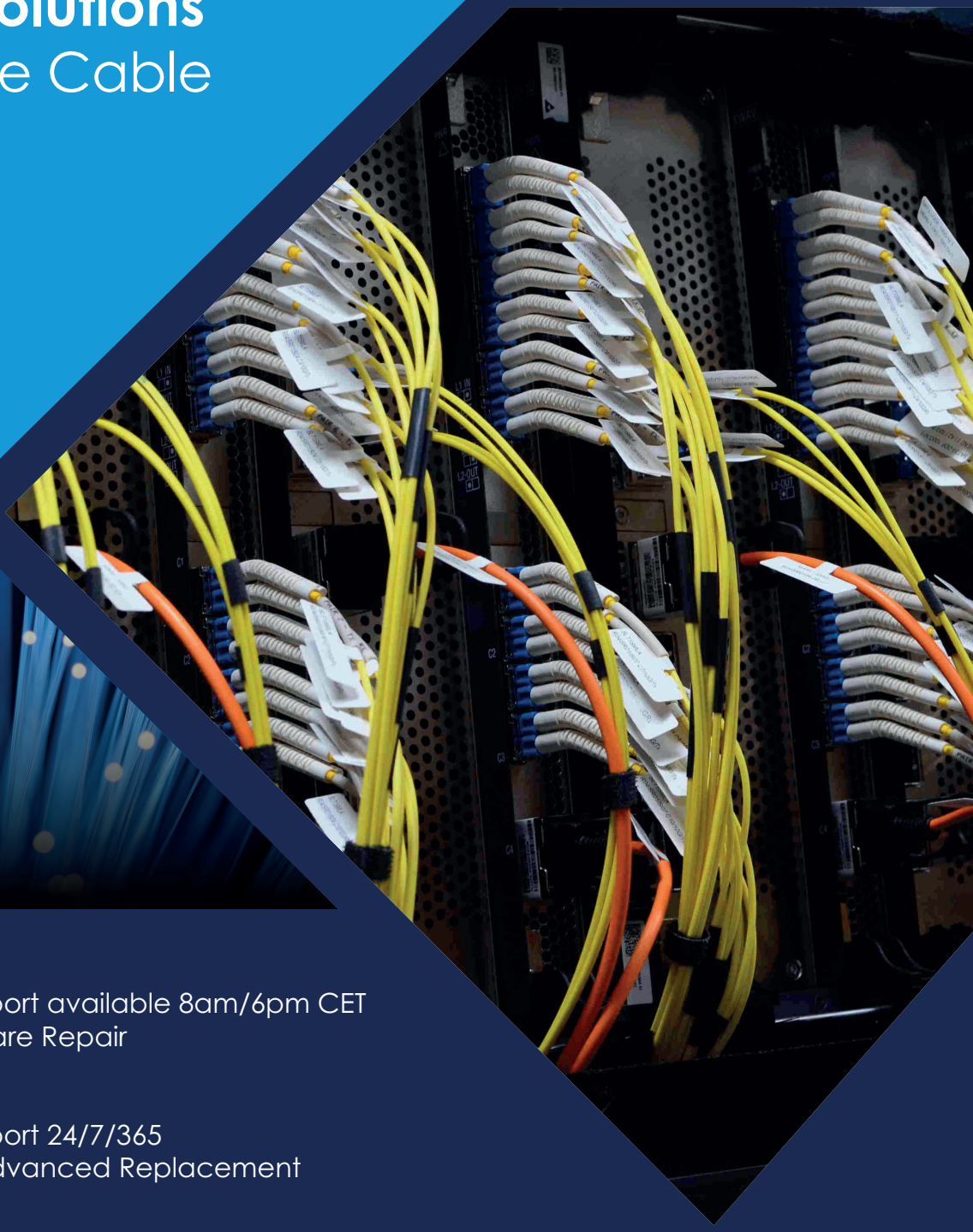
ALCATEL SUBMARINE NETWORKS

ASN End to End Services & Solutions for Submarine Cable Systems



Included Under Warranty
- Remote Technical Support available 8am/6pm CET
- Dry & Wet Plant Hardware Repair

Optional
- Remote Technical Support 24/7/365
- Dry Hardware Fast & Advanced Replacement

ASN SERVICES

By continuously delivering end to end services across the entire lifecycle of each submarine cable system, ASN Services & Support Team ensure outstanding customer satisfaction through seamless commercial and technical support, powered by advanced expertise that enables efficient, reliable system operation and maintenance.

OVERVIEW

Our France-based Services & Support Team provides a comprehensive portfolio of both Long Term and On-Demand Services to customers, including, but not limited to:

- Remote Technical Support. On-site Intervention as an option when & where required,
- Dry & Wet Plant Hardware Repair for faulty equipment,
- Wet Plant Spare Testing,
- Land Route Audit & Repair,
- Cable Protection Solutions,
- Network Services (NOC, Cybersecurity),
- Marine Support
- etc

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Remote Technical Support for Dry and Wet plant

Support for issue mitigation and problem resolution through online expertise.

Technical Support for Severity 1 issues:	Working Hours (WH)*
Technical Support for Severity 2 & 3 issues	Working Hours (WH)
First Level Support:	Customer's Responsibility
Technical Support for Dry & Wet Plant:	Working Hours (WH)

** 24/7/365 optional*

Working Hours (WH): Monday to Friday, from 08:00 am to 6:00 pm Central European Time (CET), except bank holidays in France.

Dry & Wet Plant Hardware Repair

Management of faulty items during Working Hours (WH). This includes shipping, duties & taxes, customs clearance between ASN and customer site. Fast & advanced replacement for dry hardware equipment are optional.

Support for Fault Location (Land & Sea)

In case of Wet Plant and Land Route issues, technical support is provided during Working Hours (WH) to help identify the Fault Location.

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Severity 1 (CRITICAL)

A problem that has a serious impact on the performance of the System. All traffic affecting and loss of supervision problems fall within this category.

Severity 2 (MAJOR)

A problem that generates a significant reduction on system performance or impacts operation & maintenance of the System and requires an action.

Severity 3 (MINOR)

All operational problems other than Critical or Major. This includes requests for assistance such as questions about how to perform specific tasks or general system information.

First Level Support

(Under customer's responsibility)

First Level Support activities are performed by customer's staff located in the **NOC and terminal stations**. First Level personnel will be expected to carry out the **problem** identification process and resolve simple issues by following established **fault-finding procedures**, as described in the product and system manuals, before escalating to ASN Second Level support.

- **Control of the immediate environment** in which the Equipment is located (temperature, dust, humidity, etc.);
- Contact **ASN technical support team** prior to any change or modification to be performed on the System;
- **Maintain** a sufficient level of spares and test Equipment;
- During the design life of the system, **maintain sufficient technical and service** personnel who have completed training on the System Equipment.

Second Level Support

(Under ASN's and customer responsibility)

The following activities are performed by ASN technical support team with the assistance of Customer NOC personnel on-site:

- **Troubleshooting** analysis;
- Establish an **action plan** for problem remediation;
- **Implementation** of the action plan for problem resolution;
- Replication of the issue in a **test environment** whenever possible;
- **Localising** product issues
- **Providing workarounds** until problem can be fully resolved.

Escalation to Third Level Support for Problem resolution

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Service Level Target

Turn Around Time for repairs

From the date ASN receives the item for repair until the repaired item is ready to be shipped back to the customer.
Repairs may involve the exchange of a faulty item with a new one. All repair costs during the Warranty Period are free of charge, including shipping and customs clearance.

Warranty period (PA)	10 years from PA	10 - 25 years from PA
• **Submerged equipment:** 6 months • **SLTE, Portal, ASN COTDR, PFE:** 3 months • **Software:** 3 months • **IT & Test Equipment:** 3 months	• **Submerged equipment:** 9 months • **SLTE, Portal, ASN COTDR, PFE:** 9 months • **Software:** 9 months • **IT & Test Equipment:** 9 months	• **Submerged equipment:** 12 months • **SLTE, Portal, ASN COTDR, PFE:** 12 months • **Software:** 12 months • **IT & Test Equipment:** 12 months

Target Lead Times for New Equipment

From the date ASN receives the order from the customer, to the date the items are ready to be shipped back to the customer.
All new items supplied are subject to agreed commercial terms and conditions.

Warranty period (PA)	10 years from PA	10 - 25 years from PA
• **Cable:** 6 months • **Submerged equipment:** 12 months • **SLTE, Portal, ASN COTDR, PFE:** 9 months • **Software:** 3 months • **IT & Test Equipment:** 3 months	• **Cable:** 9 months • **Submerged equipment:** 12 months • **SLTE, Portal, ASN COTDR, PFE:** 12 months • **Software:** 9 months • **IT & Test Equipment:** 9 months	• **Cable:** 12 months • **Submerged equipment:** 12 months • **SLTE, Portal, ASN COTDR, PFE:** 12 months • **Software:** 12 months • **IT & Test Equipment:** 12 months

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Support Contract Renewal

- At the end of the Warranty Period, customers have the opportunity to renew their Maintenance Contract with ASN Services to benefit Long-Term Support for their system.
- Customers will be contacted prior to the end of the Warranty Period by their Services sales representative to discuss available options for both Technical Support and Hardware Repair services.

Advanced Services

In addition to support services, ASN has also developed a comprehensive portfolio of optional services, designed to meet evolving customer needs and to deliver a complete end-to-end submarine cable solution. Some of them, such as NOC and Cybersecurity services should be discussed before bringing the submarine cable system into service.

Long Term Services

Remote Technical Support
Direct access to experts

Dry Plant Hardware Repair
Including shipping, customs clearance, duties & taxes

Live Video Support
For interactive and real-time remote assistance

Marine Repair
For undersea faults - depot facilities

Remote Support during Marine Repair
For undersea faults - depot facilities

Marine Repair Coordination
With extended remote support

Wet Plant Spare Testing
Ensure all spares are ready to use

Land Route Audit & Repair
Audit & on-site interventions for land routes & beach joints

AssetMonitor (AIS 24/7/365)
Cable protection against external aggression

Marine Liaison & Cable Awareness
Real-time surveillance along cables

Guard Vessel Services
Cable protection against external aggressions

Next Generation NOC Services
Monitor, Alert, Prevent, Manage, 24/7/365

Cybersecurity Services
Network protection against cyber attacks

On Demand Services

Comprehensive Expertise
Audit, preventive & corrective actions - remote/ on-site

Refresh Training
On dry & wet equipment, jointing etc

Spare Refilling
Cable, UJ, etc

Network Evolution
Upgrade/ replacement of equipment, configuration updates, capacity add-on

Recycling
Out of service dry & wet equipment recovery & revaluation

C-OTDR Service
Tests integrity of the repeatered fiber pairs

Contact your Sales Manager for more details or email us at services@asn.com

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