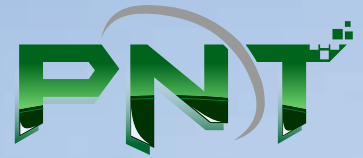


ProNewTech S.A.

Consulting Engineers



PRONewTECH

CONSULTING & ENGINEERING



Maison du Savoir – University of Luxembourg – Esch/Alzette – Belval

Network Architecture
Green ICT
Active Security Services
Call centers

Datacenter engineering
Smart Building approaches
Datacabling
Facility / Project management





1 ■

Presentation – Services

Created in 2009, **ProNewTech** is an independent Luxembourg based and owned engineering consultancy, providing a complete range of services in the fields of Consultancy and Communication technologies.



ProNewTech strategy operates in the field of technology. ICT Networks are transforming every organization, every enterprise and administration needs a technology-enabled sustainable strategy to take advantage of

the opportunities. Whether it is business strategy, technology strategy or operations strategy, our experts drive value, shape new green IT based network design operating for the future in the following design:

Datacenter and tele hub engineering

Network Architecture services:

- CAD Design and follow-up of the IT data cabling installation
- Design of cloud architectures
- Studies to virtualize IT servers and SAN environments
- Elaboration of VoIP, Call center, Dealing room solution and voice recording RFPs

Active security services:

- Intrusion detection concepts
- Access control systems
- Video surveillance studies
- Design and follow up of the implementation of Video over IP services, intrusion detection integrating existing products
- Centralized guard monitoring station layouts
- Badge payment systems

Indoor GSM coverage



2. Research and Insights – Green IT / Smart Building

ProNewTech is registered as a private research organization and received grants from CAESIE and B-BICE+ for the activities in the Smart Building design. Our consultants designed the first virtualized, centralized energy efficient Smart Building network for the Solarwind in Luxembourg.



Green IT / Smart Building Approach

A change of mindset is an imperative:

- Placing servers in a datacenter and not on the floors leads to a reduction in required floor spaces for local IT rooms.
- Installation of hot and cold corridors in a private datacenter in the basement instead of an air conditioning system for every technical floor
- Establishment of a centralized fire extinguishing system instead of a distributed one on all floors
- Mutualizing and sharing of telecom access connections between tenants limits costs for every tenant

For each of these key points, ProNewTech will deliver its expertise and know how in order to implement state of the art technologies.



3

References

BGL BNP PARIBAS – Luxembourg – Kirchberg

Project description:

- IT cabling concept for the building of BGL BNP PARIBAS (CBK II)

Establishment of technology intelligence:

- Establishment of a GREEN ICT strategy based on a Smart Building design approach
- Execution of technical meetings with different international suppliers
- Visits of similar recently constructed buildings
- Identification of different technologies that fulfill BGL BNP PARIBAS's needs
- Identification of market-available strategic concepts concerning the implementation of IT infrastructures and data cabling
- Definition of a concept for indoor GSM 4G/5G coverage (LTE)

- Concept for the implementation of technical facilities
- Establishment and elaboration of a tender document
- Coordination of the request for proposal (RFP)
- Technical and financial evaluation, formulation of recommendations
- Control of follow-up works until final certification

Period of achievement: 2013 - 2015



**BGL
BNP PARIBAS**

UNIVERSITY OF LUXEMBOURG – Esch/Alzette – Belval

Mission 1:

Studies to elaborate recommendations concerning the security of the university campus in the context of intrusion detection, video surveillance and access control.

Study concerning the implementation of an access control system for all buildings on the campus Belval: 10.000 badges

Period of achievement: 2011 - 2013

Mission 2:

Studies, analysis and coordination concerning the implementation of the security infrastructure in the new buildings (16 buildings) of the University of Luxembourg.

Project stages:

1. Preliminary design study (analysis, recommendations, budget estimation and draft plans)
2. Detailed preliminary design study (dimensioning, detailed technical specifications, detailed plans and budget allocation)
3. Project execution stage (execution plans, definition of final dimensions and final technical specifications)
4. Call of bids including detailed cost estimations
5. Follow-up work
6. Delivery of a turnkey security infrastructure

The solutions that need to be installed compromise: an intrusion detection system, an access control system (+/- 10.000 badges), a video surveillance system, a sound system and the implementation of a centralized management system.

Period of achievement: 2013 - 2017



University of Luxembourg – Esch/Alzette – Belval



UNIVERSITÉ DU LUXEMBOURG



Cité des Sciences

Mission 3:

ProNewTech is in charge of realizing detailed CAD drawings for the Datacenter of the University of Luxembourg regarding:

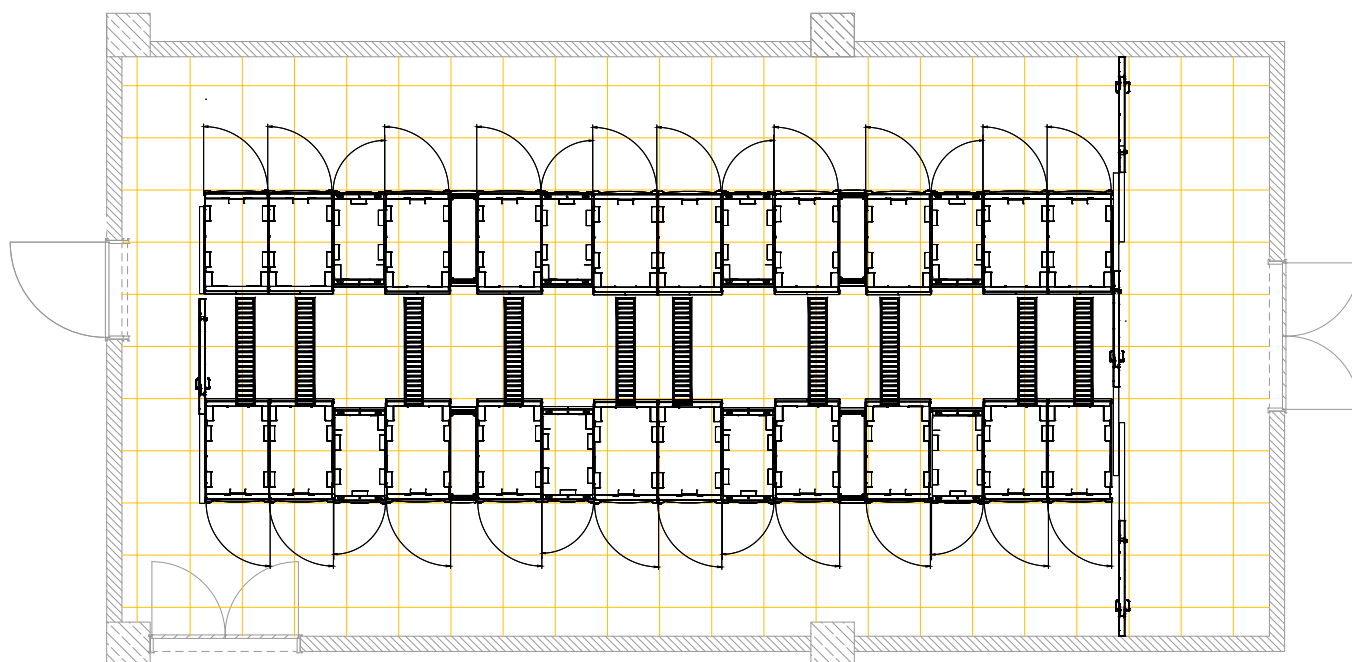
- Rack layout of the 500 sqm Datacenter room
- False floor design
- Hot aisle and cold aisle design
- Extinction system design
- Redundant Power distribution

The engineers of ProNewTech are responsible for the supervision of all works in the Datacenter up to the reception.

Mission 4:

Follow-up of the data cabling works:

- Establish and ensure the planning and coordination of work
- Track, manage and coordinate work with all stakeholders including the Fonds Belval and the project manager
- Provide ongoing reporting on the various projects
- Identify problems, propose solutions and address the subjects to core team of the University
- Validate the work milestones in respect of RFP specifications
- Create and analyze reception test reports



Datacenter layout



SES Techcom Services – ProNewTech – MDC in the MENA region



In this project, the Luxembourgish satellite communications company will support a satellite operator in the development of its new teleport facility.

This teleport will provide satellite control and communications support for satellites which are going to offer broadcast and broadband services.

Period of achievement: 11/2014 - 11/2016

On November 03rd 2014, ProNewTech and its sub-contractor MDC Group signed a service agreement with SES Techcom Services for the implementation of a new teleport project in the Middle East.

KPMG – Luxembourg – Kirchberg

Project description:

- Development of a security concept for the new KPMG building
- Needs analysis based on the architecture and the layout of the new building
- Study concerning the configuration of the following systems: intrusion detection, video surveillance, technical alarms, communications, access control, electronic payment, centralized management and interfaces
- Definition of a main security concept (active and passive)
- Elaboration of a tender document for the new security concept
- Elaboration of plans and drafts based on existing CAD files
- Launch of a limited request for proposal (RFP)
- Technical and financial evaluation of received proposals
- Presentation and delivery of a detailed evaluation

Period of achievement: 2013 - 2015

Additional References:

- **ACL – Bertrange**
Multimedia converged contact center; VoIP
- **BANK OF COMMUNICATIONS CHINA – Luxembourg**
Facility management; Data center; Network equipment, installation coordination
- **BELGACOM TANGO – Luxembourg**
Commodo analysis of +/- 300 base stations
- **CACTUS – Luxembourg (26 locations)**
Virtualized VoIP telephone environment
- **CARNEGIE INVESTMENT BANK – Luxembourg**
Telephony network; Request for proposal
- **LA LOTERIE NATIONALE – Leudelange**
Network and ICT cloud – Concept
- **LA LUXEMBOURGEOISE – Leudelange**
Contact Center – VoIP – switching network
- **BANQUE ET CAISSES RAIFFEISEN – Luxembourg**
Migration/modernization of existing security network into new agencies
- **SKANDINAVISKA ENSKILDA BANKEN – Luxembourg – Howald**
Preparation of call for tender documents; Network equipment
- **SOLARWIND – Windhof**
Concept for the 1st Smart Building in Luxembourg; Green ICT
- **VILLE DE LUXEMBOURG – Luxembourg**
Mobile telephone service; indoor coverage installations



KPMG Luxembourg – Kirchberg



Solarwind – Windhof



4. Our Values – Our Know-How

At ProNewTech our core values guide us in everything we do. The team

- **Client:** At ProNewTech, our clients come first. How can we do a better job for them? We never stop working on it.
- **Collaboration:** We collaborate — both with one another and with our clients – share ideas honestly, and work through problems together.
- **Innovation:** It's not always easy to make creative approaches, but our clients and our colleagues expect and value that from ProNewTech.
- **Integrity:** If we don't practice truth — if clients, employees, and shareholders can't count on us to be honest — then why should they trust us?
- **Quality:** Often used by clients to describe ProNewTech's services and employees, it's a critically important company attribute.

ProNewTech is ISO 9001:2008 certified, has a social responsibility certificate, respects the waste management and holds a SDK label.

ProNewTech is member of the Federation of Industrials (FEDIL), the Order of Architects and Engineers OAI, the Chamber of Commerce, LSBC Luxembourg Slovenian Business Club and ACSAL (Agence pour la coopération scientifique Afrique Luxembourg).

We aim to provide our customers with:

- Highly qualified consultants, experts in strategies and policy issues of telecommunications / ICT environments, specialists who organize private business projects as well as institutional information systems;

- Highly motivated consultants with operational experience, having held senior level in the team of regulators and operators;
- Consultants with real experience of ICT environments who are capable to sort out specific issues of demanding ICT and telecommunications networks;
- A consistent methodology based on best practices of the telecommunication sector (companies, government agencies, regulators authorities);
- Proven experience in the design and manage ICT projects enabling communications anywhere, anytime;
- Experience of training and a willingness to communicate and share expertise to the client's teams.





5. Our Team

- **Roland STREBER**
CEO – Chairman of the Board of Directors
- **Jean-Luc ULLMER**
Senior Project Manager
- **Régis BECK**
Junior Project Manager
- **Bertrand PARISOT**
Administrator – ICT Project Director
- **Fabio MILO**
Assistant Project Manager
- **Antoine DEFAT**
Junior Project Manager
- **Patricia COLICCHIA**
Administrative Assistant
- **Frederic BROTTES**
Technical Drafter
- **Muriel QUODBACH**
Account Manager



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