



## Search for a local Partner for a Bilateral R&D Project

Programme	ESITIP joint call for R&D proposals in ICT
Search launched by	Spanish company
	Egyptian industrial partner
	Spanish academic partner (University/Tech. center)

Remember that the minimum eligible consortium for ESITIP programme requires one Spanish company, one Egyptian industrial partner. Spanish academic institutions are welcome to participate as self-funded or subcontracted by the Spansih company if an agreement is achieved.

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Organization (launching this search)		
Date of Request:		
Company name:	Rology for Medical Technology LLC	
Contact person and title/ designation:	Mahmoud Barakat, Associate CEO	
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SECTION 1: Description of the institution launching this search (Please give brief / to the point explanations. For more explanation on any point below, you may add a short paragraph as an annexure, with this document.)		
Business Sector	Rology operates in the health technology sector, specializing in Al-assisted teleradiology solutions. As a pioneer in the field, Rology leverages artificial intelligence and a cloud-based platform to connect hospitals, imaging centers, and healthcare providers with highly skilled subspecialized radiologists, ensuring efficient, high-quality radiology reporting. Rology's platform is FDA-cleared and has successfully delivered over 1 million diagnostic reports, solidifying its position as a trusted leader in Al-driven teleradiology services across the Middle East, Africa, and global markets.	
Company mission or core functions	Rology's mission is to democratize access to quality radiology services by addressing the global radiologist shortage, reducing diagnostic turnaround time, and improving medical imaging workflows through AI-powered automation and cloud-based infrastructure.	





Date of establishment Ownership (if public and traded, add stock exchange and ticker symbol)	The company aims to save lives by providing faster, more accurate, and cost-efficient diagnostic radiology reports, ensuring healthcare providers can deliver timely interventions.  04/04/2018  Private
Total number of employees	62
Number of employees in R&D	12
Key products sold or services provided	<ul> <li>Product: FDA 510(k)-cleared Al-powered teleradiology platform.         <ul> <li>A cloud-based, Al-driven radiology platform that seamlessly connects hospitals, imaging centers, and healthcare providers with subspecialized radiologists for faster, more accurate diagnostic reporting.</li> <li>Features Al-assisted workflow automation, peer-review quality control, and zero-setup cost integration with existing PACS, HIS, and DICOM systems.</li> <li>Service: Radiology Reporting Services</li></ul></li></ul>
Company core technical competences	Rology operates an FDA 510(k)-cleared Al-powered teleradiology platform that optimizes radiology workflows, enabling fast, accurate, and cost-effective diagnostic reporting. The platform seamlessly integrates with hospital systems, including PACS, HIS, and DICOM, ensuring efficiency and compliance.  Rology leverages Al-driven workflow optimization, utilizing automated case matching to assign scans to the most suitable subspecialized radiologist based on expertise and availability. The Al-powered peer-review





system enhances quality control, reducing errors and improving diagnostic accuracy. The system also auto-prioritizes emergency cases, ensuring critical scans are interpreted within 30-60 minutes. The company has developed advanced AI models for radiology, including Al-powered auto-reporting for X-rays, which reduces turnaround time to 2 minutes. and a CT Lung Nodules Detection AI, enabling early lung cancer diagnosis. Al-driven structured reporting enhances consistency and diagnostic precision. Rology's scalable cloud infrastructure offers zero-setup cost implementation, allowing hospitals to access remote radiology reporting without upfront investments. The platform provides secure cloud-based storage and instant access to reports and DICOM images for clinicians, hospitals, and patients. With a network of over 170+ subspecialized radiologists across 9+ countries, Rology facilitates global telemedicine and remote collaboration. Al-enhanced mobile and web applications enable real-time case management and reporting, ensuring faster, more reliable, and scalable radiology services. Key R&D programs and Rology has undertaken significant R&D to revolutionize activities teleradiology through AI. Key initiatives include automatic diagnostic algorithms, such as lung nodule detection and triaging normal versus abnormal CT scans, enabling early diagnosis and streamlined workflows. Our workflow optimizers, like supply-demand matching and peer-review QC, enhance operational efficiency and diagnostic accuracy. Additionally, auto-impression generators reduce radiologist workload, while patient communication AI tool improves accessibility and engagement. These advancements have resulted in a 99.89% medical accuracy rate, an 83% improvement in turnaround time, and enhanced productivity, positioning Rology as a leader in Al-driven, cost-effective, and scalable radiology solutions. Examples of Rology has successfully delivered over 1 million accomplishments radiology reports, positioning itself as a leader in Al-assisted teleradiology across emerging markets. The platform has achieved FDA 510(k) clearance, making it the world's first and only FDA-cleared teleradiology platform, ensuring superior quality and safety in remote diagnostics.





Rology developed and deployed four new Al models, including Al-powered auto-reporting for X-rays, which reduced turnaround time to 2 minutes, and CT Lung Nodules Detection Al, enhancing early lung cancer diagnosis. These innovations contributed to a 54% gross profit margin and improved medical accuracy to 99.8%.

By improving diagnostic efficiency, Rology achieved a 49% improvement in turnaround time (TAT) and ensured that emergency reports were handled in under 30 minutes. The platform now serves 150+ hospitals across 9 countries, reinforcing its mission to democratize access to high-quality radiology services.

### Company strategic orientation

Rology is strategically focused on democratizing access to high-quality radiology services through Al-driven innovations, global expansion, and strategic partnerships. The company aims to address the global radiologist shortage by leveraging Al-powered teleradiology to reduce turnaround times, enhance diagnostic accuracy, and optimize radiology workflows.

Rology's growth strategy is centered on scalability and geographic expansion, with a strong emphasis on penetrating high-growth markets such as Saudi Arabia, Kenya, and other emerging regions. By integrating Al-powered workflow automation and auto-reporting solutions, Rology enhances efficiency, reduces operational costs, and delivers a superior standard of care to hospitals and imaging centers worldwide.

The company is committed to continuous Al innovation, focusing on Al-driven structured reporting, automated diagnosis, and predictive analytics to transform radiology into an on-demand, data-driven service. Rology invests in next-generation Al models, including foundation models for radiology, to further improve accuracy, efficiency, and scalability. Strategic partnerships with global healthcare providers, investors, and Al research institutions drive Rology's mission.

Rology's long-term vision is to establish itself as the global leader in Al-assisted teleradiology, expanding its reach beyond the Middle East and Africa into highly regulated markets such as Europe and North America. The company prioritizes sustainable growth, regulatory compliance, and Al advancements to maintain its





competitive edge while staying true to its core mission: saving lives through technology.

#### **SECTION 2: Partner of Interest**

(Please provide a brief summary of the prospective partner company or organization. This summary may address some or all of the points below)

### Profile of ideal technology partner

An ideal technology partner for Rology would be a company specializing in Artificial Intelligence (AI) in radiology, with extensive experience in multimodal AI, foundation models, LLMs, and VLMs. Such a partner should have a proven track record in developing and implementing AI solutions that integrate various imaging modalities, including X-rays, CT scans, and MRIs, to enhance diagnostic accuracy and efficiency.

The prospective partner should possess expertise in creating multimodal AI models capable of processing and analyzing diverse medical imaging data. This includes the ability to develop AI algorithms that can interpret complex datasets from different imaging techniques, facilitating comprehensive diagnostic insights.

## Core technological competencies and expertise

- Artificial Intelligence (AI) & Machine Learning (ML): The partner should have advanced capabilities in AI-driven image analysis, leveraging deep learning, computer vision, and neural networks to enhance radiology workflows. Expertise in developing AI-powered auto-reporting systems that can detect abnormalities, prioritize critical cases, and optimize radiology reporting is essential.
- Large Language Models (LLMs) & Generative
   Al: The partner should have experience with
   LLMs (Large Language Models) applied to
   medical imaging and radiology reporting. LLMs
   can enhance radiologists' efficiency by
   generating structured, high-quality reports from
   medical imaging data and physician notes.
- Vision-Language Models (VLMs): A strong capability in Vision-Language Models (VLMs), which combine text and medical imaging data to improve diagnostic accuracy and decision support, is crucial.
- Deep Learning & Computer Vision: The partner should specialize in deep learning models for medical imaging, including Convolutional Neural Networks (CNNs), Recurrent Neural Networks (RNNs), and Transformer-based architectures





	<ul> <li>tailored for radiology applications. Al models capable of detecting pathologies in X-rays, CT, MRI, PET-CT, and ultrasound are fundamental.</li> <li>Multimodal Al &amp; Foundation Models: The ideal partner should have expertise in multimodal Al, enabling cross-referencing of various imaging techniques to improve diagnostic outcomes. Foundation models for radiology, which can learn from diverse medical imaging data sources, are becoming a game-changer in Al-assisted diagnostics.</li> </ul>
Other essential qualifications (e.g.: ownership, track records etc.)	<ul> <li>Proven Track Record in Al-Powered Radiology: The ideal partner should have a strong track record in developing and deploying Al-driven radiology solutions, with demonstrated success in real-world clinical settings. This includes successful Al implementations in hospitals, imaging centers, and teleradiology platforms that have resulted in improved diagnostic accuracy, workflow efficiency, and cost savings.</li> <li>Intellectual Property &amp; Al Research Leadership: Ownership of proprietary Al algorithms, patents, and published research in the field of Al-assisted radiology is a strong qualification. The partner should actively contribute to Al research in medical imaging and collaborate with academic institutions, medical societies, or government health agencies to advance the field.</li> <li>Clinical Validation &amp; Real-World Deployments: The partner should have clinically validated Al solutions, supported by peer-reviewed studies, clinical trials, and pilot projects with hospitals and healthcare providers. Proven results in reducing turnaround time, improving diagnostic accuracy, and enhancing radiology workflow automation are essential.</li> </ul>
If you have a list of companies with whom you are in contact or interested in contacting, please provide contact details	Quibim     Methinks AI     The collaoration can include AI research teams (PhD) at Spanish universities
Other details or important information	
Interested areas of collaboration	Rology is particularly interested in collaborating with Spanish companies on the joint development of Al models for radiology and medical imaging. This collaboration would focus on enhancing Al-powered





	diagnostics, automation, and efficiency in teleradiology workflows.
Specific R&D contribution sought	Rology is looking for a Spanish AI partner to collaborate on cutting-edge research and development (R&D) in AI-driven radiology. The focus is on enhancing diagnostic capabilities, automating radiology workflows, and integrating AI into medical imaging.

#### **SECTION 3: Additional information about the possible collaboration**

(Please feel free to share any information you want about the possible project/s in which you would like to collaborate with an institution in the other country. I.e: possible projects, main objectives, technological area, TRL to be achieved)

Name: Mahmoud Barakat Seal:

Date: 01/03/2025 Signature: Mahmoud 3 Rology For Medical tech



## The Leading Al-powered Teleradiology Platform

in the MEA Region





## **\$4.7**

## Billion People

Two-thirds of the world's population lacks access to medical imaging and radiology.





#### **Growing Demand**

for radiology exceeds available Sub-specialized radiologist supply



**Quality and Accuracy** 

affected by workload and burnout which leads to errors



**Radiologist Shortage** 

Limited expert radiologists can't cope with demand



**Cost Constraints** 

Hospitals seek cost-effective solutions to meet demand



#### **Increased Workload**

High demand strains radiologists, leading to burnout



**Report Delays** 

lead to late diagnoses and missed diagnoses



## **Solution**

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Rology FDA 510(k) cleared and Al-assisted teleradiology platform aims to bridge the diagnostic gap. By employing sophisticated Al algorithms to accelerate and enhance diagnostic workflows.



#### The Leading AI-powered Teleradiology Platform in the MEA Region



**Al Powered** 



9 AI Models



**Zero-setup Cost** 



**FDA Cleared** 

30-120 Minutes Turnaround Time

99.89% Accuracy Rate

**170 Radiologists** 









1

#### Clinician/ ER Doctor

- Receive Stroke case.
- Create order of scan

4

#### **Neurologist/Intervention R**

Directly communicate with the ER team



3

#### Consultant

Online Access to DICOM Images +/- Report

 Perform CT/MRI scan and send to Rology

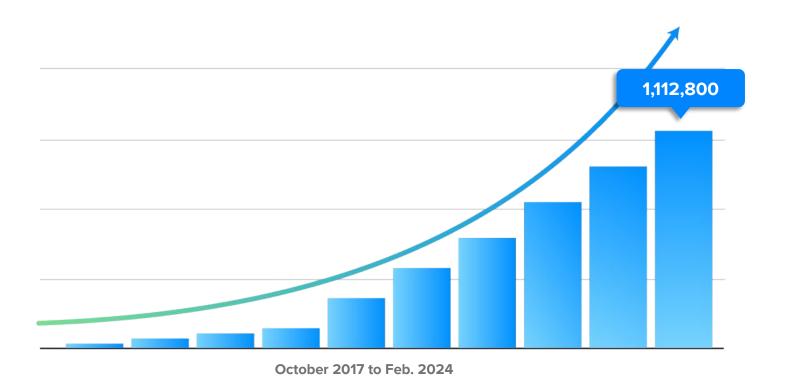
**Onsite Radiology Tech.** 





2

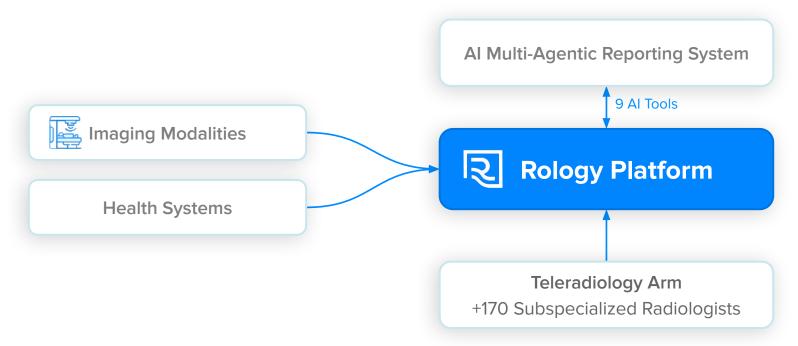
#### +1 Million Top-Quality Radiology Reports





#### Rology Now Offers a Fully Integrated Reporting System

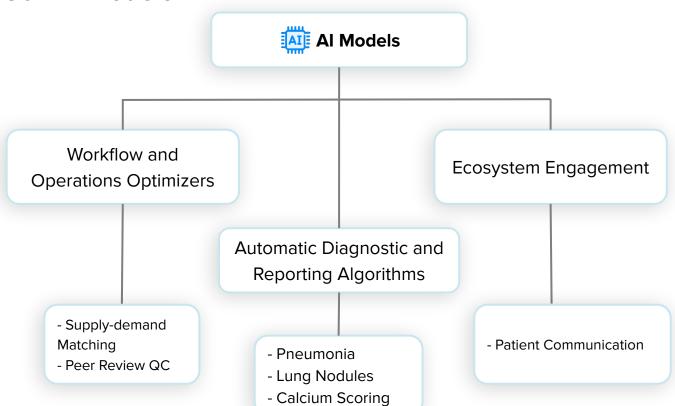
#### Powered by AI to Solve the Shortage of Radiologists



Rology as a Single-point of Integration



#### **Our Al Models**







#### Required Specifications of the Spanish Partner

Rology seeks a Spanish AI technology partner with expertise in medical imaging AI and deep learning technologies. The ideal partner should have:

- Expertise in Al model development for medical imaging (X-ray, CT, MRI).
- Experience in Large Language Models (LLMs) and Vision-Language Models (VLMs) for radiology.
- Proven track record in developing and deploying Al-powered radiology solutions.

Through this collaboration, we aim to co-develop next-generation Al models for automated radiology reporting, and enhance clinical decision-making



# Let's Save Millions of Lives Together





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