

VACANCY NOTICE

Engineer (Acoustic) - (241505)

Primary Location: Italy-La Spezia

NATO Body: Centre for Maritime Research and Experimentation (CMRE)

Schedule: Full-time

Application Deadline: 13 November 2024

Salary (Pay Basis): 5,939.03 EUR (Monthly)

Grade NATO SSS Grade G15-G17 (ABCL A2-A3)

Clearance Level NS

Appointment will be subject to receipt of a NATO SECRET security clearance (provided by the national Authorities of the selected candidate) and approval of the candidate's medical file by the CMRE Medical Adviser.

Are you a professional with proven working experience with underwater acoustic sensors and systems? Do you have knowledge of traditional and cutting-edge acoustic sensing technologies? Do you enjoy working in a challenging international environment? If so, CMRE is looking for you!

1. POST CONTEXT

This is a position within the Centre for Maritime Research and Experimentation (CMRE), an organization of the North Atlantic Treaty Organization (NATO). CMRE is an established, excellent scientific research and experimentation facility that organizes and conducts scientific research and technology development, centred on the maritime domain, delivering innovative and field-tested Science & Technology (S&T) solutions to address defence and security needs of the Alliance.

The position is within the Engineering and Information Technology Division (EITD), which supports the execution of CMRE's Programme of Work. EITD consists of the Engineering Branch (EB) and the Information Technology Branch (ITB).





The EB addresses the engineering and technological requirements of the Centre's research activity, by designing, developing, constructing, testing at-sea and maintaining, repairing and calibrating electronic, oceanographic, acoustic, acoustical assemblies and unmanned systems, especially prototypes, or combinations of such units as required.

The ITB supports the conception, design, development and construction of state-of-the-art technologies in computing, networking and data infrastructure as well as developing, integrating, and validating software applications, services and products. All this is done while ensuring interoperability, security and compliance with relevant NATO policies and regulations.

The position is within the "Sonars and Marine Sensors" Section of the EB. The position includes management responsibilities upon the "Sensing Systems Development Cell" of the Section.

2. PRINCIPAL DUTIES

Under the supervision of the Section Head, working autonomously or participating in multidisciplinary Working Groups or Project Teams, the Incumbent will be responsible for providing technical and engineering services in support of CMRE Research and Development Programme. His/her overall mission will cover a broad spectrum of activities related to the development of modern, cutting-edge underwater sensing systems, primarily focused on, but not limited to the acoustic field.

Activities will include conception, specification, budgeting, design, modelling, optimization, development, construction, integration, testing, documentation, inspection, maintenance, operation and repair.

Duties will include the following:

 Lead a team ("Cell") of NATO International Civilians - Technical Staff - and/or Contractors, working within Project Teams to the development or procurement



of underwater acoustic systems and other marine sensing equipment, in support of CMRE scientific Programme of Work, through:

- Specification
- Costing
- Modelling and Simulation
- Design
- Support to Integration
- Laboratory and Tank Testing
- Documentation
- Keep oneself abreast of technical state-of-the-art in their professional field, and organize a plan of training courses and development activities for themselves and the Cell's Staff;
- Set the yearly objectives and provide performance evaluation for the Cell's Staff;
- Provide information and support to Engineering Coordinators, Section Heads and EB Management, to define the technical requirements for newly developed Sonar and Sensing Systems in support of CMRE scientific Programme of Work; subsequently, provide cost/manpower estimates and technical descriptions to be integrated within the CMRE business and budget plan;
- Contribute to the EB support to CMRE field operations (Scientific or Engineering Sea Trials, on board Ships or from shore), for the preparation, testing and delivery of engineering instruments and equipment assigned to the Sonar and Marine Sensors Section:
- Contribute to the maintenance of the engineering instruments and equipment assigned to the Sonar and Marine Sensors Section, particularly for what concerns upgrade, obsolescence mitigation, calibration, testing, to ensure a safe and efficient operation at sea;
- As required:
 - Play the role of Engineering Coordinator of CMRE internal or customer funded projects, participating to the preparation of proposal, definition of



contracts, planning and commitment of resources, production of deliverables, reports, and statement of works;

- Participate, to sea and land based trials, as Coordinator or Member of the Engineering Project Team;
- Support the preparation and execution of Factory Acceptance Testing (FAT) and Sea Acceptance Testing (SAT) of CMRE newly developed / procured acoustic systems.
- In coordination with the CMRE Purchasing and Contracting Branch, prepare technical specifications, obtain quotations, and ultimately issue Purchase Orders for engineering supplies and services.

3. SPECIAL REQUIREMENTS AND ADDITIONAL DUTIES

a. Flexibility Clause

- The incumbent may be required to perform other related duties even in other parts of the Organization as directed.
- As required by the Program of Work, the incumbent may be asked to participate in Working Groups or Project Teams, and to coordinate and organize the work of other Technicians and Crafts Persons.

b. Deployment/Travel

The incumbent may be required to perform duties onboard Centre or chartered vessels. The incumbent may be required to undertake TDY assignments within and outside NATO boundaries.

4. **ESSENTIAL QUALIFICATIONS**

a. <u>Professional/Experience</u>

- Proven working experience with underwater acoustic sensors and systems (design, modelling, simulation, optimization, development, integration, testing, documentation);
- Broad knowledge of traditional and cutting-edge acoustic sensing technologies;
- Knowledge of one or more computer tools and packages, for:



- electrical or electronic design
- data analysis and processing
- basic underwater acoustic transducers modelling
- Participation in scientific, research and other operations at sea, focused on acoustic systems and other marine sensors;
- Production of technical documents (feasibility studies, technical proposals, specifications, drawings and schematics, test plans, test reports, user manuals, operating procedures);
- Management of technical Teams in day-to-day tasks, including objectives settings and evaluation.

b. <u>Education/Training</u>

 Bachelor's degree at a nationally recognised/certified University in Acoustic related discipline (Engineering or Physics), with at least 2 years of post-related experience;

Or:

Exceptionally, the lack of a university degree may be compensated by the
demonstration of a candidate's particular abilities or experience that is/are of
interest to CMRE, that is at least 6 years extensive and progressive expertise
in duties related to the function of the post.

c. Language Requirements

A thorough knowledge of one of the two NATO languages, both written and spoken, is essential and some knowledge of the other is desirable.

English SLP 3333 (Listening, Speaking, Reading and Writing)

NOTE: Most of the work of CMRE is conducted in the English language.

d. Certification



The incumbent needs to hold a Fit for Sea Certificate in line with the International Maritime Organization (IMO) and International Labour Organization (ILO) standards, before taking up duty.

5. **DESIRABLE QUALIFICATIONS**

a. <u>Professional/Experience</u>

- Experience in the development of underwater acoustic prototype equipment (from specifications to integration and testing), through a multi-disciplinary engineering knowledge of acoustic, electrical and mechanical components interaction, resulting effects on overall performance;
- Experience in laboratory and tank acoustic transducers tests, including data acquisition and processing;
- Knowledge of one or more computer suites for:
 - Advanced underwater acoustic transducers modelling (e.g., COMSOL);
 - Mechanical design/modelling (e.g. SolidWorks).

b. Education/Training

 Master's of Science at a nationally recognised/certified University in Acoustic related discipline (Engineering or Physics), with at least 1 year of post-related, relevant experience;

c. <u>Language Requirements</u>

Italian SLP 2222 (Listening, Speaking, Reading and Writing), to collaborate and day-by-day activities with local Suppliers, Contractors and Authorities.

6. ATTRIBUTES/COMPETENCIES

- Innovating: offer original ideas.
- Problem solving: respond to unexpected circumstances and taking initiative to implement solutions.
- Managing: time as well as material, human, and financial resources.



 Motivating: trust people and distribute responsibilities to optimize the team performance. Solicit inputs and encourage others.

All CMRE personnel are expected to conduct themselves in accordance with the current NATO Code of Conduct agreed by the North Atlantic Council (NAC), and thus display the core values of integrity, impartiality, loyalty, accountability, and professionalism.

7. <u>REMARKS</u>

The duties are mostly performed in an office environment, but the Incumbent may be required to work outdoor or on board a vessel. Slightly undesirable working conditions may apply.

About Us:

The Centre for Maritime Research and Experimentation (CMRE) is part of the NATO Science and Technology Organization (STO). The mission of the STO is to help position both national and NATO science and technology investments as a strategic enabler and technology advantage for the defence and security posture of NATO Allies and partners. The Centre conducts scientific research and technology development and delivers innovative field-tested S&T solutions to address the defence and security needs of the Alliance. CMRE has more than 60 years of experience and has produced a cadre of leaders in ocean science, modelling and simulation, acoustics and other disciplines, as well as producing critical results and understanding that have been built into the operational concepts of NATO and the Nations.

What we offer:

- Salary (Pay Basis): 5,939.03 (EUR) Monthly*
 *Salary value as per 2024. Subject to future adjustments in accordance with North Atlantic Council decisions.
- Grade ABCL grade A2-A3 / NATO grade G15-G17



NOTE:

Typically, candidates for twin-graded posts will be appointed at the lower grade. Advancement to the higher grade is not automatic and will not normally take place during the first three years of service in the post.

Under specific circumstances, serving staff members may be appointed directly to the higher grade, and a period of three years might be reduced by up to twenty-four months for external candidates.

- A world class research facility located in the sea port of La Spezia, Italy supported by two specialised research vessels.
- An exciting place in which to work situated at an ideal location, the port of La Spezia, Italy, enabling synergy with regional and global academic institutes and industry.
- Salary and conditions of employment will be in accordance with the NATO
 Civilian Personnel Regulations (NCPR), which includes a rewarding salary and
 a comprehensive system of allowances, supplements and insurances to
 support families and, in case of expatriated staff, offers an interesting
 "expatriate" package.
- A generous annual leave and, (where eligible) home leave.
- The successful candidate will be offered a three years' definite duration contract
 which may be renewed for subsequent periods subject to business needs,
 satisfactory performance and the need to rotate skills and talent within the
 Organization.
- Applicants who prove to be competent for the post but who are not successful
 in this competition may be offered an appointment to another post of a similar
 nature, which might become vacant in the near future, albeit at the same or a
 lower grade, provided they meet the necessary requirements.

Our recruitment process:

 Please note that we can only accept applications from nationals of NATO member countries.



- Applications (including the most relevant publications, the diplomas stating the highest level of education - and a CV) for this vacancy are to be submitted using the E-recruitment system;
- Appointment will be subject to receipt of a security clearance (provided by the national Authorities of the selected candidate) and approval of the candidate's medical file by the CMRE Medical Adviser.

Additional information:

- CMRE values diverse backgrounds and perspectives and is committed to recruiting and retaining a diverse and talented workforce. We welcome applications of nationals from all Member States and strongly encourage women to apply.
- Selected candidates are expected to be role models of integrity, and to promote good governance through ongoing efforts in their work.

For more information on how to apply:

How to apply for posts within NATO 6 tips to apply for posts within NATO

NOTE:

NATO will not accept any phase of the recruitment and selection prepared, in whole or in part, by means of generative artificial-intelligence (AI) tools, including and without limitation to chatbots, such as Chat Generative Pretrained Transformer (Chat GPT), or other language generating tools. NATO reserves the right to screen applications to identify the use of such tools. All applications prepared, in whole or in part, by means of such generative or creative AI applications may be rejected without further consideration at NATO's sole discretion, and NATO reserves the right to take further steps in such cases as appropriate.



HOW TO APPLY:

Applications are to be submitted using the NATO Talent Acquisition Program (NTAP) https://nato.taleo.net/careersection/2/jobdetail.ftl?job=241505&lang=en

Applications submitted by other means are not accepted. NTAP allows adding attachments. Essential information must be included in the application form. Particular attention should be given to Education and Experience section. Each question should be answered completely. Expressions such as "please see annex / enclosed document" or invitations to follow links to personal webpages are not acceptable and will be disregarded. All answers should be in English preferably, or French.