



Presentation of the



## Rural and semi-urban hospital

par **LENODA**  
HOSPITAL

# LENODA HOSPITAL

## TACKLING HEALTH INEQUALITIES

*When? How fast ? How much ?*

---

Working group ready to take action

Quick building blocks

Unique concept

State-of-the-art equipment equipment

Trust and transparency

Intercultural understanding

## **MENS BEHIND THE CONCEPT**

**A scientific committee to ensure that the site is set up and maintained. More and more medical research is needed to diagnose, choose treatments and evaluate their effectiveness..**

**The hospital therefore plays a crucial role in the decision decision. This responsibility for the therapeutic therapeutic decision entails an obligation to irreproachable quality for these examinations. In addition participation in clinical research may be envisaged, and in this case the quality must approach international standards.**

**The Scientific Committee is responsible for supporting the setting up and running the LENODA Rural Hospital LENODA Rural Hospital.**

## **A NEW GENERATION OF HOSPITALS**

**BY LENODA HOSPITAL**

The LENODA Rural Hospital Centre, the One-Day Clinic All over the world, populations with growing demands for a healthy life have put the focus on healthcare facilities. This has been achieved through the rapid development of improved methods of diagnosis and treatment.

The LENODA Rural Hospital Centre, the One-Day Clinic All over the world, populations with a growing demand for a healthy life have put the emphasis on healthcare institutions. This has been achieved through the rapid development of improved methods of diagnosis and treatment.

The LENODA Rural Hospital can be located in both urban and less densely populated areas and, in addition to the primary service, serve as a referral centre for large category II/III hospitals. The initial diagnostic work-up in the LENODA Rural Hospital Centre can therefore be continued in the large hospitals with efforts to provide in-depth treatment for patients who need it.

Two to four LENODA Rural Hospital Centres can also form satellites with a functional connection to a larger category II/III base hospital located in the city centre. The satellite clinics can then be served by professional teams from the base hospital. The teams rotate between the satellites and can offer high-quality medical services to people in a wide area. This reduces transport costs for a significant proportion of those requiring surgical, diagnostic and therapeutic services..

The basic model of the LENODA Rural Hospital Centre includes day surgery, outpatient surgeries, family medicine (GP surgery), a post-operative recovery area, a service area, a 'light' emergency area with radiology and a wet laboratory.

The basic model buildings can be extended to include a dental clinic, a larger radiology department and an obstetrics department. In the adjacent buildings, additional space can be added for diabetes treatment, a larger neighborhood area, rehabilitation and staff accommodation.

## BASIC SERVICES

An example of a basic level of service for a rural hospital in LENODA has been drawn up as follows:

### **Outpatient surgery**

The day surgery service will mainly cover general surgery, orthopedic surgery and urology. Operating rooms can also be loaned to other external professionals, for example for gynecological surgery, ENT surgery, cataract surgery and plastic surgery.

The surgical service will be provided either by local professionals or by rotating teams of specialists, whose presence will depend on the frequency of diagnoses in each specialist area.

Outpatient diagnostic work by family doctors and specialists will be carried out at the LENODA Rural Hospital Centre by general practitioners and specialists in different areas of surgery. The pre-operative assessment is carried out by wet laboratory analyses and, on occasion, by referral to larger diagnostic centres..

The family medicine clinic can also serve as a vaccination centre for children and adults. The family medicine general practitioner can refer a patient directly to a specialist for a final diagnosis and further diagnostic examination. In this way, the diagnostic work can be followed by the decision and time given on the spot for surgical therapy..

The outpatient clinics and operating rooms thus form an integrated unit for the diagnosis and treatment of a large number of surgical diagnoses within most surgical specialities..

### **The observation pavilion zone**

The LENODA Rural Hospital covers the need for night care or prolonged care (more than 24 hours) through the presence of a pavilion of rooms with observation beds and step-down beds. These beds can be used both for observation in emergencies and for prolonged post-operative care after surgery when the distance from home is long.

### **Pharmacy**

The LENODA Rural Hospital Centre will also include a pharmacy to cover the need for pharmaceutical products for the home surgery service, including patients' prescriptions when they leave the clinic. The pharmacy will also serve the surrounding population.

## FULLY EQUIPPED WITH STATE-OF-THE-ART STATE-OF-THE-ART

### Intérieur

The interior of the LENODA Rural Hospital is designed to achieve a high level of quality. The design considerations require compliance with medical standards. In addition, the LENODA Rural Hospital will be optimized with regard to patient flow and the appropriate separation of different functions in order to minimise the risk of contamination of the semi-sterile and sterile areas of the LENODA Rural Hospital. Particular attention must then be paid to the ventilation system and staff hygiene routines.

### Surgical Department

In the current basic model, the LENODA Rural Hospital Centre has an operating room (OR). The OR can also be used for minor surgical procedures, and is optionally equipped for endoscopic services.

### Anesthesia

Several types of anesthesia can be used, including general, local and regional anesthesia, as well as various levels of sedation. Depending on local traditions, gas or intravenous methods may be chosen.

### Post-operation recovery area

The number of beds generally depends on the number of operating rooms, the number of operations per room, the type of diagnosis and the experience of the surgeons. In the current model, eight post-operative beds are included.

### CSSD

The Central Sterilization System Department (CSSD) is responsible for the decontamination, cleaning, disinfection, assembly, packaging and sterilization of reusable instruments in the LENODA Rural Hospital Centre. Sterile and non-sterile instruments are transferred to separate corridors.

### Servicing equipment

Hospital engineering: Engineering services refer to the specific construction of utilities, machinery, equipment, processes and work systems required for the hospital.

### Computer hardware and software

The IT service must be ordered from local suppliers to coordinate with the local systems of the regional reference hospitals.

Four servers are required: connection server, backup server, database server and application server. Hardware and software can be included on request.

An air-conditioning system is required for each building and each individual area of the hospital. Operating rooms require a separate air conditioning unit with HEPA filter (< 10 CFU). Operating rooms will be pressurized in relation to the surrounding areas.es.

Medical gases are distributed to the various workstations at the LENODA Rural Hospital via a 'medical fluids' centre. The most common gases are oxygen, compressed air and nitrous oxide. Because of their toxicity and flammability, anesthetic gases must be removed from the operating room by a suction system that directs the gas to the outside. Carbon dioxide will be added when laparoscopic methods are included in the surgical service.

### Dining, Cooking, Canteen

Food and drink will be served to patients, families, staff and professionals in specific areas for hygiene reasons..





## DAY SURGERY OPERATIONS

### **General surgery**

Hernia repair (inguinal and abdominal)  
Hemorrhoidectomy - Excision of sebaceous cysts and lipomas  
Varicose vein surgery - Excision of dermoid cysts / pilonidal sinus

### **Orthopedic surgery**

Arthroscopy (knee, shoulder) - Achilles tenolysis and tendon repair - Correction of metatarsal deformities - Carpal tunnel release

### **Gynecology**

Laparoscopy / Hysteroscopy - Dilation- curettage  
Conization of the cervix - TVT for primary urinary incontinence - Vacuum curettage after miscarriage

### **Urology**

Corrective surgery for induration of the plastic penis - Separation of preputial adhesions  
Hydrocele testicle - Simple transurethral bladder resections/excisions - Bladder neck incisions/small resections of the prostate (TURP)

### **ORL**

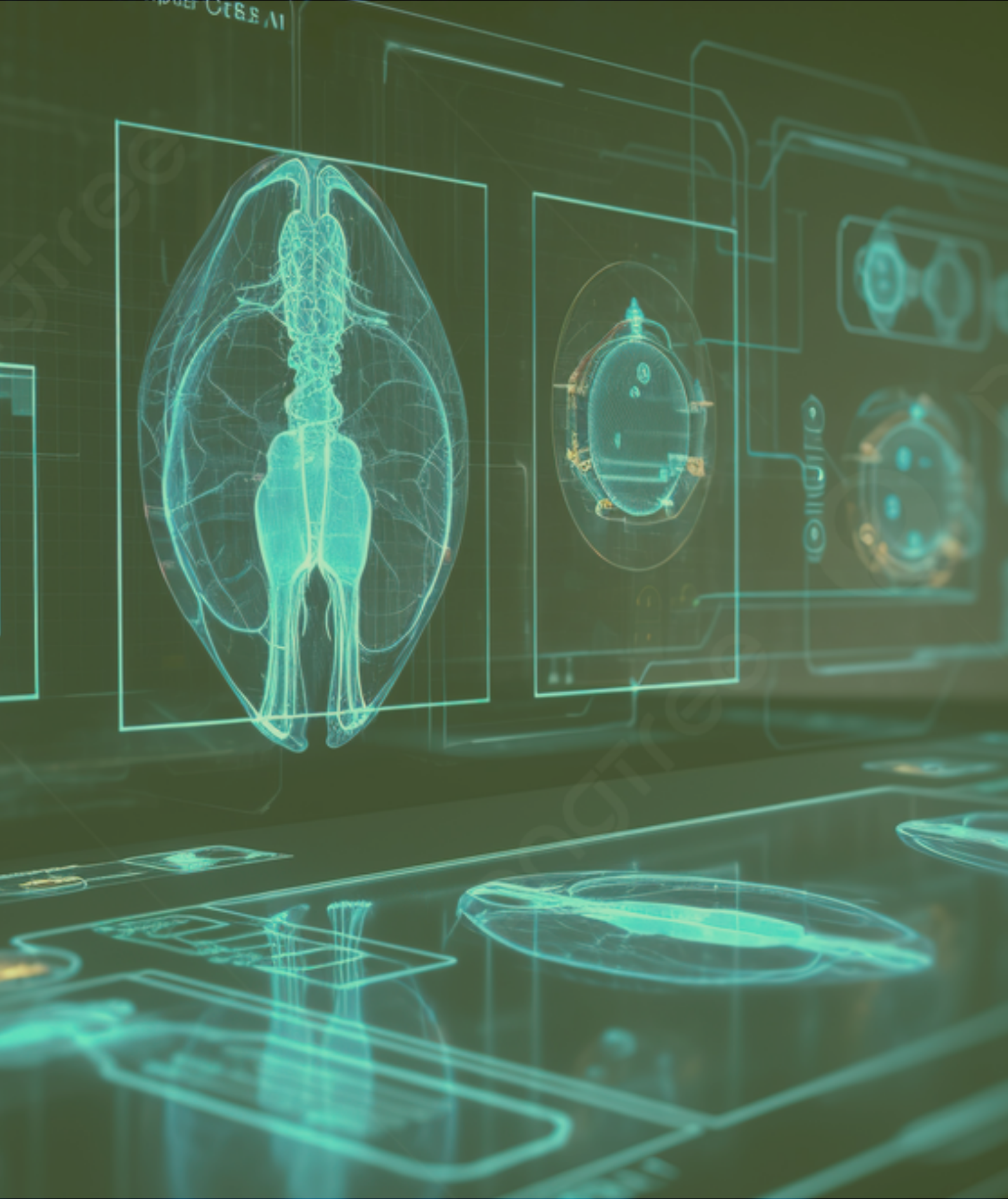
Tonsillectomy - Adenoidectomy - Atrial tumors - Atrial septoplasty - Surgery for nasal bone fractures

### **Cosmetic Surgery**

More than 60 diagnoses can be treated with over 50 different types of surgery.

### **Oncology (optional)**

Nuclear medicine department including cyclotron and PET scanner  
Diagnosis of various cancers etc.



# INTRODUCTION

To the concept



Centre Hospitalier  
Rural & Semi Urbain



## FACTS & CONTEXT - 1

**In a marvellous world, we imagine a society that is not confronted with health problems linked to a range of socio-economic factors, development, lack of information, administrative, financial, etc...**

The COVID-19 epidemic has made us realise how fragile our healthcare systems are worldwide, and how intense the constraints and risks are due to a lack of resources and tools. But it has also shown us that we are no longer immune to other risks, to other more devastating and deadly pandemics, where the state of health and immune systems of our populations are an obligation if we are to better grasp a future world full of unknowns and preserve notions of healthy living.

- **Africa has suffered from a number of pandemics, the most recent of which was Ebola, which was catastrophic for some countries in terms of loss of human life, but also halted or stagnated economic development - a 'stop and go' attitude on the part of donors and a reluctance on the part of investors to come on board during this period.**
- **Recurring diseases are still wreaking havoc on the continent, including malaria, cholera and measles, as well as AIDS and undiagnosed cancers.**
- Public information, prevention and upstream detection as close as possible to the population is an obvious need, identified by all the players in the sector, who cannot dispute the urgent need to be as close as possible to the population in the human interest of the integrity of their health, but also in the interest of nations in their sound socio-economic development.
- Beyond the agreed ethics of the medical sector and its necessity, a population in good health is a population that educates itself, trains itself, produces, builds a secure living environment and helps a nation grow..
- The lack of financial and human resources, infrastructure, the complexities of access, road infrastructure and energy often mean that the authorities are faced with major problems that require them to compromise on their primary obligations..
- **The complexity of access and the disparity between regions do not favour access to healthcare for people in rural and semi-urban areas.**
- Obligations linked to urban megacities whose demography is exploding, depriving rural and semi-urban areas of the capacity to access healthcare for their populations, even though these rural and semi-urban areas **represent more than 40% of Africa's intercontinental national populations today.**



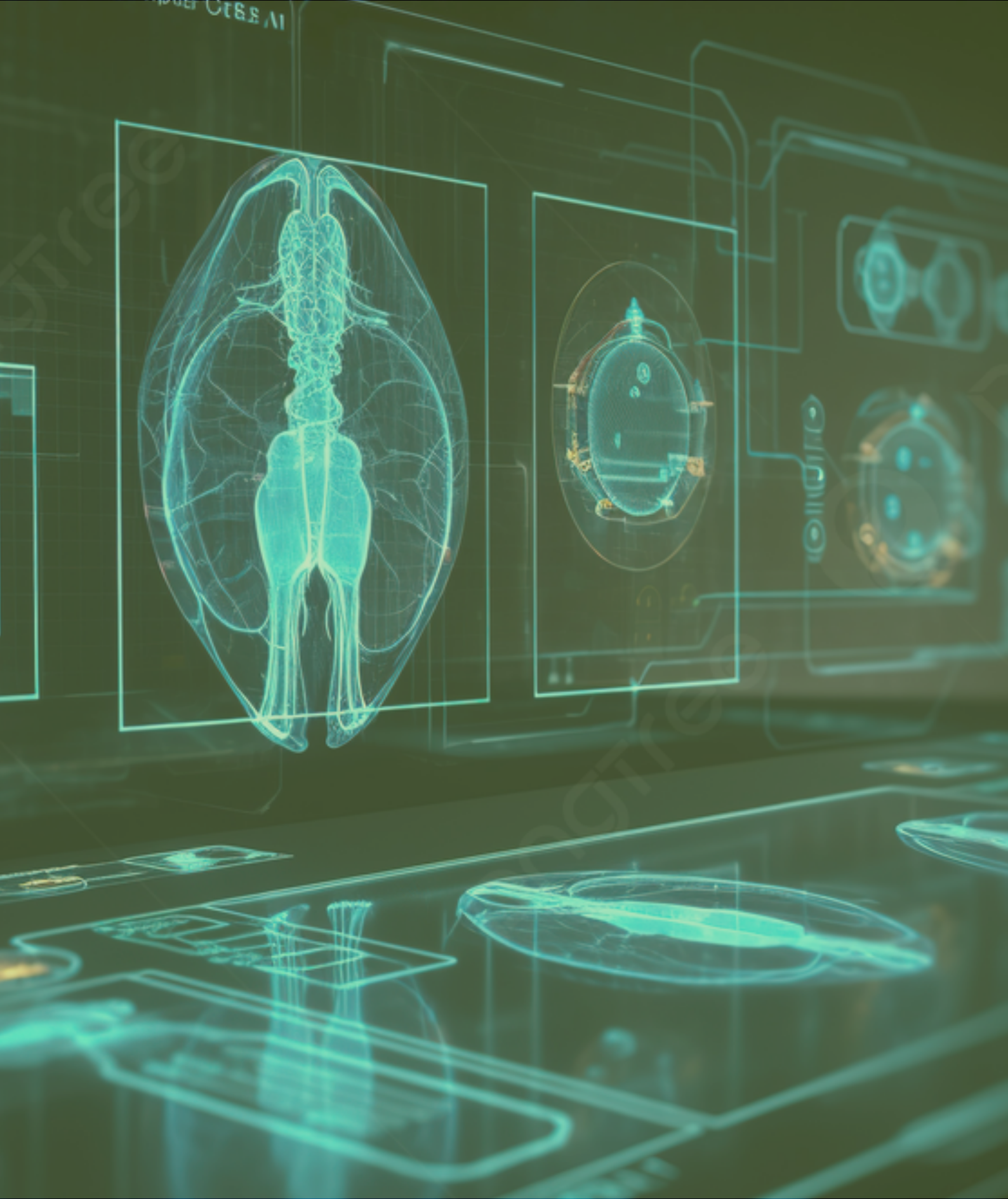


Centre Hospitalier  
Rural & Semi Urbain



## FACTS & CONTEXT - 2

- According to OECD (Organisation for Economic Co-operation and Development) indicators, the urban demographic explosion (rural exodus) **will continue to increase over the next 3-4 years, before stabilising and moving in the opposite direction.**
- **This curve is set to reverse extremely rapidly as a result of the world's food requirements and the new challenges facing the agricultural industry,** where the African continent still has the greatest territorial potential, the world's future breadbasket and the greatest future human resources capacity between now and 2050.
- **Hence the need to have a population in good health** so as to be ready and operational for this coming agricultural industrial upheaval for African states.
- Schemes introduced in accordance with national medical master plans **tend to think in terms of a macro structure for large urban cities,** with reports on intermediate towns, forgetting rural and semi-urban areas that are often poorly or not at all equipped.
- Intermediary solutions are now available to States whose aim and interest is to get as close as possible to their populations in order to offer in rural and semi-urban areas widespread adapted solutions opening a multitude of care linked to the problems encountered by the populations and by this action reinforcing the national medical offer on the territory.
- **It is in this environment that we have come to offer a completely new vision** and offering, defined solely in terms of population needs, with a micro notion of cumulative capacity per region, autonomous, independent, adapted and responding to the first medical needs.
- This CHRu concept, designed to last, will strengthen the national offer and regulate numerous medical problems as close as possible to villages and areas with little or no coverage, and offer an immediate local service that can relieve the urban health system of the need for primary care, which is in the process of being structured and reorganised.



# STATE OF HEALTH IN AFRICA



## THE STATE OF HEALTH IN AFRICA - 1

44% of the rural population are unable to receive proper treatment, compared with 29% in towns, and over 76% of doctors are concentrated in urban areas (WHO, 2009).

- **Africa has not yet completed its epidemiological transition and faces a dual challenge:** on the one hand, eradicating endemic diseases such as AIDS, malaria and tuberculosis and, on the other, combating the development of chronic diseases (diabetes, cancer) and diseases linked to ageing ...
- In medicine, rural health is the interdisciplinary study of health and health care delivery in the context of a rural environment or place.
- Generally speaking, people's health problems result in absenteeism from work and therefore, from an economic point of view, in a drop in productivity, the consequences of which can go so far as to jeopardise a country's economic survival at work and at school.
- It is a natural observation that there is a correlation between living standards, as measured by GDP in purchasing power parity, and health levels.

Tableau. Caractéristiques générales de la population

		Région africaine	Global
Taille de la population (en milliers)	2013	927 371	7 126 098
	2000	638 974	6 126 622
Pourcentage de la population vivant en milieu urbain (%)	2013	37	53
	2000	34	50
Espérance de vie à la naissance (en années)	2013	58	71
	1990	50	64
Taux de mortalité des adultes (probabilité de mourir entre 15 et 60 ans pour 1000 personnes)	2013	306	152
	1990	361	198
Total des dépenses de santé par habitant (PPA \$ int. \$)	2013	222	1 339
	2000	111	571
	1995	95	530
Revenu national brut par habitant (PPA int. \$)	2013	1 606	10 720
	2000	1 620	6 980
	1995	559	5 453



Centre Hospitalier  
Rural & Semi Urbain

LENODA  
HOSPITAL

## THE STATE OF HEALTH IN AFRICA - 2

### Why are health services poor in emerging countries?

Lack of financial resources, socio-cultural and geographical barriers, quality of care and lack of information about certain diseases are all arguments against seeking care for vulnerable populations.

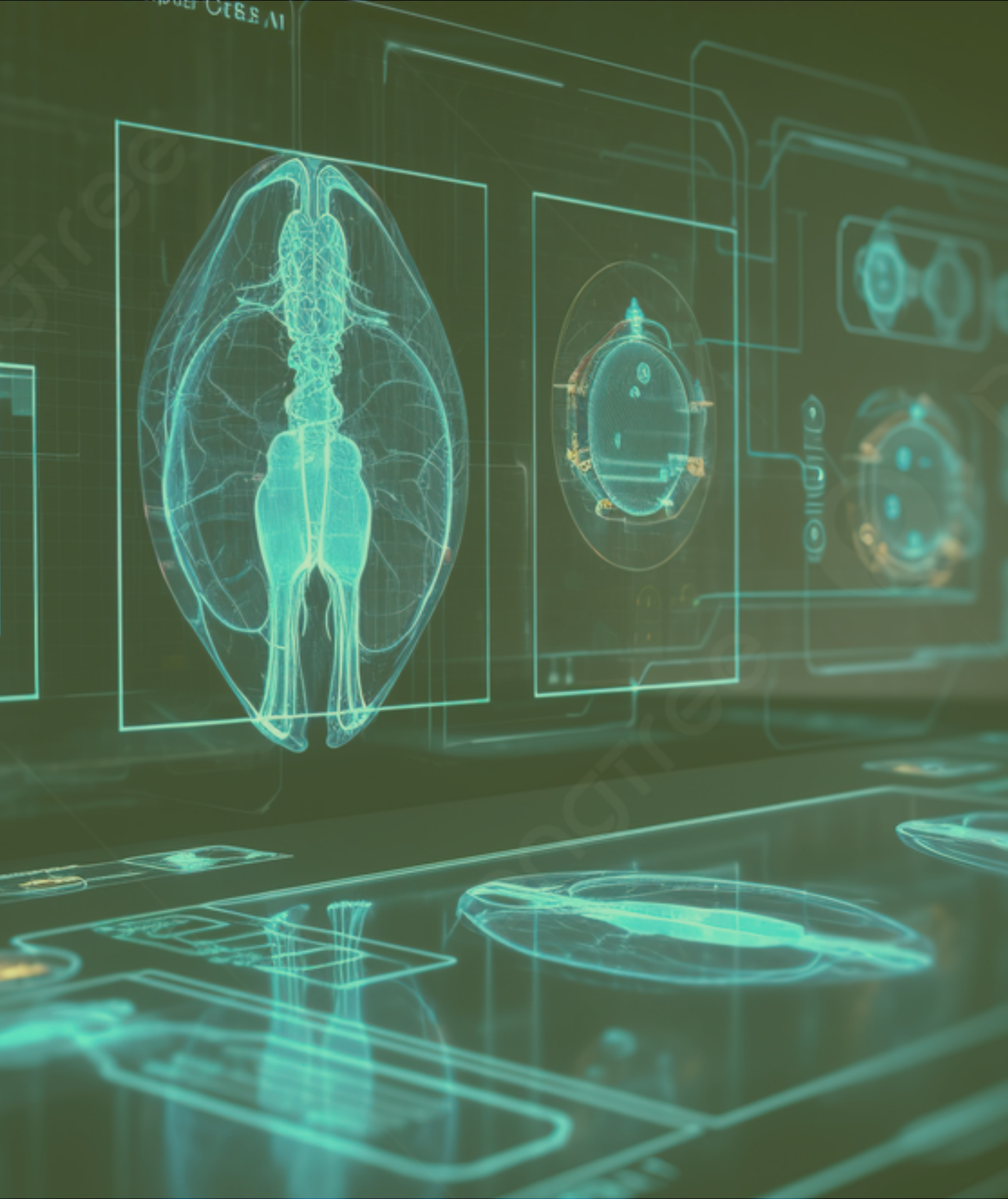
### How can we explain Africa's health problems? ?

One of the main obstacles to the roll-out of Universal Health Coverage in Africa is not only the lack of financial resources, but also inequalities in access to healthcare facilities

### What are the health challenges in emerging countries?

These include lack of access to drinking water, malnutrition, poor parental education, uncontrolled population growth and hostile climatic conditions. In fact, these health figures point to the breakdown of the broader development dynamic.





# CHRu DESCRIPTION AND ITS COMPONENTS



Centre Hospitalier  
Rural & Semi Urbain

LENODA  
HOSPITAL

## OUR PROJECT: THE RURAL HOSPITAL CENTRE (CHRu)

The aim of the CHRu project is to set up hospital facilities in rural and semi-urban areas, known as Rural Hospitals, to meet the immediate needs of the population in the following medical and surgical disciplines:

**Consultations, blood sampling, dental, ophthalmology, ENT, pediatrics, neonatology/intensive care, gynecology, obstetrics/delivery, general hospitalisation, post-natal hospitalisation, traumatology, pharmacy, laboratory, radiology, emergency, intensive care unit, operating theatre (minor surgery), pre-post-op, dermatology/small surgery, sterilization, hemodialysis, mortuary.**

Other associated services, such as preventive medical information, preventive medicine and non-invasive first aid, will be added to the range of medical and surgical disciplines, thereby strengthening the national offering by extending it to rural areas on a sub-regional basis.

The CHRu project is an inclusive, all-encompassing initiative that will strengthen the national medical offer, prevent risks and protect the population and its human capital, which are essential to its development.

It provides overall comfort in terms of speed of installation (3 months per site), ease of deployment in rural and semi-urban areas (immediate), commissioning, with training, expert support, skills transfer, complete autonomy, servicing, maintenance and structuring of the various options offered on the economic model based on a PPP (Public Private Partnership), EPC, BOOT (Build Own Operate Transfer), organized, structured and financed.

The aim is not to set up modules of RHCUs, but 1 to 4 per region to provide the coverage and catchment area needed to bolster the medical offer, without replacing the integrated projects of the various national medical master plans or various projects currently being carried out and/or renovated in urban areas. We offer the opportunity to have a real medical relay network, decentralized and operational between rural and semi-urban areas and urban cities equipped with CHRu.



3D overview of a CHRu (non-contractual photo)

The CHRu is an alternative, immediate, rapid and structured solution for reinforcing and regulating a national healthcare system without changing the overall strategy, but working towards a dynamic and inclusive process of general access to healthcare, based on responsiveness, autonomy and proximity to the population.



Centre Hospitalier  
Rural & Semi Urbain



## CHRu COMPONENTS

### 5 stages that define the components of the project :

1- Installing and commissioning the Rural Hospital Centre (CHRu)

Note: once the concrete slab has been laid, the assembly time for the entire CHRu is 24 weeks (excluding climatic and/or technical contingencies).

2-Providing all the necessary equipment (medical equipment, furniture, accessories and consumables)

3- **Implementation of medical ERP (computerized management system), hardware and software**

4- Maintaining and servicing equipment and networks

5-Supporting medical staff through ongoing training.

### For 3 distinct zones of location:

1- **Hospital and medical site**

2- **Hospital's technical site**

3- **CHRu staff living accommodation**





## THE MEDICAL SITE

- Shelter area for patients and carers Public WC
- Reception / Patient welcome
- General administration
- Consultations
- Blood sampling
- Dental
- Ophthalmology
- ENT
- Pediatrics
- Neonatology / Intensive care
- Gynecology
- Obstetrics / Childbirth
- Management / General Operations
- Inpatient Women
- Sanitary Women
- Hospital admissions Men
- Sanitary Men
- Post natal hospitalisation (PN) WC & shower for PN hospitalisation
- Nurses' office
- Traumatology
- Pharmacy
- Laboratory
- Radiology
- Emergency
- Intensive care unit
- Operating theatre
- SAS Surgeons and nurses preparation  
Operating room Pre Post-op Sterilization:  
1 'dirty' entry +1 'clean' exit  
Dermatology / Minor surgery operating room
- Ambulance shelter and patient service
- Medical fluids
- Flow module
- Morgue
- Hemodialysis + WC/changing rooms

## THE TECHNICAL SITE

- Medical staff rest room
- Men's & Women's toilets
- Men's & Women's changing rooms
- Maintenance and technical
- Storage of medical consumables  
Incinerator
- Laundry and linen storage
- Food storage
- Kitchen for hospital patients
- Pandemic module with integrated sanitary facilities  
Drinking water treatment micro-station (MCP) Fuel tank
- Generators (x2) and electrical cabinet  
Septic tank and spreading area
- Micro photovoltaic power station





Centre Hospitalier  
Rural & Semi Urbain



## CHRu LIVING ACCOMODATION AREA FOR STAFF

- 1 Kitchen module
- 1 Laundry module
- 1 Men's sanitary module
- 1 Women sanitary module
- 1 canvas area for catering
- 6 'bedroom' modules-4 beds
- 2 bedroom Modules- 2 beds
- 4 accommodation tents, each with 8 bunk beds

BASE DE VIE DE CHANTIER

PLATEFORME DE STOCKAGE  
POUR LA MISE EN CHANTIER



## A RURAL AND SEMI-URBAN HOSPITAL CENTRE MEANS:

**100**  
Hospital beds

**72**  
general hospital beds

**40**  
accommodation beds for families

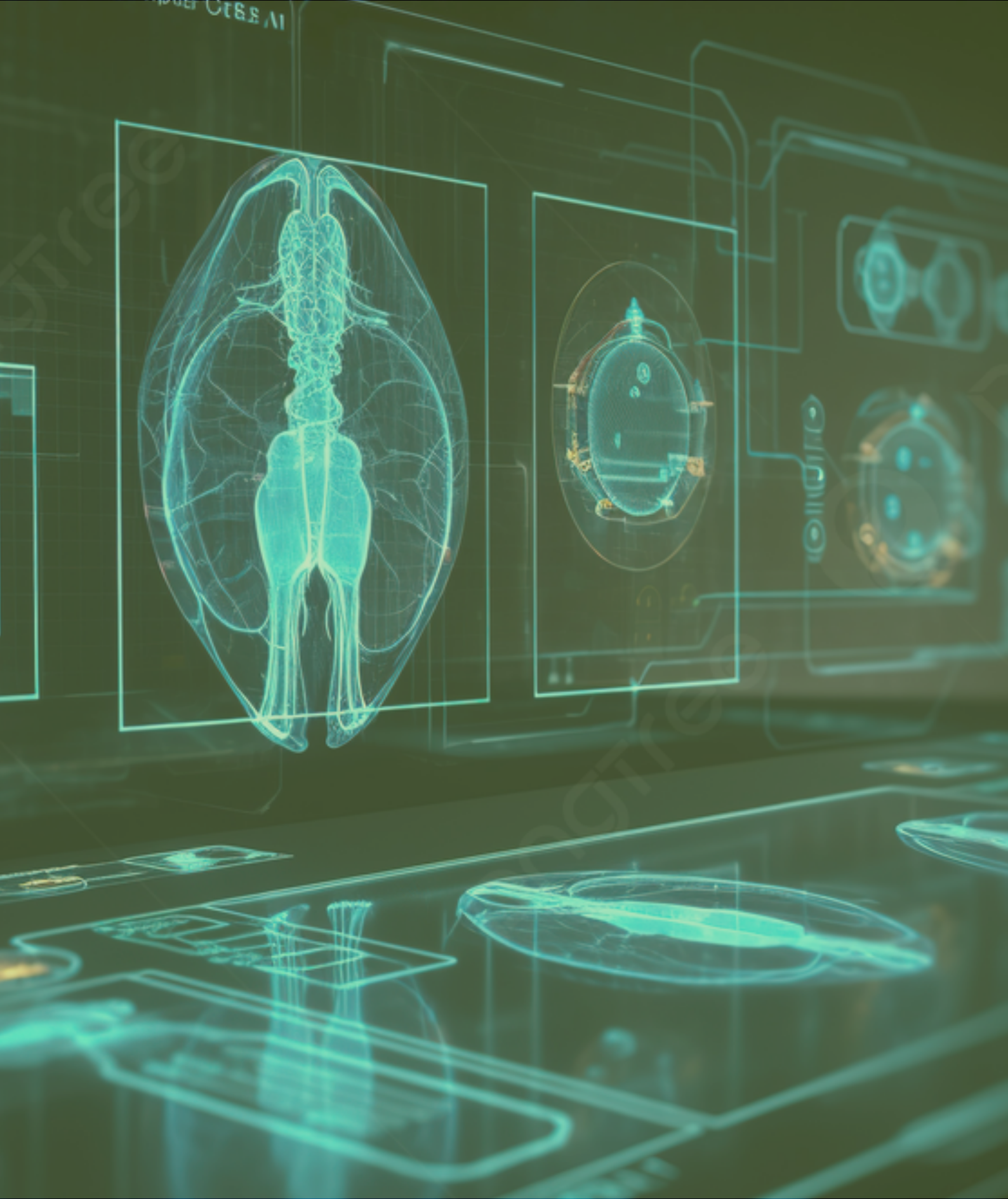
**12**  
post-natal hospital beds

**8**  
Intensité care beds

**8**  
Pandémie beds

**40**  
accommodation beds for healthcare personnel

The concept is based on containers (simple and extendable) and tents used as interconnection corridors. The premises are equipped with all necessary medical equipment, furniture, electricity, and air conditioning, etc. Everything will be managed by an ERP (computer system, hardware and software) specialized in managing patient data, medical imaging, laboratory, and hospital administration (payroll, consumable stock, billing, etc.).



# GENERAL PLAN

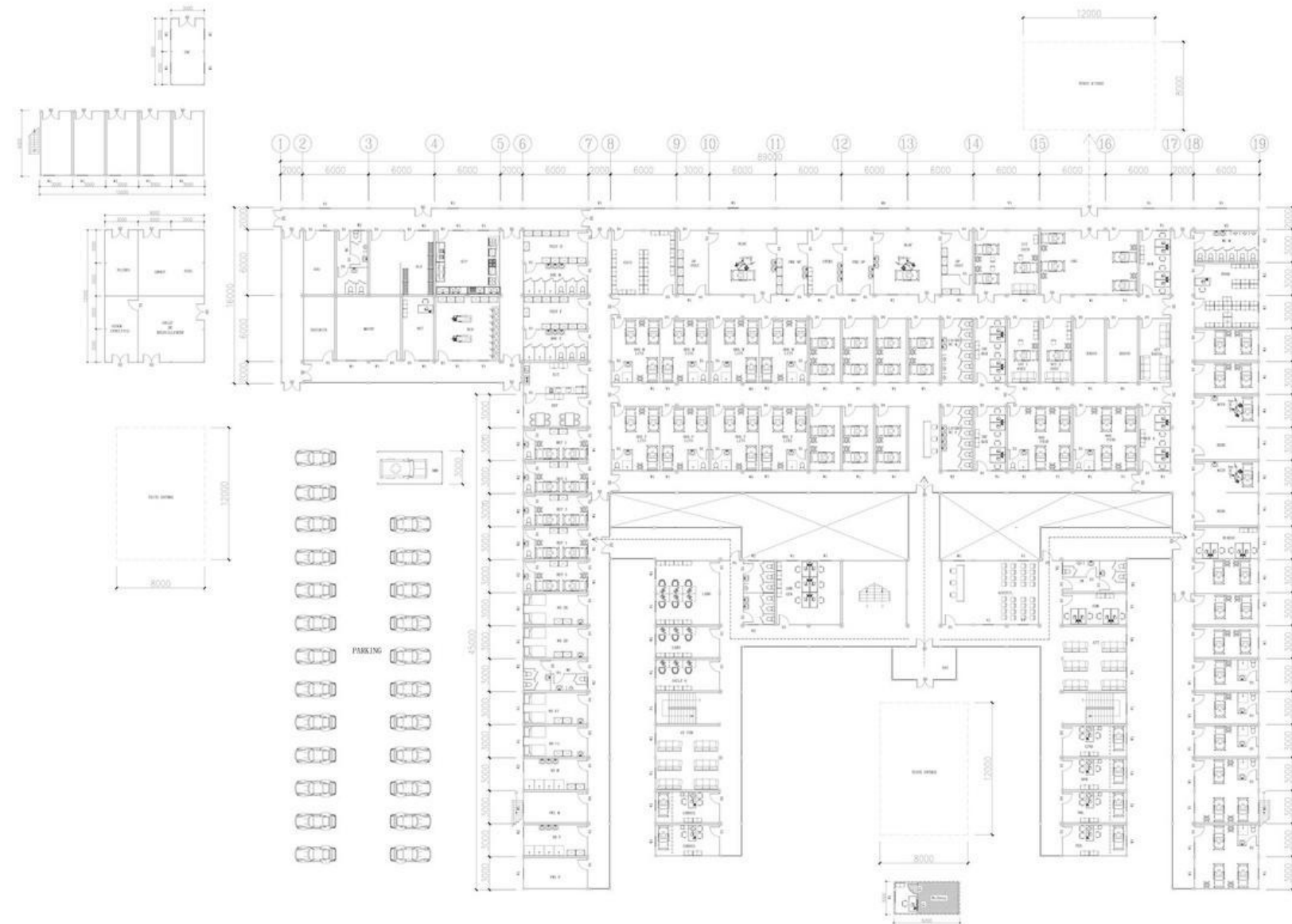
And CHRu modelling



Centre Hospitalier  
Rural & Semi Urbain



## CHRu BUILDING GENERAL PLAN



First Floor

Surface = 6 375 m<sup>2</sup>

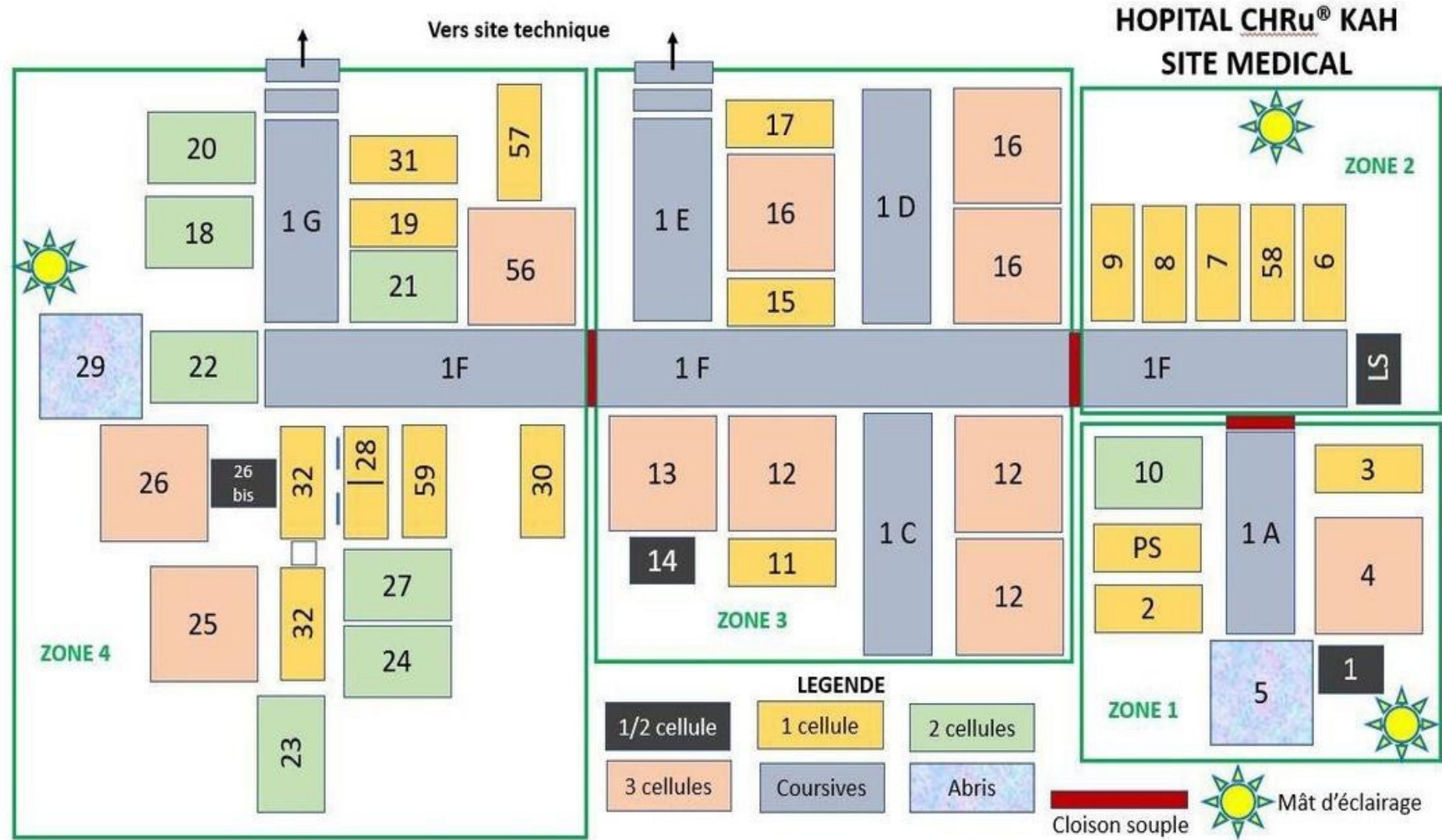


Centre Hospitalier  
Rural & Semi Urbain

LENODA  
HOSPITAL

### 3D MODELLING OF A MODULAR HOSPITAL BUILDING







### Locaux par zones

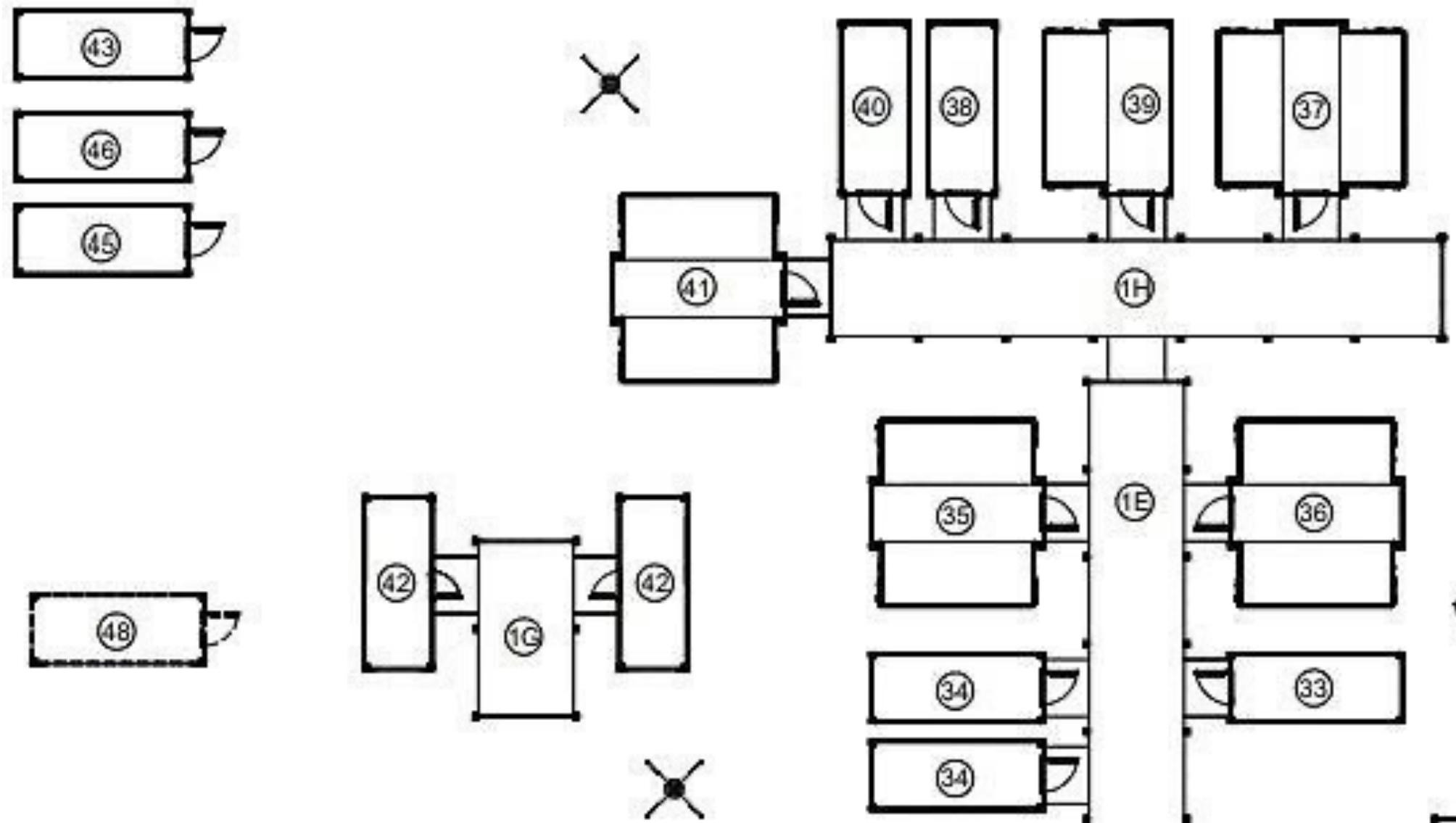
ZONE 1 : Accueil/Admin/DG et consultations	ZONE 2 : Spécialités médicales	ZONE 3 : Hospitalisation	ZONE 4 : Urgences et Chirurgie	
1. WC publics 2. Accueil patients 3. Administration générale 4. Consultations 5. Tente abri d'entrée 10. Direction générale (avec backup serveur) PS. Prélèvements sanguins 1A. Tente utilisée comme coursive (x2)	6. Dentaire 7. Ophtalmologie 58. ORL 8. Pédiatrie 9. Gynécologie 58. ORL LS. Local serveur 1F. Tente utilisée comme coursive	11. Sanitaires Femmes 12. Hospitalisation Femmes 13. Hospitalisations post natales 14. WC + douche post accouchement 15. Bureau des infirmières 16. Hospitalisation Hommes 17. Sanitaires Hommes 1C, 1D, 1E, 1F. Tente utilisée comme coursive	18. Traumatologie 19. Pharmacie 20. Laboratoire 21. Radiologie 22. Urgences 23. Obstétrique / accouchement 24. Néonatalogie (unité de soins intensifs pour bébé) 25. Unité de soins intensifs 26. Bloc opératoire 26 bis. SAS chirurgiens entrée bloc OP 27. Pré post opératoire 28. Stérilisation (1 entrée « sale » + 1 sortie « propre »)	29. Abri ambulance et desserte patients 30. Fluides médicaux 31. Morgue 56. Hémodialyse 57. Hémodialyse : WC + Vestiaires + Système d'eau par osmose inverse 59. Dermatologie / Bloc OP petite chirurgie 32. 2 x Conteneurs de distribution des 23 + 24 + 25 + 26 + 27 + 28 1F, 1G. Tente utilisée comme coursive



Centre Hospitalier  
Rural & Semi Urbain

LENODA  
HOSPITAL

### TEMPORARY TECHNICAL SITE MAP

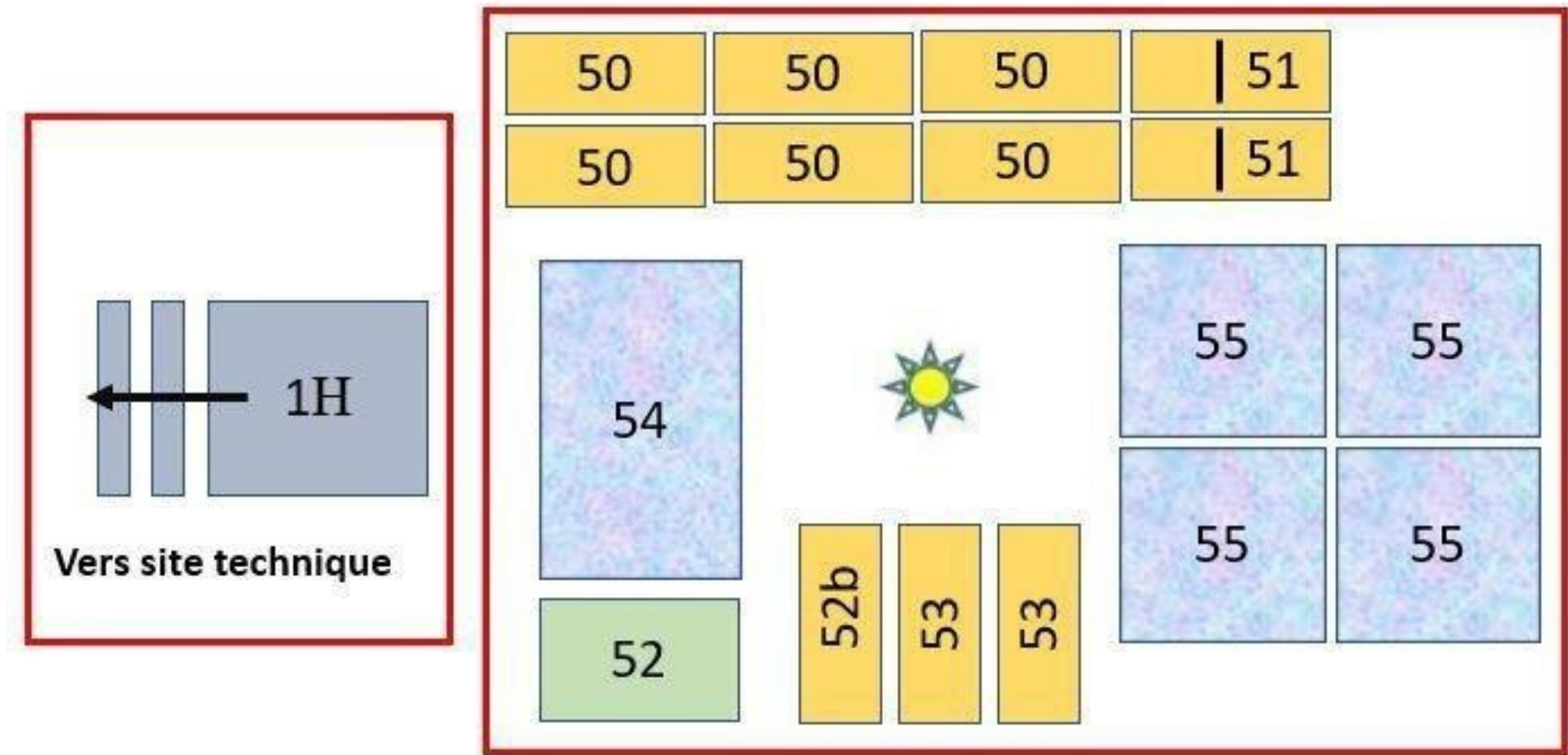




Centre Hospitalier  
Rural & Semi Urbain



### CHRu ACCOMODATION BASE FOR STAFF AND/OR VISITORS - 1

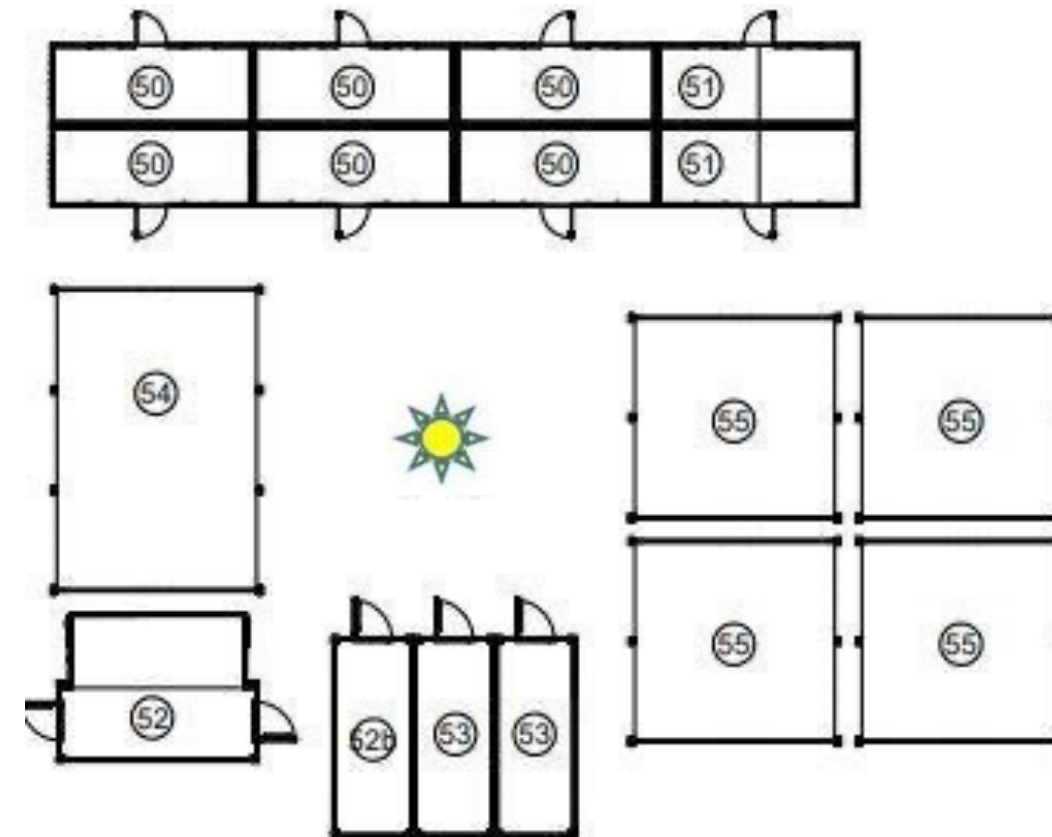


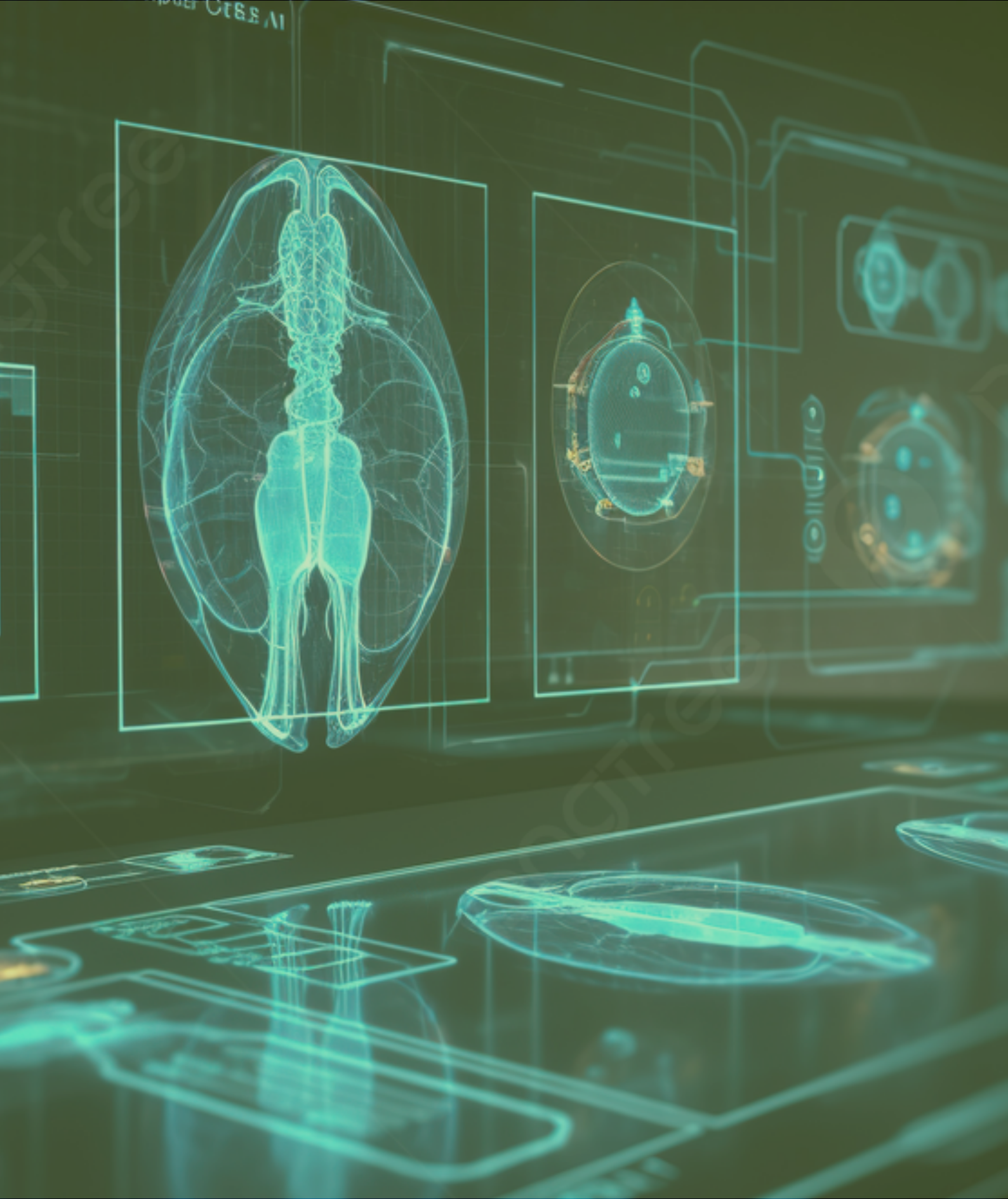


## CHRu ACCOMODATION BASE FOR STAFF AND/OR VISITORS - 2

### Locaux :

- 
- 50. Chambre pour 4 personnes (x6)
  - 51. Chambre pour 2 personnes (x2)
  - 52. Cuisine
  - 52b. Buanderie
  - 53. Sanitaires Hommes & femmes (WC + Lavabos + Douches) (x2)
  - 54. Réfectoire (en toile)
  - 55. Tente d'hébergement pour 16 personnes (x4)
- 





## POWER & HYDRAULICS

## ENERGY PROJECT

The 'Energy' project is based around the installation of a state-of-the-art, self-sufficient photovoltaic power plant with storage and performance, connected to villages with networks covering an area of 10 square kilometers, providing access to energy for thousands of people and households.



**ENERGY**

## WATER PROJECT

**Access to water and drinking water for people in semi-urban and rural areas, including :**

- **a drinking water production plant in rural areas,**
- **10 mobile production units with distribution systems including networks and rural facilities for distribution,**
- **cisterns and hydrants.**

In order to respond to the water deficit, we provide access to drinking water and regulate rural production for millions of people immediately affected.

The solution proposed by LENODA consists of implementing a treatment unit coupled with tanker trucks to supply drinking water extracted from surface water in the vicinity of rural communities at standpipes that are easily accessible by the local population.

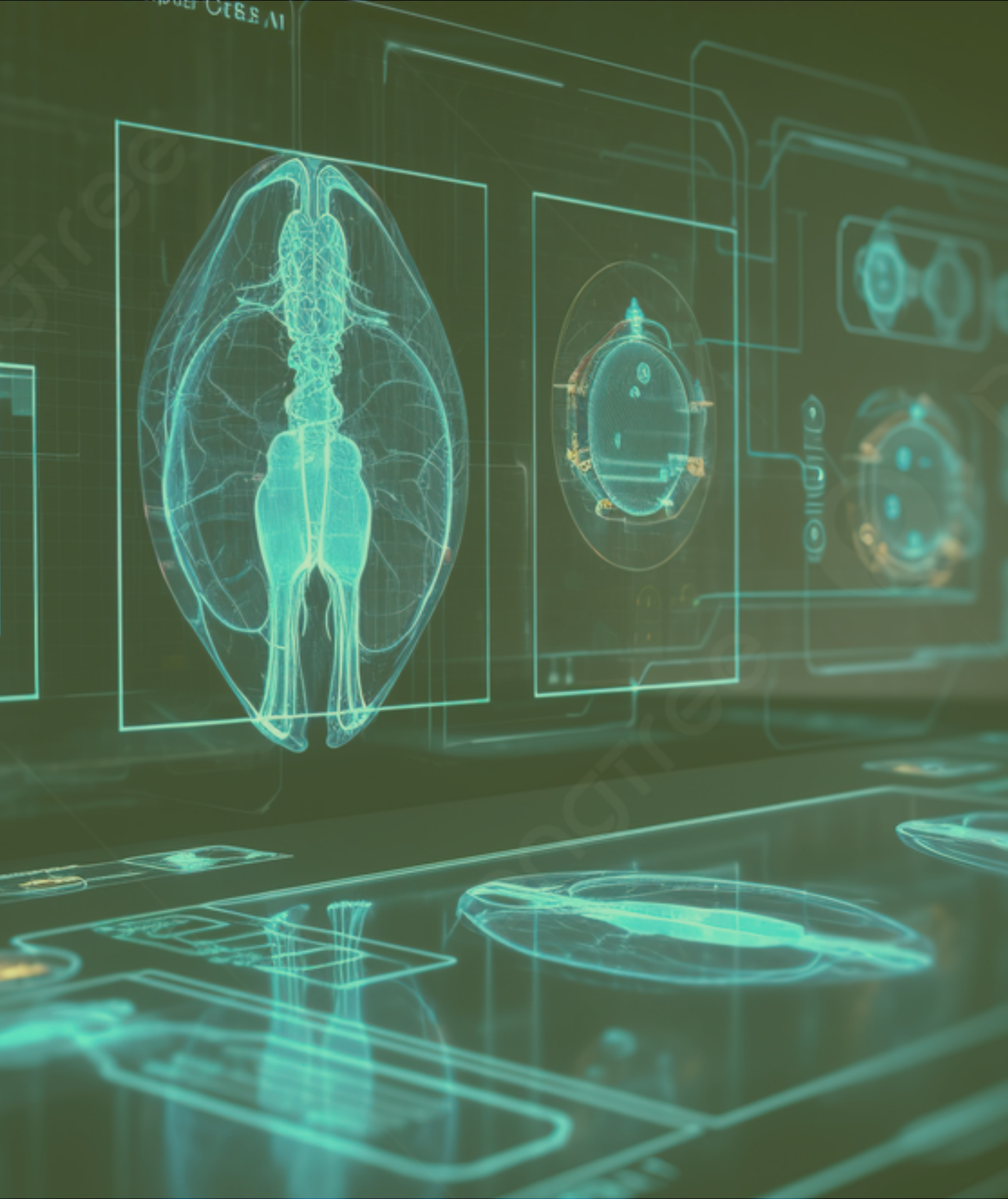
The mobile units are equipped with organic treatment systems. They will be positioned close to streams, rivers, lakes, etc. to transform raw water into safe drinking water.

The advantage of the mobility of such systems will be the ability to change raw water tapping points and thus maximise the chances of guaranteeing sufficient volumes of drinking water without disturbing natural ecosystems.

The units will fill tanker lorries, which in turn will create a greater radius of action by going as far as the standpipes that will be installed in the communes close to the tapping point. The tankers will operate in such a way as to make the rounds and fill up with the necessary volumes of water in an optimized way (according to the geographical locations of the rural communes, roads, populations to be supplied, etc.)..



**WATER**



# PARTNERSHIPS & ASSOCIATES



Centre Hospitalier  
Rural & Semi Urbain



## HOSPITAL

**The need for comprehensive solutions and access to knowledge is essential as technology evolves and therapies become more sophisticated.**

**With LENODA, we support you every step of the way, so you can deliver excellent care without ever compromising quality and safety.**

**« ALL OUR PARTNERS AND SUPPLIERS ARE AMONG THE BEST SPECIALISTS IN THEIR FIELD.. »**

**LENODA SARL**  
SANTÉ-HYDRAULIQUE-ÉNERGIE-AGRICULTURE

## SERVICES

State-of-the-art medical equipment needs a combination of intelligent financial solutions and preventive maintenance to ensure maximum availability.

LENODA gives you total cost control and peace of mind, so you can concentrate on what's important: saving lives.

## ACUTE CARE

**Correct handling and knowledge are two important keys to achieving the desired result when working in a hospital..**

LENODA HOSPITAL' products are no exception. Your medical staff receive professional training in the form of webcasts with the latest updates, and an e-Learning system will train your operators on Servo-u, Servo-air and NAVA..



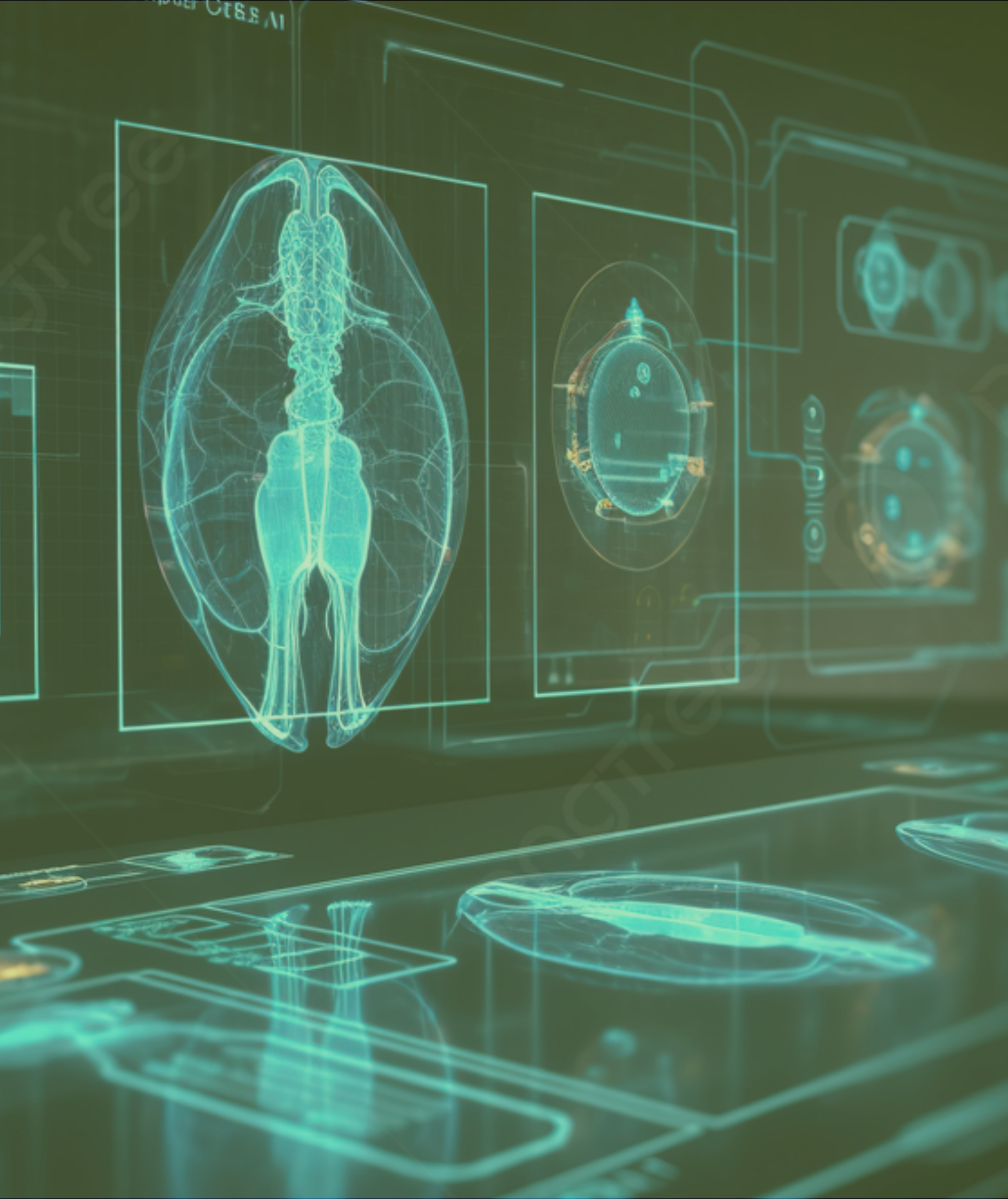
Centre Hospitalier  
Rural & Semi Urbain



## A PROFESSIONAL ADVISORY SCIENTIFIC COMMITTEE

When your LENODA CHRu is up and running, you're not left to fend for yourself. We have set up a professional and prompt advisory board of experts who will guide you, answer your questions and help you with any challenges that may arise. This, together with the follow-up services provided by the manufacturers of your hospital equipment, ensures a safe and stable operational phase.

NAME	COUNTRY	COMPETENCES	ACTIVITIES
Denis GUILLOTEAU	FR	Prof.PhD Pharmacy, PhD Biology,Biomedical sciences, specialist of brain diseases (Parkinson, Alzheimer) and molecular imaging	Professor in various international universities, researcher, former CAMES's jury, special adviser for Ministry of Health (Fr)
Johnny VERCOUILLIE	FR	PhD inRadiochimistry, physicochimistry computing sciences, biophysics & system	Professor and researcher
Maria Joan RIBEIRO	FR	Prof. MD , nuclear medicine and biophysics	Professor, head of NM department, clinical researcher
Gilles CALAIS	FR	Prof. MD, oncology and radiotherapy	Professor, head of radiology department, researcher
Mamadou MBODJ	SEN	Prof.MD and nuclear medicine	Professor
Patrick PAULUS	LUX/BE	Prof., MD, Dr. in medical sciences, oncology expert in nuclear medicine and molecular imaging	Professor, clinical researcher & scientific adviser
Karim MANSOUR	ALG	PhD. in biophysics, PhD in radiophysics and accredited radiophysicist	Professor & scientific adviser
Rudy VERBRUGGEN	BEL	Dr. in radiochemistry and molecular imaging	General director of Nuclear Medicine Europe, Brussels, International marketing & analyst expert
Paolo J. BEDOGNI	IT/FR	Dr.Med, oncology, immunology, MBA, strategic analyst SAI Inc	President PNS, clinical researcher, strategic analyst, former chief editor of "Ahead in Neurology



# MONITORING & FINANCING



## THE MAINTENANCE

### Access a new generation of personalized services

- Designed specifically to meet your needs
- Managed by our own network of experienced specialist teams
- A dedicated on-site maintenance technician assigned to your equipment
- Rapid remote access to LENODA/PNS technical experts
- Rapid response and on-site intervention planning
- Proactive maintenance to ensure optimum performance levels
- Privileged support and guaranteed upgrades
- Clinical training by phone, online and on-site

### On-site maintenance technician

**Objective:** Establishing close relations with you and achieving performance targets

- **guaranteed maximum availability for your equipment**
- **Fastest remote access to LENODA/PNS technical experts**
- A rapid response combined with a priority intervention schedule on priority sites
- **Monitoring and proactive maintenance of your equipment**
- Priority services for maximum productivity

### Maximum uptime guaranteed for your equipment

In short: Maximise your productivity and return on investment



## FUNDING FOR PROJECTS THAT HELP

LENODA SARL offers advice and audits on appropriate financing solutions for the construction of local hospitals.

**Through government agencies and private capital**, we can most likely advise you on the best way to finance your project. There are many advantages:

- **Long-term loans and guarantees** : repayment periods are limited only by the nature of the assets and the maximum periods allowed under the OECD Consensus.
- **Attractive interest rates** - a fixed interest rate (CIRR) could be offered.
- **Reliable financing** - The terms and conditions will depend on the assumptions of the project. Up to 100% of the contract value can be provided as finance or a maximum of 90-95% of the total loan amount can be secured. The remaining 5-10% must be secured by another bank or other available assets as appropriate.

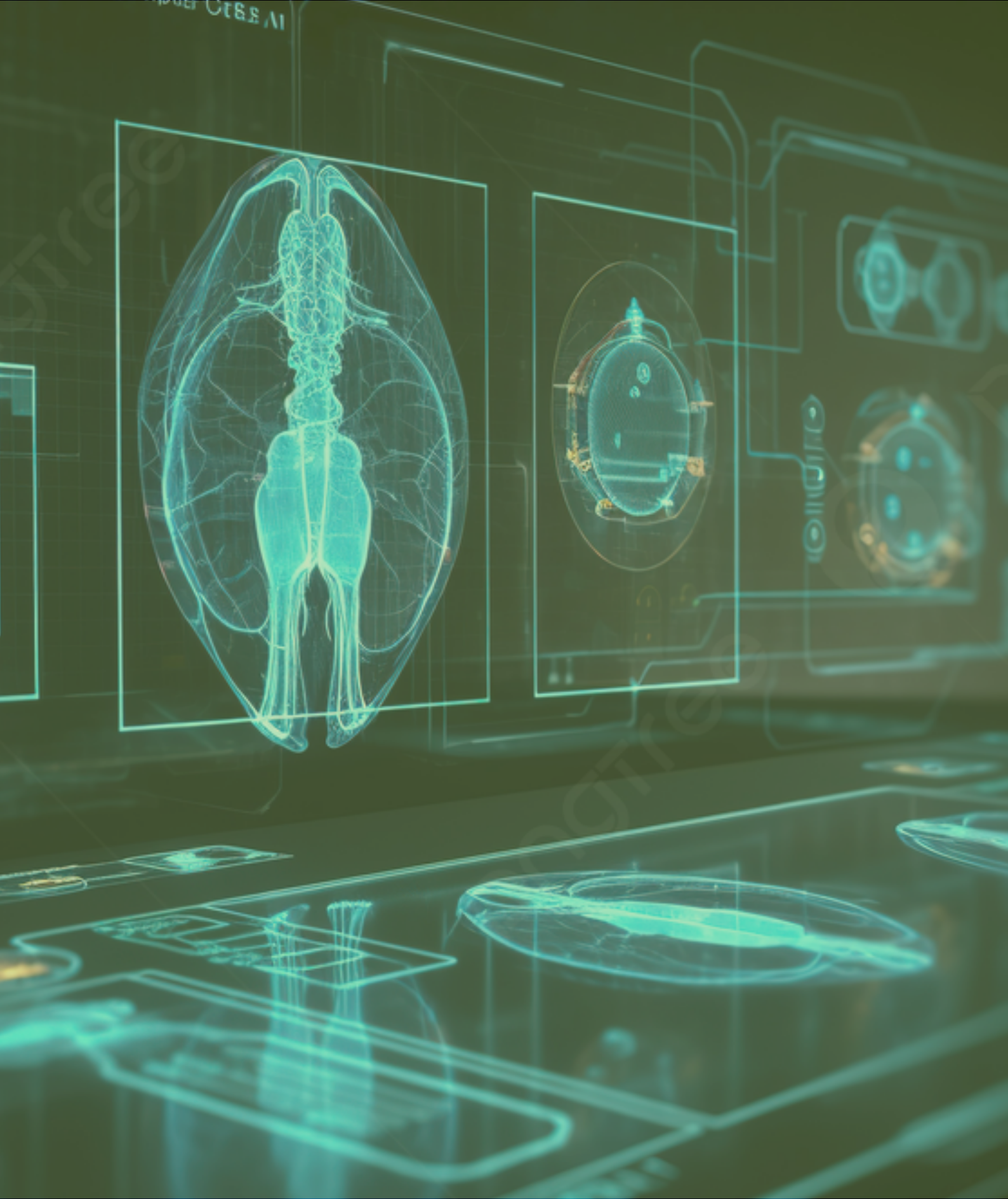
Processing times will, of course, **depend on the country risk, the preferred currency and the customer's financial situation.**

**A request for financing will be required before the final contract between « LENODA HOSPITAL » and the client.**

« LENODA HOSPITAL » represents the customer throughout the process, from assessment to binding offer.

All in all, those who conclude an agreement with **the hospital systems of the LENODA Rural Hospital Centre are assured of very favorable funding.**





# CONTACTS

## FRANCE

🏠 583 CHEMIN DU VALLONET 06190 ROQUEBRUNE CAP MARTIN

✉️ [lenoda2022@gmail.com](mailto:lenoda2022@gmail.com)

☎️ + 33 6 59 34 56 40 / + 33 6 63 11 77 42 / + 33 7 86 42 19 38

## BRESIL

🏠 RUE JOÃO CORDEIRO, 831 PLAGE D'IRACEMA, FORTALEZA / CE CEP : 60.110-300

✉️ [lenoda2022@gmail.com](mailto:lenoda2022@gmail.com)

☎️ + 55 85 99 71 08 26

## CAMEROUN

🏠 BP : 6819 YAOUNDE

✉️ [lenoda2022@gmail.com](mailto:lenoda2022@gmail.com)

☎️ + 237 6 77 63 25 82

## GUINEE-BISSAU

🏠 BOR, RUA DE CLINICA DE BOR.

✉️ [lenoda2022@gmail.com](mailto:lenoda2022@gmail.com)

☎️ + 24 59 55 56 61 74

## CHINE

🏠 PNS Ltd UNITÉ A, 3F, CHEONG SUN TOWER  
116-118 WING LOK STREET - SHEUNG WAN - HONG KONG

✉️ [lenoda2022@gmail.com](mailto:lenoda2022@gmail.com)

☎️ + (852) 25 34 01 03 ou +33 (0) 6 14 65 22 51

