



## FOCUS



Luc Provost, CEO of B Medical Systems and  
Yves Reding, CEO of EBRC

# EBRC & BMS

## When Luxembourg tech saves lives around the world

B Medical Systems, international leader in the medical cold chain, played a major role in ending the COVID crisis by providing transportation logistics for Messenger RNA vaccines. Faced with the rapid development of its activities, B Medical Systems called on EBRC for support by outsourcing its IT activities.



Over the last few months, B Medical Systems has had to deal with an ultra-fast growth of its activity, that is the supply of the required equipment for transportation and storage at  $-80^{\circ}\text{C}$  of COVID-19 messenger RNA vaccines. This Luxembourg-based company, which successfully develops cold chain solutions for the medical sector, played a key role in the success of the worldwide mass vaccination effort aimed at overcoming the health crisis. B Medical Systems chose EBRC to support it in this crucial step and in this exponential increase of its production, entrusting EBRC with the outsourcing of its IT activities with two main leitmotifs: agility and security of operations. Both companies demonstrate the best that Tech for Life Made in Luxembourg can do worldwide to save lives.

Luc Provost, CEO of B Medical Systems and Yves Reding, CEO of EBRC talk about this tour de force achieved by their teams in a very short time and explain their development perspectives.

### **"MADE IN LUXEMBOURG" QUALITY EXPORTS ITSELF WELL**

"We share many common features with EBRC", confirmed Luc Provost, CEO of B Medical Systems, "starting with our Luxembourg roots." Originally a small Luxembourg-based company, B Medical Systems has managed over the years to develop an exclusive core business, focused on cold chain management in the medical sector, which the company operates on an international scale.

The similarities between the two companies do not end there. Both have a geographical footprint that extends far beyond the borders of the Grand Duchy. As of 2019, B Medical Systems has had a sales office, warehouse and full team in North America. This year, the company expanded its activities to India, the world's largest producer of vaccines, and set up its first manufacturing unit outside Luxembourg.

B Medical Systems now has customers in over 120 countries. "Our broad international presence allows us to send 'Made in Luxembourg' materials to countries as diverse as the Democratic Republic of Congo, Ethiopia, Brazil and Peru. We have teams trained in Luxembourg capable of installing and maintaining the equipment while taking into account local conditions", explained Luc Provost.

### **HEALTHTECHS: A HIGHLY SENSITIVE AND CRITICAL SECTOR**

Over the past 40 years, B Medical Systems has acquired a world leadership position in three solution lines: vaccine cold chain, medical refrigeration and blood component management. "In the field of blood transfusion, for example, our solutions are used on a daily basis by both the Luxembourg Red Cross and the Etablissement Français du Sang", said Luc Provost. B Medical Systems' cold chain control solutions were also used to vaccinate more than 300 million children in developing countries over the past 20 years. "In order to empower healthcare professionals, we are in constant dialogue with them to stay in tune with their changing needs. We believe that together we can make a real impact not only on individuals and communities, but also on humanity", he said.

"In digital, EBRC has been paving the way for 'Tech for Life' since 2011 with the IBBL biobank", said Yves Reding, CEO of EBRC. "We have continued our efforts with the e-Santé agency and the Shared Healthcare File, the BioNextLab, etc. Today, we go on building these foundations with B Medical Systems by using EBRC's managed services to support the creation and operation of intelligent solutions that help save lives".

### **TECH FOR LIFE: INNOVATION TO IMPROVE LIFE**

Since 2015, B Medical Systems has injected significant capital into its Luxembourg manufacturing site in Hosingen. "We have

implemented cobotics systems where humans and robots collaborate, as well as rotational moulding machines to manufacture our refrigerators, freezers and vaccine cold chain equipment", explained Luc Provost. Rotational moulding technology, in particular, is unique in the medical refrigeration industry and allows us to produce robust, high-quality products in a very short time.

"We are thus able to respond quickly to new cold chain management needs, such as the fight against the COVID-19 pandemic, which requires vaccine storage temperatures by around  $-80^{\circ}\text{C}$ ". The health crisis initially placed heavy demands on medical analysis laboratories due to the lack of a treatment protocol. "Large-scale tests were organised, but we very quickly mobilised to set up all the logistics for the distribution of future vaccines. As everyone now knows, messenger RNA technology requires storage at  $-70^{\circ}\text{C}$  for the vaccines developed by Pfizer and BioNTech, or at  $-20^{\circ}\text{C}$  for the one developed by Moderna. This differs greatly from traditional vaccines and requires different logistics. This is where our solutions came into play and demonstrated their effectiveness. Our role has been to provide intelligent transport devices that allow for continuous control of the cold chain to ensure the safety of vaccine products. Our solutions integrate communicating IoT technologies, allowing the exchange of data necessary for the tracing of each parcel, i.e. its complete monitoring from the production site to the point of administration of the doses", explained Luc Provost.

Managing and protecting sensitive data has been at the heart of EBRC's strategy for 20 years. "The financial sector and its high security and confidentiality regulatory requirements have been very structuring for the development of our service offer. This characteristic specific to the Luxembourg market has enabled us to become a natural partner for the healthcare sector: data protection, sovereign cloud, culture of resilience.





Like B Medical Systems, our know-how can be exported and we are rapidly adopting the requirements of various countries in terms of health data processing regulations. For example, EBRC is certified as a Health Data Host in France", explained Yves Reding.

### **RESILIENCE: A WATCHWORD FOR THE HEALTHCARE SECTOR**

"As I saw during my visit to the Resilience Centre South, a Tier IV certified 'Fault Tolerant' datacenter, redundancy is a key principle for EBRC. The same applies to B Medical Systems. For example, our refrigeration equipment has double seals and quadruple hinges. The reliability of our solutions is essential to ensure the integrity and safety of the cold chain", said the CEO of B Medical Systems. "In order to be able to meet all kinds of field requirements, our vaccination refrigerators and freezers accept different power supply modes, they can be directly connected to solar panels without using batteries or regulators, which are usually weak points in this type of equipment", he emphasized.

The B Medical Systems range includes equipment designed for geographical areas where the electricity supply is unreliable, where transport requires robust solutions and extended autonomy for long journeys. "For example, in Indonesia we have deployed refrigerators that can maintain a stable temperature for a month without electricity, and in Chad our solar-powered vaccine storage solutions can withstand temperatures of around 45°C in the shade without any problems", he said.

The quality and reliability of B Medical Systems' solutions reflect the company's extensive experience over its 40-year history. "We strive to be the best at what we do and

to lead by example", said Luc Provost. "We believe that the solutions and services we provide promote quality of care, which is why we hold ourselves to a high standard in everything we do. Our focus on R&D, our extensive technological know-how and our global network of partners enable us to deliver both innovative solutions and services in a very short timeframe".

"We are perfectly aligned with this principle of comprehensive quality, described by Luc Provost, which we also apply to our entire Trusted Services Europe range", explained Yves Reding. "We always seek end-to-end excellence and quality in our value chain. This is one of the reasons why we have had zero seconds of downtime in our datacenters for 20 years. In medicine, patients' lives depend on the availability of their data."

### **CHOOSING A PARTNER MUST BE DONE CAREFULLY: "YOU DON'T PLAY DICE WITH HEALTH"**

"Faced with the sudden and significant increase in needs caused by the Covid crisis, we invested heavily in both human resources and technology", said Luc Provost. "But we quickly realised that we could not cover all aspects of such a wide-ranging problem with our resources alone," he said. "We had to call on expert and innovative partners who shared the same type of long-term strategy as us. Our information system plays a central role in the orchestration of our organisation: it is therefore an essential element in the success of our project. This is why we chose to entrust EBRC with the management of our IT systems", he said.

"In order to operate in a global, highly-sensitive and high-visibility market, we needed

an agile partner capable of carrying out our project in a very short time, but above all, able to give us guarantees of security and ethics in line with the specific requirements of the health sector", explained the CEO of B Medical Systems. "Beyond the proposed solution and the respect of commitments, we were looking for a reactive partner capable of offering us continuous consulting support to enable us to rapidly improve our maturity and performance. But one of the key points of our partnership is the strength of the EBRC teams' proposals", he added.

"Today, we can expand our solution with peace of mind and focus on what we know best: our business. We do it all over the world and it's great to be able to rely on a trusted partner. We provide our solution and EBRC offers its expertise in medical data protection."

### **EXCELLENCE AND TRUST AT THE HEART OF OUR RELATIONSHIP**

"Moreover, EBRC's ability to act internationally is a guarantee for us that we will be able to continue to develop without coming up against the obstacles of national legislation on the hosting of personal or medical data, for example", said the CEO of B Medical Systems. "The know-how in Luxembourg - and in companies like EBRC in particular - in the field of information security is a strong argument for us to put forward to the public authorities with whom we work".

In this respect, there is nothing better than international standards as a recognised passport to real guarantees. For several years, EBRC has been certified ISO 27001 for information security and ISO 22301 for business continuity. These two pillars constitute the foundations for security and resilience.

***"The innovative solutions we develop save lives, while helping communities to grow and thrive."***

Luc Provost, CEO of B Medical Systems