



### 1. Introduction & Overview

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 - The origins & why it's needed
- The who's who in the NGOSS world
- Terminology
- The "Lean Operator" vision & strategy
- 4 components of NGOSS: eTOM, SID, TNA, TAM

### 2. NGOSS Lifecycle & Methodology

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, Rationalize, Rectify

### 3. eTOM - An Overview

Having reviewed the 4 views of NGOSS, we now begin to address the Business view by introducing 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
- The who's who in the eTOM world
- Terminology
- ETOM Level 0: The big picture

### 4. eTOM - The Business Process Framework

In this section, we examine the various components of the eTOM framework. Starting from the Level 0 "big picture", we drill down to sub-processes at lower levels of decomposition:

- Operations
  - Operations Support and Readiness ("OSR")
  - Fulfillment, Assurance, and Billing ("FAB")
  - 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 and how it can be used to reveal finer process details at lower levels. The ultimate objective is to produce an enterprise view of process capability and functionality:

- Process Decomposition - A definition
- Process Levels
- Process Decomposition - The approach.

### 6. eTOM Linkage to Other Models

In this module we examine how the eTOM relates to other industry models such as TMN, ITIL, RosettaNet, and Six Sigma. Our main area of focus is the alignment between eTOM and ITIL (IT Infrastructure Library) processes. We begin by defining 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 in a B2B context: Alignment with RosettaNet clusters
- Mapping eTOM to ITIL

## 7. Introducing eTOM to Your Business

Here we examine how you can bring the eTOM into your own environment and provide selected case studies to showcase how adopters have utilized eTOM to assist in business transformation:

- eTOM in a "Greenfield" environment
- Adapting your infrastructure to eTOM
- Adding the eTOM to your infrastructure
- Sampling of eTOM Adopters

## 8. The Shared Information & Data Model

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

## 9. 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.

Each of the 4 parts of the hands-on workshop takes place at a different stage of the two days, as new concepts are covered.