



NGOSS-Applied

Expert Services from LTC International

Companies today are increasingly turning to the TM Forum's New Generation Operations Systems and Software (NGOSS) to provide a framework and direction for large-scale NGN, BSS/OSS, and new revenue transformation projects. NGOSS was developed by the TM Forum and its members to meet the need for a set of Information, Communications, and Entertainment industry standards, best practices and guidelines that would enable members to develop and deploy complex services with reduced cost, and reduced risk.

The TM Forum describes NGOSS as: "... the industry's only true standard for development and deployment of easy to integrate, flexible, easy to manage OSS/BSS components.... NGOSS is provided as a set of documents that make up a toolkit of industry-agreed specifications and guidelines that cover key business and technical areas, and a defined methodology for use of the tools."

Companies who recognize the value of NGOSS-driven projects still face a challenge – finding experts who truly understand how to make best use of it in practice. NGOSS represents many person-years of development effort and it continues to evolve. Its' scope encompasses all of BSS/OSS, yet it contains sufficient granularity to describe detailed process flows and individual component interfaces. It's complex. While the TM Forum provides general training, and much reference documentation, people do not become experts overnight. That's why LTC has assembled the *NGOSS-Applied* team of expert practitioners.

NGOSS-Applied is a set of expert services from LTC delivered by a team that includes people who were deeply involved in assessing the business need for NGOSS, in the development of NGOSS, the evolution of TNA, eTOM, and SID, and the creation of standards documents and training courses. This is a uniquely capable group of knowledgeable and experienced specialists. Their expertise is backed by LTC's accumulated experience in successfully delivering complex cutting edge projects to clients worldwide. With *NGOSS-Applied*, LTC will help you bridge the gap between NGOSS concept and realization.

NGOSS ACCELERATION

If your company is at an early stage in its NGOSS project, or not yet started, LTC can help get your project off to a fast start.

LTC's Business Operations Architects® will conduct a high-level assessment, establishing a project baseline and gathering information to guide project direction and strategy. This may include interviews with your specialists and decision-makers, and sometimes we will poll selected customers to ensure that everyone is consistent with requirements and expectations.

The LTC team will help frame your business objectives and technical objectives for the NGOSS initiative and set concrete and achievable goals for each stage of the project.

We will plan & design directed workshops – collaborative sessions that adapt and expand the concepts of NGOSS. Strategic discussions will explore exactly how NGOSS fits in with your existing environment and development strategy.

This leads to tactical action-planning sessions that ensure that your NGOSS program is based on a comprehensive to-do list.

CUSTOMIZED NGOSS WORKSHOPS

The place to go for standard, foundation NGOSS training is the TM Forum, but then, “What do you do next?” Many of LTC’s customers also need blended and customized workshops that directly address their specific business and technical needs. NGOSS-Applied subject matter experts can build those specifically crafted workshops that will extend and expand your skills.

LTC *NGOSS-Applied* discovery workshops are crafted from your requirements, blending selected NGOSS materials and other industry best practices, customized to work in your operational environment, to meet your standards and objectives. Workshops are adapted to the needs and language of specific audiences: for example IT architects, operations specialists, sales, or project managers with implementation teams. These workshops are on-site, delivered in a venue chosen by you, anywhere in the world.

Our workshop format encourages frequent interaction between the facilitators and the participants. We include choreographed discovery sessions where we gather issues and requirements specific to your company’s needs.

Whether you are a service provider embarking on an NGOSS program, or a software vendor planning product evolution along NGOSS principles, LTC will provide the practical skills you need to launch and complete projects.

PRODUCT DEVELOPMENT AND POSITIONING

LTC also helps software vendors with product evolution and messaging, guiding customers in how your products support NGOSS principles and service provider transformation.

These programs consist of an information gathering phase (which may include customer surveys, internal surveys, and executive interviews) and interactive workshop sessions.

We then work with product managers and developers to establish product requirements and evolution plans. And we will work with your marketing and sales teams to create NGOSS-oriented messages for your customers, and provide coaching on how best to deliver those messages.

NGOSS SOLUTIONS ARCHITECTURE

Today, as a service provider, when developing your OSS/BSS architecture you must consider your market, your products, prior investments, your partnerships, and network specifics.

PolyArchitects[™] from LTC bring broad, overlapping service provider experience in OSS/BSS, operations center design, network design, and product invention. *NGOSS-Applied* experts at LTC include the industry’s foremost NGOSS solutions architects. This combination of skills enables the team to work with you to create complete and elegant applied designs.

Working with your architecture team and delivery managers, LTC will help create a custom architecture to fit your needs and circumstances, without compromising NGOSS and the benefits it will bring to your organization. Every part of NGOSS is adapted. Specifically our architectures robustly include:

- NGOSS principles and guidelines for transformation;
- NGOSS artifacts (TNA, SID, eTOM, TAM), and their interrelation;
- Framework and business components;
- Guides on how to construct solutions, what to expect from them, and how to measure success;
- Data models, data transformation, and model-in-the-middle integration;
- NGOSS implementation interfaces, service contracts, and a plurality of technology specific deployment approaches.

LTC knows how to blend vendor-supplied packages and home-grown applications into a custom target architecture that meets budgets and timeframes. Component integration models are conformant with the Technology Neutral Architecture (TNA) and optimized for your IT standard implementation: SOA, ESB, CSF, grid, or cloud computing. For a decade, we’ve assisted with eTOM process design.

NGOSS-Applied experts create data models with proper extensions to the SID, adapt your existing models, and transform data stores. We provide TNA conformant service design and NGOSS contract models for the necessary interface specifications. LTC’s *NGOSS-Applied* provides deep experience and established model

templates ranging from Visio diagrams to formal UML and model-driven architectures (MDA).

When you deploy, LTC provides enhanced project logistics and governance using our experienced PM's. Studies show that communication is a key factor in project success. If you engage a large SI in the actual deployment, LTC can provide System's Integrator Governance that insures they communicate accurately and stay on target.

NGOSS APPLICATION EVALUATION

It is sometimes difficult to pin down what is relevant to your needs, meaningful and definitive in thousands of pages of TM Forum specifications. Many vendors and some SI implementations claim to be NGOSS-compliant while adhering to just a few NGOSS 'principles'.

LTC will provide a 'fit and function' analysis of vendors and integration frameworks. High level analysis provides a first cut at vendor qualification. This is followed with investigation of components, SID compliance, eTOM processes, Contracts, and OSS/J or CSF APIs.

There are many ways to implement NGOSS, and sometimes pragmatic approaches are needed. For example, a strategic product or home-grown application may not be NGOSS compliant, but can nevertheless be made to perform well within an NGOSS architecture, with the development of wrapper SOA interfaces. We help make this possible. Then we test compliance *to your specific enterprise* architectural requirements and designated interface performance needs.

NGOSS TROUBLESHOOTING

Sometimes a troubleshooting project is needed, perhaps to correct oversights, recover when transformations are not meeting expectations, or rapidly react to a new business opportunity. Inevitably your best people are always tied up in existing initiatives.

Drawing on our collective wealth of experience, usually just one or two experts will be able to diagnose what is going wrong and quickly help you back on track.

SUPPORTING ENHANCED SERVICES

LTC's team of *NGOSS-Applied* experts includes foremost experts and leaders in: integrated product and support design, SDP/SDF, Device Management, Supply Chain, the Collaborative Garden initiative for intelligent revenue capture, Autonomic Management, and Self* Systems. Our consultants bring the experience of running the related TM Forum programs, publishing articles and books, and presenting seminars worldwide in these important domains.

WHO'S WHO

LTC's *NGOSS-Applied* international team:

- Wedge Greene, initiator of the original NGOSS program in the TMF
- John Reilly, author of three NGOSS books, contributor to eTOM & SID
- Cliff Faurer, who created the most extensive MDA NGOSS UML models to date
- Tony Richardson who syncs NGOSS with advances in the rest of the communications
- Claude Hary, a marketing executive with years on the TM Forum board of directors
- Experienced NGOSS-styled SOA business modelers and implementers including Serge Garcia and Iwan Gramatikoff
- International expert NGOSS architects, modelers, designers and subject-matter experts Alfred Anaya, Chris Ballard, Andrew Chalmers, Paul Coxhead, Andrew McFadyen, Keith Miller, Alan Quayle and Marcus Ras
- Operations process designers: Sean O'Reilly and others.

You can engage members of the *NGOSS-Applied* team to help you move your initiatives forward. Contact us at the number below or email NGOSS@ltcinternational.com.