

Audits, Consulting & Special Projects

Your Planning Advantage

KEY FEATURES

- IEEE 1588 PTP Expertise
- Customized Deployment Guidelines
- Standards and Best Practices Recommendations
- Accurate Documentation
- Schedule Management
- Project Progress Reports
- Global Reach
- Quality System Certified to TL 9000, Telcordia GR-2981-CORE and ISO 9001:2000

OVERVIEW

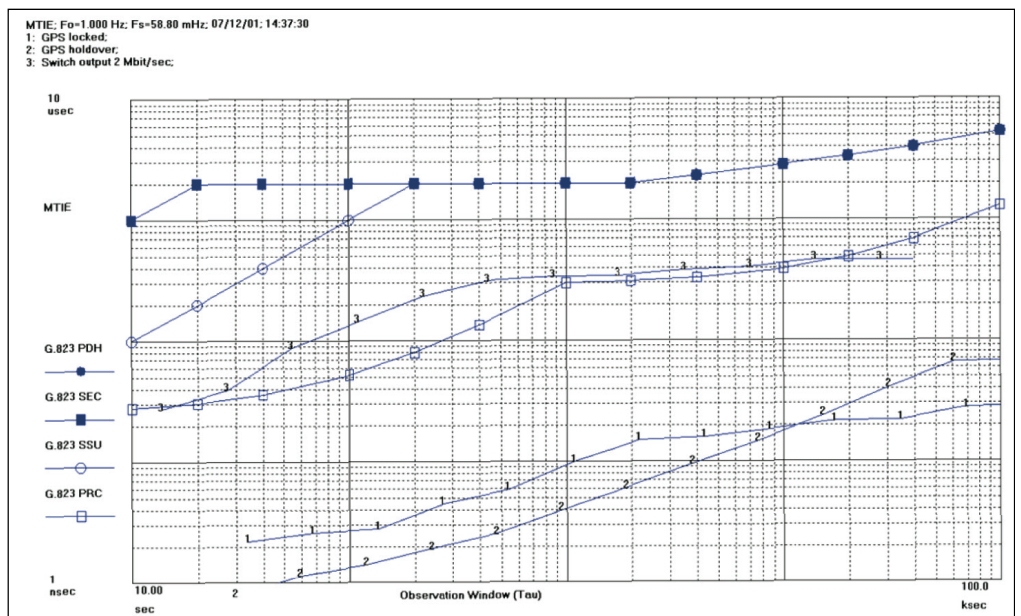
In the complexity of global telecommunications, synchronization and timing is a very specialized layer. Before planning changes to your sync network, consider consulting with the most experienced team in the sync business – Symmetricom Global Services (SGS). We have experience from both the client and vendor sides and understand your business requirements. Our expertise provides you with insightful, comprehensive recommendations, using less time and effort on your part. Our expert consulting and audit services can help you achieve your expectations. Whether it's building a business case for sync, planning and managing your current network, or developing disaster recovery contingencies, we have the skill and experience to get the job done right. Scope and pricing can also be structured to fit your unique needs.



AUDITS

In 2001, the Network Reliability Steering Committee (NRSC) formed a special task group to investigate network timing outages, determine their root causes and recommend preventive best practices.

Their final report was published in 2002. To avoid timing outages, they recommend that network operators and service providers:



Measurement from SGS Synchronization Audit

- Conduct office inspections of BITS and intra-office facilities on a priority basis
- Ensure that engineering, design and installation processes address how new network elements are integrated into the office and network synchronization plans
- Develop management and recordkeeping tools that accurately track the diversity of internal wiring for office synchronization, including timing leads and power sources
- Conduct periodic verification of the office synchronization plan and the diversity of timing links, power feeds and alarms
- Ensure the office synchronization plan fits within the overall network synchronization plan

Our Synchronization Audits can help you comply with these recommendations, maintain the integrity of your network and avoid timing outages.

A Sync Inventory Audit begins with a physical verification of your office. Our field experts identify the timing source for all network elements and the input source(s) to the timing distribution shelf. We check the installations and options in your network timing equipment against current standards, recommending corrective action for any discrepancies. This is done regardless of the sync equipment manufacturer. If an office's current configuration is not ideal, we can recommend the best one. We can even check the sync equipment installed at each network location to ensure it's fully functional and operating in accordance with manufacturer specifications. This ensures your equipment is optimized for peak performance and that your customers receive the best service possible. We then compile this information and create a written record for you. We can even input it directly into your synchronization tracking database. When the audit is complete, you receive an updated record of timing sources, with all documented changes and recommendations. It's an efficient way to monitor capacity and plan for network growth.

If you suspect network timing is somehow causing errors and customer complaints, a Sync Performance Audit can pinpoint the problem's source. Using precision timing instruments and sophisticated synchronization audit software, we make reference measurements and assess your network's performance. This produces a network data picture, showing the current status and quality of your network synchronization. This information highlights any timing source problems. It can also be used to facilitate the design and management of advanced synchronization solutions. We provide the expert synchronization analysis to find and resolve any uncertainties in your timing network.

All of our audits and testing projects include a comprehensive written report detailing the equipment reviewed at each site, our findings and our recommendations for improvement. Whether it's checking for specific equipment issues or reviewing your entire sync network, we'll work with you to define an audit plan that fits your needs. Schedule management and project progress reports are always included at no additional charge.

CONSULTING

Network Synchronization Design. If you're building a new network or expanding an existing one, we can help you craft the best synchronization plan.

We begin with the most critical information – a comprehensive review that defines your needs and documents all your requirements. We then incorporate standards recommendations and global best practices for synchronization. Next, we structure the right combination of equipment to meet your network needs, both now and in the future. Finally, we create a written plan that details our recommended design for you.

Network Synchronization Planning for New or Expanding Networks. Without proper planning, changes to sync networks often cause problems. Any time you build or expand is an opportunity to incorporate best sync practices. A smooth transition requires the Network Planner to do two things: (1) match the proper timing device to each application, and (2) weigh the necessary performance and operation qualities against your budget. We can help you develop a plan to accomplish this. By defining needs by office type, recommending the best products for your timeline and budget, and documenting everything for you, we help you clarify your objectives and plan for their smooth implementation.

Next Generation Network Sync Planning. IEEE 1588, also referred to as Precision Time Protocol or PTP, is a next-generation protocol specifically designed to provide precise timing and synchronization over packet-based Ethernet networks. With the advent of version 2 of the protocol, PTP has now been adapted to meet the more sophisticated synchronization requirements of telecommunications applications. As service providers begin to deploy PTP, they need a thorough understanding of its impact on network performance and service level agreements. Symmetricom's Next Generation Sync Planning Service can provide this needed expertise. We can assist a carrier in analyzing future requirements, create customized deployment recommendations unique to that network, and provide a carrier-class PTP solution that offers the highest level of resiliency, performance, scalability and management.

Disaster Recovery Planning. While it's always a good business practice, a Disaster Recovery plan is also a customer expectation. But it can be the last thing you have time to do. With our experience and resources, we can help you develop a cost-effective and thorough sync network recovery plan. We'll work closely with you. In the end, you'll have the confidence that your business network can recover promptly if disaster strikes.

We can write your disaster recovery plan based on our review of your network or just provide an analysis of your existing plan. In addition, we can provide labor to help you get your network back in service in an emergency. Whatever your requirements, we have the flexibility and expertise to fulfill them.

On-Site PCN Implementation or Product Upgrades.

If manpower is tight, we can provide upgrade or Product Change Notice (PCN) implementation services for you. We supply the labor to remove, return and replace parts for you, as well as test the equipment to ensure the change was properly incorporated. We can also coordinate seedstock deliveries, handle factory returns on your behalf and write new "Method of Procedure" (MOP) documents.

PCN implementation work or upgrade projects are available on a project-specific or contract basis. A contract can include routine sweeps through your network to make the changes and upgrades you require. Schedule management and project progress reports are included.

SPECIAL PROJECTS

Do you have a unique problem that doesn't fit into our standard services? If it's related to your sync network, we can probably help. We can provide on-site expertise and project management to help you through any sync network-related projects. Call us so we can discuss your requirements. Our staff is eager to help you solve problems.

ALL-INCLUSIVE STATEMENT OF WORK

Before we deliver any service, we clarify your requirements and gather information. We build a statement of work for your specific project, which includes all the details. Your final quote is built around this comprehensive, all-inclusive statement of work. This gives you all the information up front so you can avoid any expensive surprises midway through a project. Our commitment to you is that the job gets done right, and it begins and ends the way we said it will.

QUALITY GUARANTEED

Our Quality system is certified to TL 9000, Telcordia GR-2981-CORE and ISO 9001:2000. We also maintain ISO Auditors on staff and regularly solicit your comments regarding our support services to continually improve your experience. Your satisfaction is our goal.

SYMMETRICOM GLOBAL SERVICES

Symmetrcom Global Services (SGS) is the dedicated services division of Symmetrcom, Inc. We offer services designed to help you lower costs, streamline processes, ensure quality and save time. We are 100% focused on service, delivering the support you need to increase customer satisfaction and grow your business.

CONTACT US

Please visit us online at <http://www.symmetrcom.com>. Your Symmetrcom sales representative has more information on all our products and services. You can also contact any of our regional offices.

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