Course Description:

Enhanced Telecom Operations Map® (eTOM) is the TeleManagement Forum’s industry standard business process framework used by telecommunications service providers and their suppliers. This course provides students with an introduction to the widely used eTOM framework, its benefits to service providers and their suppliers, and ways in which eTOM can be implemented in their environment. The course addresses the relationship between eTOM and NGOSS (New Generation Operations Systems and Software), TeleManagement Forum’s standard OSS/BSS development lifecycle framework, and the NGOSS elements including the SID (Shared Information and Data Model) and the TAM (Telecom Applications Map).

Course Outline:

1. What are eTOM and NGOSS? Why are they needed?
   This initial module introduces the student to the Lean Operator vision and the role of New Generation Operations Systems and Software (NGOSS) as an enabling set of frameworks. We also introduce each of the component frameworks (eTOM, SID, TNA, and TAM); we focus in particular on the role of the Enhanced Telecom Operations Map (eTOM) in standardizing the way in which service providers design their business processes.
   - NGOSS – What is it?
   - Terminology
   - The “Lean Operator” vision & strategy
   - 4 components of NGOSS: eTOM, SID, TNA, TAM
   - Who are some of the players?

2. NGOSS Lifecycle & Methodology – Concepts & Definitions
   In this section, we examine the NGOSS Lifecycle Methodology as an implementation tool. In particular, we explain the elements of the NGOSS Knowledge Base (eTOM, SID, TNA):
   - Definitions
   - Methodology Goals
   - Explaining Technology Neutral Architecture (TNA)
   - The NGOSS Knowledge Base
   - The 4 views of NGOSS Lifecycle:
     - Business
     - System
     - Implementation
     - Deployment
   - Use Cases and Contracts in the NGOSS Lifecycle
   - The SANRR Methodology: Scope, Analyze, Normalize, Rationale, Rectify

3. eTOM – Overview and Principles
   Having reviewed the 4 views of NGOSS, we now begin to concentrate on the Business view and introduce the student to the role of the Enhanced Telecom Operations Map (eTOM) in standardizing the way in which service providers design their business processes. eTOM - Origins and goals
   - Terminology
   - ETOM - The big picture

4. eTOM – The Business Process Framework
   In this section, we examine the various components of the eTOM framework. Starting from Levels 0 and 1 “big picture”, we drill down to sub-processes at lower levels of decomposition:
   - Operations
   - Operations Support and Readiness (“OSR”)
   - OPS Processes – Levels 1 and 2 for OSR and FAB
   - Strategy, Infrastructure, and Product (“SIP”)
   - Strategy & Commit
   - Infrastructure Lifecycle Management
   - Product Lifecycle Management
   - Enterprise Management.

5. Process Decomposition
   In this module we examine the process decomposition technique, which is used to reveal the process details at lower levels. The ultimate objective is to produce an enterprise view of process capabilities and functionality:
   - Process Decomposition – A definition
   - Process Levels
   - Process Decomposition – The approach.
   - Process Flows and Interactions

6. The Shared Information & Data Model (SID)
   Having addressed the Business Process requirements in the business view, we now move to the System view of NGOSS and discuss the Functional, Information and Data Model requirements to support the business processes mapped to eTOM. We describe the benefits of having a streamlined approach to information and data modeling and how the SID enables this streamlining by aligning with eTOM processes.
   - SID – Definition and goals
   - The SID framework
   - SID and eTOM alignment
   - SID Key Entities
   - SID in Real life: Industry Adoption

7. The Telecom Applications Map (TAM)
   Whereby eTOM provides Service Providers a reference framework for business processes, TAM provides a reference framework for the applications. This section defines the Applications’ framework describes how to execute this mapping effectively.
   - TAM – Definition and goals
   - NGOSS and TAM
   - TAM Domains
   - TAM and eTOM – A discussion

8. eTOM – Alignment with other Models
   In this module we examine how the eTOM relates to other industry models such as TMN, ITIL, RosettaNet, and Six Sigma. One of our areas of focus is the alignment between eTOM and ITIL (IT Infrastructure Library) processes. We define at a high level the ITIL framework and the processes related to Service Management (Service Delivery and Service Support); we then describe the synergies between eTOM and ITIL and the alignment between their processes.
   - ETOM linkage to NGOSS and the SID
   - ETOM and ITU-T TMN
   - ETOM & Six Sigma
   - eTOM in a B2B context: Alignment with RosettaNet clusters
   - Mapping eTOM to ITIL

9. eTOM – From Theory to Practice
   Here we examine how you can bring the eTOM into your own environment. We also examine some of the work that is being done by various industry adopters of eTOM, from within the services provider community and from the vendor community.
   - eTOM in a “Greenfield” environment
   - Adapting eTOM to your infrastructure
   - Sampling of eTOM Adopters and Case Studies

10. A Real-Life Case Study
    In this section, we examine a real-life case study of a carrier’s implementation of eTOM within its environment. We cover each of the steps taken to ensure successful implementation:
    - As-Is Analysis
    - Mapping to eTOM
    - Gap Analysis
    - Enhancement & Optimization
    - Process Flows
    - Decomposition
    - Business Rules
    - Documentation

11. Summary & Document Map
    This section summarizes the role of NGOSS and its various components (eTOM, SID, TNA, and TAM) in providing a set of frameworks for commonality in developing and maintaining streamlined solutions. We also bring the student up to speed on the latest NGOSS developments currently taking place.

Hands-On Workshop

In this 4-part workshop, the students work in teams, presenting their solutions to the class. The workshop takes into account the client’s own environment, and deals with a real-life current issue(s). We begin by articulating the issue(s) at hand and identify the clients’ own relevant processes. Using the tools learned during the presentations, especially the SANRR methodology and process decomposition methods, the teams develop a use case, analyze the problem and potential solution, map their processes to eTOM, develop process flows, and develop a contract for the solution.