

NOMOTechⁱⁱⁱ

Broadband Communications Everywhere



Communicate with complete freedom



**A unique combination of network, radio
and telecom expertise ...**

NOMOTECHⁱⁱⁱ
Broadband Communications Everywhere

At your service

Specialists in **Digital Development of Territory** and **wireless networks** for High-Speed Internet delivery since 2003, NOMOTECH has earned an international reputation thanks to its total mastery of the technology, from the core network to the end-user.

In order to provide top-quality services to subscribers in any geographic location, NOMOTECH deploys high-performing wireless infrastructures combined with the most appropriate means of backhaul and transport (high-speed radio, optical fibers, and satellite bridges).

This allows NOMOTECH to offer **the most appropriate broadband solutions** to its carrier clients, ensuring an optimized operating & total cost of ownership; NOMOTECH clients can easily and quickly complete territory coverage, and increase market penetration.

Thanks to its skilled professionals, to the high performance of its Wifi, WiFIMAX and WiMAX infrastructures, and to a close collaboration with global operators, NOMOTECH is at work on projects in numerous regions in Europe and Africa today, providing **thousands of subscribers**, individuals and professionals, **fixed and mobile**, with access every day to **High-Speed Internet** and **telephony services** (VoIP and mobile Wifi).

Offshore sites and isolated living areas



Isolated living areas (offshore platforms, mining zones) can benefit from high-speed and VoIP telephony services thanks to the infrastructures that NOMOTECH has already deployed for several years, notably in equatorial Africa. The interconnection of the global Internet network is carried out by satellite, reaching subscribers via wireless technology.

Hotspots and Mesh networks

Endowed with dynamic routing features and supporting legal intercept, the NOMOTECH system is designed for use in Hotspot environments, notably in ports and tourist zones. Anyone equipped with a Wifi compatible terminal (portable PC, PDA, GSM/Wifi telephone) can connect as a nomadic user, with flexible subscription billing.



Ultra high-speed radio bridges



The NOMOTECH equipment enables reliable & secure connections between remote sites tens of kilometers apart, with speeds up to 100 Mbps. These radio bridges can be hot-standby protected and encrypted; they also allow high-speed Internet connections in isolated locations, replacing more expensive and slow-to-install cabled networks.



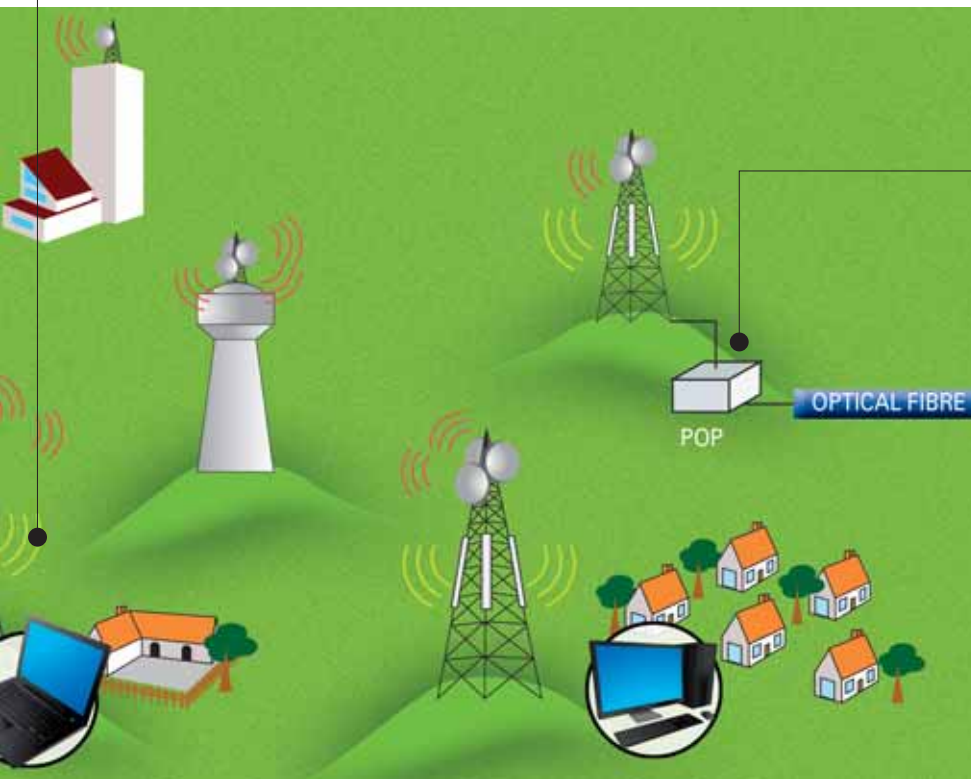
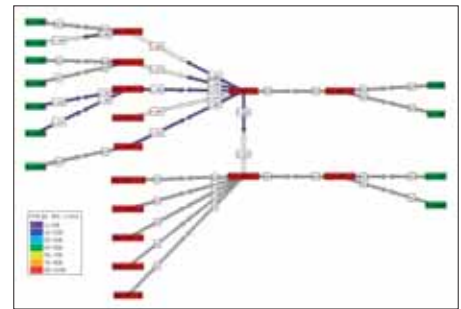
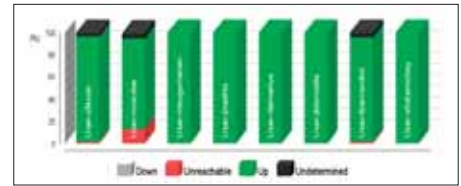
To make Universal Broadband access a reality now



IDYLE Telecom
West-TELECOM

Serving broadband-less areas

The NOMOTECH infrastructures are ideal for covering broadband-less areas (e.g.: remote countryside, villages, mountain regions), offering everyone the possibility to take advantage of broadband. For example, in the rural Manche area in NW France, nearly 100 % of the population now enjoys high-speed Internet connectivity. Particularly quick to implement, NOMOTECH solutions allow more operators to benefit from an excellent return on their investment. Use of common standard (802.11) Wifi base stations allows customers to connect using standard low-cost Wifi terminals or CPE.



Operation and Supervision

NOMOTECH has developed a system of custom-made solutions for operators in order to supervise and run infrastructures, with the aim of guaranteeing optimal quality of service and performance for network users

- QoS Server [prioritization of voice versus data transfer, of Internet use]
- Authentication server [management of subscribers]
- Network Management Server [supervision, fault management, routing]
- Security Server [tunneling – encryption – firewalling]

At the core of the infrastructures, the NOMOTECH base station

- Multi-SSID support – multi-operator infrastructures
- Integration of QoS layers (Quality of Service, called 802.11e) and security (802.11i) of WiMAX allowing notably IP telephony (via Internet) with optimal quality
- VPN modes, Hotspot and integrated Mesh networks
- Dynamic routing (RIP v2, OSPF / BGP)
- Remote diagnostics (SNMP agents in each active piece of equipment)
- Authentication of subscribers and management of databases (RADIUS), secure tunneling (L2TP) of communications between the client's station and the core network, traceability and logs of connections according to regulations
- Configurable prioritization or separation of flow (voice over IP, email service, navigation on Internet, P2P...)
- Support of load-balancing, alternative routing, automatic reconfiguration of network routes
- Compliance to international standards IEEE 802.11 (Wifi) or 802.16 (WiMAX) according to the configurations
- WiFIMAX 2.4 & 5.4 GHz, WiMAX 2.5 & 3.5 GHz, last mile wireless networks 700/900 MHz, 3.5 & 5.8 GHz...
- Up to 8 radio channels per WiFIMAX base station, for simultaneous management of backhaul connections and distribution sectors to subscribers
- Rugged equipment ideal for extreme conditions (temperature of - 40°C to + 85°C, damp climates and dusty conditions)
- Modular & upgradable design: interchangeable radio cards according to frequencies and technological evolutions



Internet Service Provider (ISP)

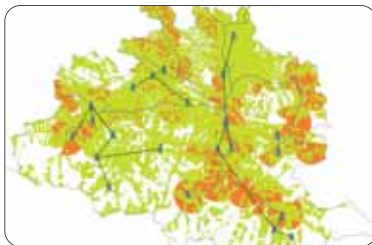
WEST TELECOM and IDYLE TELECOM (NOMOTECH business units) sell Internet and Telephony subscriptions to individuals and businesses. They use WiFIMAX/ WiMAX infrastructures provided by NOMOTECH or its partners. The offers include connections at a guaranteed speed or in best effort mode for professionals in WiMAX, a symmetric WiFIMAX offer for individuals, VoIP telephony and Wifi cell phones.

NOMOTECH ensures complete service for the Digital Development of Territory, from the infrastructure to the sale of services to end-users.

An offer of modular services and solutions adapted to each client

Radio engineering and wireless solutions

Expert in radio technology, NOMOTECH develops and markets a complete range of wireless solutions, designed to serve broadband-less areas, and to equip hotspots, Mesh networks, or high-speed radio bridges. Using a combination of different technologies (Wifi, WiFIMAX, WiMAX) enables NOMOTECH to provide its clients with the most appropriate infrastructures for the demands of the territory.



Field studies

- Needs analysis
- Topography
- Site research
- Radio cell planning
- Site selection

After a detailed needs analysis, a topographic study of the territory using 3D topography software determines the high points that can be used as distribution sites. RF modeling of the areas is then performed to confirm good coverage of the territory.

The detailed planning of NOMOTECH enables full territory coverage.



Network Engineering

- Core Network
- IP architecture
- Security, authentication
- Subscribers management
- QoS

Once the infrastructure dimensions are verified, IP networks are designed and implemented to ensure reliable end-to-end operation.

NOMOTECH's know-how guarantees its clients a high level of network availability.



Telecom Engineering

- VoIP / SIP
- Interconnections via global Internet
- Services bulk purchase
- Secure connections

NOMOTECH also works closely with global Telecom solution suppliers in order to provide interconnections to the Internet networks, to purchase bandwidth and IP transit in volume, and to assure long distance secured trunks and VoIP services.

NOMOTECH's partnerships help provide network users with a vast array of services.



Deployment

- Installation
- Activation
- Provisioning

NOMOTECH works with regional partners and provides complete project management of its networks from deployment to customer use. NOMOTECH can also direct site security and handle administration.

Validated deployment procedures enable NOMOTECH to quickly deploy & activate a network.



Operating

- Supervision
- Maintenance
- Upgrades

NOMOTECH has developed a platform of supervision to monitor its networks across the world in real time. This operation platform can be configured according to each client's specific requests. Supervision is possible thanks to "SNMP" agents embedded in every active piece of equipment (base station, power units, servers...). Any performance anomaly or quality issue is immediately detected, which allows curative and preventative maintenance to be conducted efficiently and expeditiously.

Preventative maintenance and high-performing monitoring technologies guarantee a network that always operates optimally.

TESTIMONIAL

NOMOTECH is a Manche-based company which has successfully grown over the past years. Well established on today's French digital market, it has shone in its ability to find technologically innovative solutions, and is now recognized as a key actor for Territory Digital Development. The keys to NOMOTECH's success are: the advanced technical skills of its team and its ability to manage global projects from conception to network deployment, operation and supervision. With its Wifi technologies – called WiFiMAX – NOMOTECH has developed one of the largest Wifi networks in Europe for the Manche regional community. Other French communities are now adopting this model, and demand NOMOTECH's services and expertise in order to bridge the digital divide. NOMOTECH infrastructures are indeed the most cost-effective solutions available on the market today.



Philippe Le Grand
Director of Manche Numérique



The advantages of NOMOTECH infrastructures and services



Active in Europe and Africa since 2003, NOMOTECH has created regional broadband networks covering entire regions and enabling competitive services from a range of ISP.

- A true global infrastructure with centralized supervision.
- Robust and intelligent systems, which guarantee first class performance, quality of service, traffic prioritization, use control, updating, and remote management.
- Compliance to the latest international telecom standards (802.11, 802.16) and adaptation of each configuration to existing regulations.
- NOMOTECH's flexible designs enables cost-effectiveness and easy expansion of network infrastructure to meet future demand.
- Creating broadband networks in remote locations anywhere in the world, and connecting them to the World Wide Web
- NOMOTECH has proven its ability to provide broadband services to isolated regions covering more than 6000 km², meeting the daily needs of thousands of end-users for Internet and VoIP telephony.
- Internationally recognized Telecom and Internet expertise, with a modular service offer appropriate to each client's demand.

NOMOTECH[®]
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