflection & Review:** Build a functional RP framework

Day 5: Data Analytics for Revenue Protection

- **Topic 1:** Utility Data Analysis Techniques
- **Topic 2:** Identifying Revenue Leakage Patterns
- **Topic 3:** Predictive Analytics for Theft Detection
- **Topic 4:** KPI Development and Performance Metrics
- **Topic 5:** Integrating Data in Back-office Decisions
- **Topic 6:** Visualization Tools and Dashboards
- **Reflection & Review:** Analyze case data and develop mitigation strategies

Day 6: Regulatory Compliance & Legal Frameworks

- **Topic 1:** Utility Regulation and Compliance
- **Topic 2:** License Requirements and Obligations
- **Topic 3:** Risk Assessment and Legal Mitigation
- **Topic 4:** Policy Development for Revenue Protection
- **Topic 5:** International Standards and Best Practices
- **Topic 6:** Auditing and Reporting for Compliance
- **Reflection & Review:** Apply legal and regulatory frameworks



Day 7: Field Operations Excellence

- **Topic 1:** Planning and Conducting Field Audits
- **Topic 2:** Optimizing Resource Allocation
- **Topic 3:** Safety and Security in Field Operations
- **Topic 4:** Supervising Field Teams
- **Topic 5:** Reporting and Documentation Best Practices
- **Topic 6:** Scenario-based Field Simulations
- **Reflection & Review:** Lessons from practical exercises

Day 8: Strategic Partnerships & Stakeholder Engagement

- **Topic 1:** Building Partnerships with Regulatory Bodies
- **Topic 2:** Engaging International RP Associations
- **Topic 3:** Fostering Collaboration with Utilities
- **Topic 4:** Consumer Awareness Campaigns
- **Topic 5:** Incentivizing Compliance Participation
- **Topic 6:** Leveraging Partnerships for Continuous Improvement
- **Reflection & Review:** Strategic engagement planning

Day 9: Advanced Case Studies & Simulation

- **Topic 1:** Electricity Theft Case Studies
- **Topic 2:** Water Loss Detection Projects
- **Topic 3:** Scenario Analysis and Decision Making
- **Topic 4:** Technology Deployment Lessons
- **Topic 5:** Integrated Field & Back-office Strategies
- **Topic 6:** KPI-driven Performance Evaluation
- **Reflection & Review:** Applied case studies and lessons learned



Day 10: Capstone, Future Planning & Mastery

- **Topic 1:** Revenue Protection Master Plan Development
- **Topic 2:** Integrating Analytics & Smart Metering
- **Topic 3:** Continuous Improvement Strategies
- **Topic 4:** Measuring ROI and Performance Metrics
- **Topic 5:** Emerging Technologies & Innovation in RP
- **Topic 6:** Knowledge Review & Action Planning
- **Reflection & Review:** Final wrap-up, actionable plans, Q&A

How This Course is Different from Other Revenue Protection Courses:

The course stands out due to its complete approach, blending theoretical insights with practical applications. Unlike other courses, it emphasizes both Traditional and Smart Metering Revenue Protection, offering advanced strategies for Electricity and Water Theft Prevention. The course includes in-depth Utility Data Analysis for Revenue Protection and provides actionable steps for implementing Metering Security Measures. Real-world case studies from various regions highlight best practices and innovative solutions. This course also uniquely focuses on building strategic partnerships and fostering Utility Consumer Engagement, ensuring a holistic approach to revenue protection.