





FibNet Engenharia e Telecomunicações, S. A. entered the telecommunications market in 2000 as a supplier of integrated solutions, specializing in project design and planning, implementation and management of telecommunication network jobs.

With its recognized team of highly skilled professionals, the company guarantees clients effective management of all resources, with the emphasis on top quality service.

FibNet began with the project planning and construction of a countrywide fibre optic ring and has expanded its activities to cover all aspects of engineering involved in the construction of telecommunications networks.

FibNet provides turnkey services for a wide range of telecommunications areas, namely:

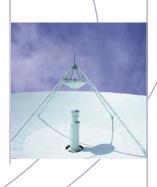
- Cable Television
- Fibre optic backbone and access networks in several topologies: FTTH-PMP, FTTH-P2P, DWDM.
- GSM, FWA, UMTS, LTE and Wimax Mobile Communication networks

# We Guarantee Client Satisfaction by Producing Results

The need to increase efficiency and the constant search for greater productivity are key strategic points in Fibnet's positioning.

This means that the way we work is governed and marked by involvement, team spirit and confidence.

How successful we are depends essentially on the quality of our services and of our employees, our respect for commitments and our desire and capability to achieve the objectives we set for our- selves.







#### CABLE TELEVISION

FibNet has the capacity to design, plan and set up cable television networks using bi-directional HFC networks. Our engineering department offers our Clients turnkey solutions covering all aspects from initial surveys to network performance. Whatever our Clients' needs might be: television, telephone, Internet, extensions, maintenance, network updating, audits or consultancy, FibNet can supply the best integrated service solution with speed and care.

## FIBRE OPTIC NETWORKS

Aware that operators have different network requirements, FibNet offers a wide range of fibre optic, HFC, FTTH-PMP, FTTH-P2P, DWDM solutions, among others, for the project designing, planning and construction of small, medium and large scale networks, thereby connecting companies and/or housing units separated by large distances.

FibNet has a highly qualified team that provides Clients with alternatives in terms of engineering, implementation and the testing of the solutions presented.

## MOBILE COMMUNICATIONS - GSM / FWA / UMTS / LTE / WIMAX

FibNet offers integrated solutions for mobile and fixed telecommunications net- works, covering everything from site surveys, negotiation, project designing and planning, construction, structural calculations, geotechnical studies, and network coverage tests.

No matter what aspect of work we carry out, whether this is the correction of tilts and azimuths, the commissioning of equipment or the auditing and inspection of construction, FibNet offers operators the right solution for their operating needs.

#### CONSTRUCTION

FibNet can build any type of telecommunications and power network, technical buildings, network heads, and other facilities. We ensure network construction quality through our job management teams, which keep tight control on the methods, technical means and human resources involved.

#### MAINTENANCE

Well aware of operators' needs to keep their networks in good operating condition, FibNet has the technical and manpower structure to be able to replace and test any type of telecommunications network, from the operating centre to the final customer.

Our maintenance teams are on 24-hour standby ready to work on telecommunication and power networks anywhere in Portugal.







#### INSTALLATIONS

FibNet has a technical and manpower structure for carrying out television, Internet and telephone installations at the subscribers/clients of any operator, any- where in Europe.

#### **TRAINING**

In order to offer our Clients top quality services, FibNet invests in the continuous training of our professionals in order to keep them constantly up to date on the most recent technologies. FibNet's value is based, without any doubt, on our most valuable resource: our People.

As a logical consequence of technological advances, Fibnet provides vocational training courses to our employees with the objective of familiarizing them with new working techniques and equipment, and introducing or updating them with regard to regulations and new procedures.

Given the frequency of our internal training, Fibnet provides the following external training courses:

- Fibre optic fundamentals
- Fibre optic installer
- Outside plant installer
- Fibre characterization
- · Fibre optic testing
- Premise wire installation

FibNet's specialized employees are a competitive advantage for the company on our journey towards the target of Total Quality.

#### **LICENSING**

Before a telecommunications network can be built it is necessary to satisfy legal requirements in the form of a "Rights of Passage and/or Occupation" license.

Licensing is, without doubt, the greatest obstacle to be overcome by any opera- tor. FibNet has extensive experience in the preparation of licensing processes, both with existing networks owners and with public and private entities, and is thus able to provide this service to its Clients.



A telecommunication network needs to be identified. FibNet plans and produces all the technical support documentation with regard to construction and licensing processes, geographic implementation letters, maintenance procedures, contract specifications, geo-referenced records, and so on.





# **QUALITY SYSTEM**

### Commitment to Quality

Our success depends on:

- The Quality of our Products and Services,
- The Quality of our Employees,
- Our Respect for Commitments,
- Our desire and capability to achieve the objectives we set ourselves.
- Satisfied Clients, Employees and Shareholders our partners results in their success, which also ensures our success and continuity.

Our objective is persistent progress.

We therefore strive to improve at all levels of the Company and in each of the functions we perform.

## **Objectives and Strategy**

## **Objectives**

- To continually improve the services we provide and their respective processes, within a functionally effective and efficient structure.
- To make us our clients' first choice, offering products and services that suit their needs.
- To achieve sustainable annual growth in order to ensure that FibNet's share- holders get a good return on their invested capital.
- To achieve the full satisfaction and integration of FibNet's employees in all aspects of our activity, particularly in the Quality process, with the company being run ethically and with respect for our clients, employees, shareholders, suppliers and the communities with which and in which we work.
- To progress on our road to excellence in accordance with established plans and objectives.

## Strategy

Our Quality Strategy is an integral part of FibNet's planning system and is a part of our business strategy and planning. The latter determines our strategic orientation in the various market activity areas and sets out our business objectives.

The requisites of the Quality Management System are defined and considered in the integrated, strategic decisions made and in the processes and procedures we follow.

FibNet takes full responsibility for the Quality of the Services and Products it supplies and undertakes to ensure that Total Quality and Continuous Improvement are key elements in the Company's culture.



# **REFERENCES**



#### **RENOWED CUSTOMERS**



















































# MAJOR PROJECTS COMPLETED AND ONGOING

Client	Project Designation	Project Description	Location	Value/ Estim. value	Status
PT Comunicações	Design and construction of FTTH networks	Design, licensing and construction of FTTH - GPON access networks with over 620 miles of fibre cable installed, 250.000 splices, 120.000 Homes Passed	Portugal	15.600,000,00€	Ongoing
SICE	Highway Transmontana (A4) and Main Itinerary (IP4)	Fiber optic communications network for Control and Traffic Management	Portugal	245.000,00 €	Ongoing
ZON TVCabo	Design, Licensing and Building of fibre optic distribution networks	Design, Licensing and Building the Fibre optic portion of Hybrid Fibre-Coax (HFC) Networks in a span of more than 200 miles	Portugal	1.785.000,00€	Accomplished
	Construction of FTTH networks	Construction of FTTH - GPON access networks in Paredes - Oporto, 12,000 HPs	Oporto	1.150.000,00€	Ongoing
TVTEL	Design and construction of FTTH networks	Design and construction of FTTH - GEPON access networks in Lisbon. Were the first 50,000 HPs built in Portugal in FTTH topology	Lisbon	4.480.000,00€	Accomplished
Cabovisão	Fibre optic ring countrywide	Design, licensing and installation of a 1,250 miles countrywide fibre optic ring network connecting 35 Hubs.	Portugal	50.000.000,00€	Accomplished
	Project, licensing and construction of Technical Rooms	Design, licensing and construction of 35 technical rooms along the contrywide fibre optic ring.	Portugal	5.152.000,00€	Accomplished
	HFC CATV Networks	Design, Licensing and construction of Hybrid Fibre-Coax (HFC) Networks. About 450.000 Homes Passed.	Portugal	37.500.000,00€	Accomplished
	Backbone and access networks maintenance	Backbone and CATV networks preventive and corrective maintenance, since August 2004.	Portugal	9.050.000,00€	Ongoing
	Installation of subscriber services and technical assistance	Installation of Cabovisão's services in more than 95.000 subscribers and more than 150.000 Technical assistances since year 2000	Center and South of Portugal	45.724.000,00€	Ongoing
Colt Telecom - Serviços de Telecomunicações Unipessoal, Lda,	Telecommunications Fibre	Engineering design and construction of fibre optic network. Fibre connections to Major Enterprise and SME customers.	Oporto	219,375,00 €	Accomplished
		80 miles of fibre cable installed, spliced and tested at 1310 and 1550 nm. Fibre connections to Major Enterprise and SME customers. Preventive and corrective maintenance.	Lisbon	2.585.000,00 €	Accomplished
Águas do Douro e Paiva S.A.	Remote in-band management over fibre	1,5 miles of Conduit Constructed, 155 miles of sub-ducts installed, 80 miles of fibre cable installed, spliced and tested at 1310 and 1550 nm.	Oporto	350.000,00€	Accomplished
Numericable SA	Upgrade design of existing HFC Networks	Redesign of existing HFC networks to FTTLA and FTTLA+ topologies (424.000 HP's)	France	2.120.000,00 €	Accomplished
	Preventive and corrective maintenance of CATV networks	Preventive and corrective maintenance of HFC - CATV networks	France	252.000,00 €	Accomplished
Free	Telecommunications Fibre Optic Networks	Construction of FTTH - P2P access networks. Horizontal and vertical Network	France	1.550.000,00€	Ongoing
SFR	Telecommunications Fibre Optic Networks	Construction of FTTH PON - GPON access networks.	France	750.000,00€	Ongoing
		Construction of the FTTH - P2P access networks in industrial parks		95.000,00€	
Sogestrel	Telecommunications Fibre Optic Networks	Upgrade of the existing Numericable CATV network to FTTLA and FTTLA+ topologies. We instaled, spliced and tested fibre cables and removed the coaxial cables.	France	320.000,00€	Accomplished
CIRCET	Telecommunications Fibre Optic Networks	Fibre optic cable installation and splicing for France Telecom	France	165.000,00€	Accomplished
Eiffage Numerique	Fiber optic communications network	Installation and commissioning of enterprise optical fiber network at regional level. Department 78 (lle de France).	France	652.000,00€	Ongoing
OutreMer Telecom	Mobile Network Operator	Construction and commissioning GSM and data network solution including MSC/VLR, HLR, BSC OMCR, OMCS, IN, CRBT, VMS, MMS, EPIN and GPRS/EDGE, WAP gateway and UPS	Reunion and Mayoite islands	480.000,00 €	Accomplished
Global	Mobile Network Operator	Design a fibre optic ring network connecting several sites at 2 Mbts in Parana state	Brazil	150.000,00€	Accomplished
	Mobile Network Operator	Construction of 23 telecommunication towers with 70 m high in the states of Parana and Santa Catarina	Brazil	1.150.000,00 €	Accomplished
TelespCelular	Mobile Network Operator	Mobile network quality monitoring and optimization with TEMS and QVOICE	Brazil	115.000,00€	Accomplished
	Mobile Network Operator	SDH Links installation in São Paulo state	Brazil	2.100.000,00 €	Accomplished





















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