EURAMET e.V. Quality Manual

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EURAMET e.V. Quality Manual

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1. About EURAMET e.V.

1.1. EURAMET e.V.

1.1.1. EURAMET – the European Association of National Metrology Institutes – is a Regional Metrology Organisation (RMO) of Europe. It coordinates and promotes the cooperation of National Metrology Institutes (NMI) of Europe in research in metrology, traceability of measurements to the SI units, international recognition of national measurement standards and of the Calibration and Measurement Capabilities (CMC) of its members, and other appropriate related activities. Among these tasks, EURAMET is responsible for the elaboration and execution of a European Metrology Research Programme (EMRP). EURAMET e.V. is a registered association for public goods under German law.

EURAMET e.V. was inaugurated on 11 January 2007 in Berlin, Germany, as a not for profit organisation ("gemeinnütziger eingetragener Verein – e.V."). Since 1 July 2007 EURAMET e.V. is the successor of EUROMET. All activities and responsibilities as the Regional Metrology Organisation for Europe under the intergovernmental Metre Convention were transferred from EUROMET to EURAMET e.V.

When dealing with EURAMET, Stakeholders are entitled to, and should expect the highest standards of integrity from EURAMET Officials, Secretariat Staff, and Contact Persons (cascading control).

1.1.2. Further information on EURAMET is publicly available on the website www.euramet.org and the organisation of EURAMET is described in Section 3 of this Quality Manual.



2. EURAMET Quality Management System

2.1. Mission, Vision and Strategy

2.1.1. Mission

Develop and disseminate an appropriate, integrated and cost effective measurement infrastructure for Europe taking into account the needs of end users in industry, business and Government.

Ensure that the European measurement infrastructure is internationally competitive and recognised, and is based on robust and high quality science and R&D.

Support members in meeting their own national requirements through collaboration and a balanced European measurement infrastructure.

2.1.2. Vision

To be the leader in the development and application of measurement enabling Europe to be competitive, healthy and sustainable through innovation.

2.1.3. Strategy

EURAMET strategy concentrates on helping member nations and Europe to meet future needs related to innovation, growth and societal well being through the provision and development of quality assured and traceable measurement. The strategy is presented in detail in the "EURAMET 2020 Strategy" document.

2.2. Quality Policy and Objectives

- **2.2.1.** EURAMET provides its stakeholders with a service that meets, statutory and regulatory requirements under German law, the EURAMET Byelaws and Rules of Procedure, and follows the general principles of ISO 9001:2008.
- **2.2.2.** EURAMET will promote a collective commitment to good professional practice and continual improvement. The actions undertaken and their effectiveness will be monitored by the Quality Manager reporting to the Chairperson and the Board of Directors.
- **2.2.3.** EURAMET officials and Secretariat staff are aware of their responsibility to ensure stakeholder needs and expectations are determined, converted into requirements and fulfilled with the aim of achieving stakeholder satisfaction within the bounds of appropriate statutory and regulatory requirements.
- **2.2.4.** Specific aspects of EURAMET policy are addressed in detailed policy documents and EURAMET Guides.

2.3. Quality Management Structure

- **2.3.1** The management of the Quality Structure is the responsibility of the Quality Manager, who reports directly to EURAMET Chairperson.
- **2.3.2.** The Board of Directors, through the Secretariat, shall provide leadership, commitment and active involvement in developing and maintaining an effective and efficient management system. This is undertaken as follows:

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- Communication to the organisation of the importance of meeting stakeholder and statutory and regulatory requirements.
- Establishing and developing the Quality Policy.
- Ensuring quality objectives are established and communicated to the organisation.
- Ensuring the availability of resources and the improvement and support of people through regular and effective competency, awareness, training and review of staff.
- Outlining a framework for review of policy and objectives for ongoing suitability.
- Undertaking quality planning to define the processes needed to meet effectively and efficiently the organisation's objectives.
- Regular quality management system review.

2.4. Quality Management System Documentation

- 2.4.1. The policies set out in this Quality Manual support the EURAMET Byelaws and Rules of Procedure.
- **2.4.2.** The policies in the Quality Manual are supported by a series of administrative procedures and/or desk instructions. Where procedures and/or desk instructions are supported by forms, those forms are referenced in those procedures or desk instructions.
- **2.4.3.** The Quality Manual will be updated as necessary and reviewed annually on the anniversary of its issue date.
- **2.4.4.** Administrative procedures and/or desk instructions will be updated as necessary.



3. Organisation and Management

3.1. EURAMET Members, Associates and Liaison Organisations

The basis for membership is defined in the EURAMET Byelaws Sections 4 & 5 in accordance with the EURAMET Rules of Procedure (Part A. Section III).

The responsible authority in a country shall submit a written application for an NMI to become a member using the form "Application for Membership".

Designated Institutes (DI) in a country which fulfil the EURAMET Acceptance Criteria for Associates can apply for associate membership according to the procedure "Procedure for acceptance of Designated Institutes as EURAMET Associates"

The reference source for the actual status of Members, Associates and Liaison Organisations of EURAMET is the EURAMET website.

3.2. Bodies and Committees of the Association

EURAMET is organised in different bodies and committees, which are the:

- Chairperson and two Vice-Chairpersons
- Board of Directors
- General Assembly
- EMRP Committee
- Secretariat
- Technical Committees
- Research Council

Descriptions are given in the EURAMET Byelaws and Rules of Procedures. Operational processes with regard to the Quality Management System are outlined below and these operate through the Board of Directors (BoD).

The reference source for members of the bodies and committees described in this section is the EURAMET website.

3.2.1. Chairperson & Vice-Chairpersons

EURAMET has one Chairperson and two Vice-Chairpersons, who are elected for a period of three years following the procedure for "Election and Voting of BoD and Chairpersons". The EURAMET Chairperson and Vice-Chairperson (GA) are elected by the General Assembly. The Vice-Chairperson (EMRP), who is at the same time the Chair of EMRP Committee, is elected by the EMRP Committee.

The Chairpersons represent EURAMET legally.

The responsibilities and tasks are described in Terms of Reference.

The role shall be formally accepted by signing the template "Acceptance of role and declaration of impartiality" and the record shall be kept by the Secretariat.

3.2.2. Board of Directors

The Board of Directors is responsible for the governance and strategic direction of EURAMET. It is composed of the three Chairpersons, either the Chairperson elect or the past Chairperson and six



elected members. Members of the BoD are elected according to the procedure for "Election and Voting of BoD and Chairpersons".

The rights, responsibilities and tasks are described in Terms of Reference.

The role shall be formally accepted by signing the template "Acceptance of role and declaration of impartiality" and the record shall be kept by the Secretariat.

3.2.3. General Assembly

The General Assembly is the highest authority and decision-making body of EURAMET. Each member is represented by a Delegate with one vote in the decision making. The eligibility criteria for delegates and alternates to the delegates are stated in § 4(6) of the EURAMET Byelaws. Delegates and alternates are nominated by the member NMI by using the template "Nomination and Authorization of EURAMET Delegates".

Representatives of EURAMET Associates have an observer status in the General Assembly.

The rights, responsibilities and tasks are described in Terms of Reference.

3.2.4. EMRP Committee

The EMRP Committee is the decision-making body for all matters concerning the execution of the European Metrology Research Programme (EMRP). Each member participating in the EMRP has one representative.

Decision making within the EMRP Committee is based on a weighted voting principle, taking into account the degree of engagement in the specific funding programme under discussion.

The operation of the EMRP Committee is described in the "Rules of Procedure of the EMRP Committee".

3.2.5. Technical Committees

The technical work of EURAMET is coordinated in Technical Committees (TCs). The following Technical Committees are established:

- Technical Committee for Acoustics, Ultrasound and Vibration (TC-AUV)
- Technical Committee for Electricity and Magnetism (TC-EM)
- Technical Committee for Flow (TC-Flow)
- Technical Committee for Interdisciplinary Metrology (TC-IM)
- Technical Committee for Ionising Radiation (TC-IR)
- Technical Committee for Length (TC-L)
- Technical Committee for Mass and Related Quantities (TC-M)
- Technical Committee for Metrology in Chemistry (TC-MC)
- Technical Committee for Photometry and Radiometry (TC-PR)
- Technical Committee for Quality (TC-Q)
- Technical Committee for Thermometry (TC-T)
- Technical Committee for Time and Frequency (TC-TF)

Members and Associates have the right to participate in the work of TCs via contact persons or observers according to the EURAMET Byelaws § 16. TC Contact persons are appointed by the delegate by using the "Nomination of TC Contact Person" template (special template for contact



persons from United Kingdom). Only one contact person per country can be appointed to each TC. Exceptions for this rule shall be approved by the Board of Directors.

Each TC is chaired by a TC-Chair who is elected by the General Assembly (GA). The role shall be formally accepted by signing the template "Acceptance of role and declaration of impartiality" and the record shall be kept by the Secretariat.

Technical Sub-Commitees (SC) may be established within each TC. Members and Associates have the right to participate in the work of SCs via contact persons or observers according to the EURAMET Byelaws § 16. SC Contact persons are appointed by TC Contact Persons of a country by using the "Nomination of SC Contact Person".template (special template for contact persons from United Kingdom). Only one contact person per country can be appointed to each SC.

The work within each SC is coordinated by a Convenor. A Convenor is proposed by the TC Chair after consultation of the Contact Persons and shall be appointed by the EURAMET Chairperson.

Liaison organisations may appoint a permanent observer to a TC or an SC with the approval of the Board of Directors.

Details of the TCs are publicly available on the EURAMET website.

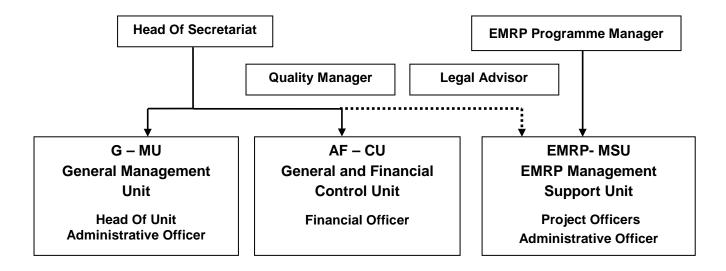
3.2.6. Research Council

The Research Council is the advisory board in matters of the EMRP with representatives consisting of institutional and personal members of high standing, drawn from the external stakeholder community.

The organisation and tasks are described in the EURAMET Rules of Procedure (Part B) and the Terms of Reference of the Research Council.

3.2.7. Secretariat

The Secretariat supports the EURAMET bodies executing the issues of EURAMET. The organizational chart of the EURAMET Secretariat is as follows:





The Secretariat operates in accordance with rules described in Bylaws (§ 16) and Rules of Procedure.

Written job descriptions are available for following positions:

- Head of Secretariat
- EMRP Programme Manager
- Financial Officer
- Head of G-MU
- G-MU Administrative Officer
- Quality Manager
- EMRP-MSU Legal & Contract Officer
- EMRP-MSU Project Officers
- EMRP-MSU Administrative Officer

3.3. Resource Management

- **3.3.1.** EURAMET recognises that one of its most important assets is the personnel involved in its operations. The experience and competence of personnel, the ability to devote sufficient time and the assured support of the parent organisation (where relevant) are key factors to be considered when nominating and appointing personnel to EURAMET positions.
- **3.3.2.** EURAMET recognises that appropriate resources must be made available to enable the organisation to function effectively. Budgets are prepared by the Secretariat in cooperation with the Board of Directors for approval by the General Assembly or EMRP Committee (as appropriate). Outturns are reported to these bodies, and taken into account in the following budget cycle.

3.4. Human Resources

Personnel working for EURAMET can be distinguished as follows:

- a) Direct employees: In every respect the usual employee / employer relationship
- b) Secondees (seconded personnel)
- c) Staff of the EMRP-MSU

Access to documents related to 'Human Resources' is restricted to Delegates.

3.4.1. Direct Employees

Direct employees work based on a contract of employment between EURAMET and the employee.

The employee works under sole supervision and responsibility of EURAMET in accordance with "EURAMET Human Resources Line Management" policy. The employee fills in EURAMET timesheets. EURAMET approves leave, conducts employee appraisals following the "Procedure for evaluation of EURAMET Secretariat staff: Head of Secretariat, G-MU, AF-CU" or "Procedure for evaluation of Secretariat Staff: EMRP Programme Manager and EMRP-MSU". EURAMET determines the level of remuneration in accordance with its normal practices. The tasks and responsibilities shall be described in a job description.

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The employee is either on EURAMET's payroll and is paid directly by EURAMET or paid through an agent in the country where the employee is based. EURAMET pays the monthly salary even if the employee is absent through sickness, holiday, and special leave. EURAMET is responsible for all social insurance contributions.

EURAMET is liable for any damages to third parties caused by EURAMET employees in the scope of their employment relationship. The employees are liable for recourse to EURAMET according to employment law.

3.4.2. Secondees

Seconded personnel from EURAMET Members and Associates to EURAMET (hereinafter "Secondee") works based on a contract of employment between home organization (EURAMET member or associate) and employee. Additional legal arrangements for assignment of staff to EURAMET exist in the form of either a 3-way contract between employer, employee and EURAMET or other bilateral contractual agreements between the parties.

a) Seconded staff:

Personnel from EURAMET Members and Associates can be seconded to EURAMET for a broader range of activities upon approval of the Board of Directors. The details shall be given in a job description. For the duration of the secondment the secondee works under sole supervision and responsibility of his/her EURAMET line manager in accordance with the "EURAMET Human Resources Line Management" policy. The secondee shall be treated like a direct employee; the term "seconded staff" is used.

The secondee fills in EURAMET timesheets. EURAMET approves leave, conducts employee appraisals following the "Procedure for evaluation of EURAMET Secretariat staff: Head of Secretariat, G-MU, AF-CU".

The secondee is on the payroll of his/her home organization. EURAMET is charged the monthly payroll costs plus VAT, for the percentage of time agreed: 100% for full time staff, alternatively the relevant percentage for part-time staff. EURAMET pays the monthly payroll costs even if the secondee is absent through sickness, holiday and special leave, unless otherwise specifically agreed.

b) Seconded project personnel:

Personnel from EURAMET Members and Associates can be seconded to the EURAMET General Management Unit for a limited period of time and for a clearly defined activity (project-type activity) upon decision of the Head of Secretariat. For the duration of the secondment the secondee works under sole supervision and responsibility of the EURAMET Head of Secretariat in accordance with the "EURAMET Human Resources Line Management" policy. Legal arrangements should exist in the form of a 3-way "Secondment Agreement" between employer, secondee and EURAMET. The term "seconded project personnel" is used.

The duration of a secondment, tasks and objectives, salary and cost recovery and further details, if needed, are stated in a Secondment Agreement.

c) Seconded advisor:

For certain fields of long-term or permanent activities, which are in the general interest of EURAMET, the Board of Directors may appoint personnel from EURAMET Members or Associates to fulfill particular tasks or for carrying out particular responsibilities for EURAMET. For the duration



of the secondment the personnel works under sole supervision and responsibility of the Board of Directors. The term "seconded advisor" is used.

Reimbursement of the salary or further details can be agreed between EURAMET and the employer organization.

3.4.3. Staff of the EMRP-MSU

The implementation of the EMRP is assigned to the EMRP-MSU which is hosted by NPL, based on the "Agreement on Programme Management and Support Services for the Article 169 EMRP". There is no direct legal relationship between EURAMET and the staff of the EMRP-MSU but specific staff-related provisions may be given in the relevant agreements between EURAMET and NPL. In particular, NPL assures that the employees allocated to the EMRP-MSU comply with the EURAMET procedures and cooperate with the other bodies and committees of EURAMET. Following the requirements of the European Commission and/or upon decision of the EMRP Committee, specific EURAMET procedures may be applied to the staff of the EMRP-MSU as part of the "EURAMET Human Resources Line Management" policy, including but not necessarily limited to staff evaluation and job descriptions.

The staff is on the payroll of NPL. NPL provides full details of all expenditures charged by the EMRP-MSU.

3.5. Financial Resources

Finance resources are defined in the Byelaws Section 6. Financial resources for the operation of EURAMET are provided through:

- Membership fees charged to all Members for general membership of EURAMET; EURAMET Rules of Procedure (Rule A., III., 6).
- EMRP fees charged to participating members for particular European metrology research programmes; EURAMET Rules of Procedure (Rule A., III., 6) and Rules of Procedure of the EMRP Committee (Rule 7).

3.6. Infrastructure

EURAMET does not have its own premises. The EURAMET Secretariat carries out its activities in the office premises of host organizations, PTB and NPL, based on the contractual agreements.

IT infrastructure and support is provided by PTB in accordance with the agreement between PTB and EURAMET on providing the staff and infrastructure for the EURAMET Secretariat. PTB guarantees availability, security and confidentiality of data. File directories and mailing system are hosted on servers separate from PTB servers. PTB provides regular status reports on access rights to EURAMET servers.

The number of PTB administrators having access to EURAMET directories is limited and controlled. All administrators have to sign letters of confidentiality.

NPL provides the infrastructure necessary for the operation of the EMRP-MSU according to the Secretariat Agreement between EURAMET and NPL.



4. Quality Management System Processes

4.1. General Requirements

- **4.1.1.** The EURAMET management system shall, through its nominated staff, develop and implement clear processes that continually improve the effectiveness and efficiency of the organisation in the delivery of its activities.
- **4.1.2.** Annually the Board of Directors will review the performance of the organisation and make appropriate changes to improve that performance.

4.2. Control of Documents

- **4.2.1.** This section describes the types of documents that require control under the EURAMET management system and the process of control. Documents under this process are:
 - Governance documents (including this quality manual)
 - Operational documents
 - Policy documents
 - Meeting and committee related documents
 - TC-related documents
 - Technical publications/guidance documents
 - Documented processes required for the implementation and undertaking of the EMRP
 - External documents

The detailed classification of the QMS documents is presented in the "Categories and types of EURAMET documents".

- **4.2.2.** It is the responsibility of the Quality Manager, to undertake the following controls:
 - Ensure that documents are approved prior to use, and where relevant, at their designated review period
 - Ensure that procedures are uniquely identified
 - Ensure changes and revision status of documents are identified in the Document Control Sheet
 - Ensure the relevant versions of documents are available at the point of use (this will generally be through uploading to the appropriate area of the website)
 - Ensure documents remain legible, identifiable and suitable for the intended reader
 - Any related documents external to the system are identified and controlled where applicable
 - Remove and prevent any unintended use of obsolete documentation



4.3. Control of Records

- **4.3.1.** Records shall be established to provide evidence of conformity to the system requirements. The controls required under the system are outlined below:
 - Identification Records that need to be maintained under the management system will be identified in a way that enables them to be easily identified
 - Storage The main archive of records shall be stored electronically on the main server in the first instance. Other types of record shall be identified and location logged along with the electronic records.
 - Protection and retrieval Records shall be protected from accidental loss or alteration by access controls, read-only protection and back-ups.
 - Retention time and disposal The retention time and disposal of records is defined in the related procedures.

4.4. Non-conformances and Corrective Action

- **4.4.1.** A non-conformance can be identified by any member of the EURAMET staff or officials, or may result from a complaint or audit finding. Non-conformance may be reported directly on the Non Conformance Report Template to the Quality Manager. The Quality Manager shall complete a Non Conformance Report (NCR) for non-conformances that are brought to the attention of the Quality Manager in other ways. The Quality Manager has the responsibility for logging the issue, and for filing the NCRs and ensuring the issue is quantified and analysed in accordance with the NCR, acting directly in urgent cases of immediate risk and developing an action plan to mitigate the issue
- **4.4.2.** Corrective action shall be used as a tool for improvement of the management system as well as a mechanism to promptly satisfy the stakeholder immediate need and to prevent a recurrence of a non-conformance.
- **4.4.3.** A need for corrective action can be identified through the following mechanisms:
 - Outputs from meetings
 - Complaints
 - Audit reports
 - Management reviews
 - Programme reviews
 - Every day staff activities
- **4.4.4.** It is the responsibility of the Quality Manager to develop an action plan for corrective actions and to keep records in order to be reported into management review.

4.5. Internal Audit

- **4.5.1.** Internal audits will be used at intervals planned by the Quality Manager to determine whether the quality management system:
 - Conforms to the planned arrangements of EURAMET.
 - Is effectively implemented and maintained at all levels.
 - · Addresses any statutory or regulatory requirements



Results of these audits will be reported into management review processes.

The audit plan will take into consideration the scope and scale of operations undertaken by EURAMET.

Internal audits will be conducted by nominated personnel with appropriate experience, using internal processes and procedures, to obtain objective and independent evidence of the performance of the management system. Audit reports will be generated by the auditor and identify the scope, the method and classify any actions resulting from the audit as:

Major : A complete, systematic, departure from the defined process being audited.

Minor : A localised departure from the defined process being audited.

Observation : An issue that may cause a departure from the defined process being audited in the

future.

Non-conformances shall be logged and follow up activities on corrective actions will be undertaken in a timely fashion and verified by the Board of Directors.

4.6. Planning, Monitoring and Management System Review

4.6.1. Quality Planning

The Secretariat, under the Board of Directors, shall define the processes that are needed to meet EURAMET's objectives and requirements effectively and efficiently. Inputs to this planning are typically:

- The EURAMET strategic direction
- EURAMET's objectives
- Statutory and regulatory requirements
- Actions from corrective / preventive actions
- Improvement opportunities
- Resourcing plans

In addition, planning will also be undertaken to ensure that the quality management system meets requirements and quality objectives on an ongoing basis and that the integrity of the system is maintained.

4.6.2. Monitoring and Communication

The regular operation of EURAMET activities may identify and provide evidence of the effectiveness of the operation of the quality management system's plans. Regular analysis by the Quality Manager shall be used to communicate the effectiveness of the quality policy, requirements, objectives and accomplishments through channels developed by the Secretariat through the Board of Directors.

4.6.3. Management System Review

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Reviews will be undertaken at planned intervals as determined by Secretariat in consultation with the Board of Directors. Management System Review inputs and outputs will be determined using ISO9001:2008 sections 5.6.2 and 5.6.3.



4.7. Programme and Project Management

4.7.1. Policy

Operations within EURAMET that relate to formal deliverables for the European Commission shall be organized in full conformance with and follow the contract requirements defined in the contract with the European Commission.

The EMRP Programme Manager will be responsible for advising the appropriate EURAMET Official or bodies of all actions necessary to ensure compliance with the European Commission requirements.



5. Internal Control Systems

5.1. Control Environment

Ethics and Integrity

EURAMET is a non-profit organisation acting for "public good" in the field of metrology coordination and management. When dealing with EURAMET, stakeholders are entitled to, and should expect, the highest standards of integrity from EURAMET Officials, Secretariat staff and Contact Persons.

EURAMET Officials and Secretariat staff are required to comply with and sign the EURAMET Code of Conduct. Other EURAMET Roles, without financial powers, like TC Chairs, are required to comply with Terms of Reference. EURAMET Officials and EURAMET Roles have to sign the Acceptance of Role, which includes the possibility of removal from the role for non-performance.

Commitment to competence

EURAMET Officials and key Secretariat staff are nominated and/or appointed by the relevant EURAMET body, such as the General Assembly, Board of Directors, EMRP Committee and Technical Committees. The appointing committees have responsibility for assuring themselves that potential appointees are competent.

- EURAMET officials are elected and
- Secretariat staff is approved by the Board of Directors.

The EURAMET Head of Secretariat and the EMRP Programme Manager shall jointly assess the performance of staff within the units of the Secretariat under their respective responsibility and report annually to the Board of Directors. The EURAMET Head of Secretariat and the EMRP Programme Manager shall be assessed annually by the Board of Directors.

Management Structure (see also Section 3)

All key roles are defined in Terms of Reference and/or in job descriptions, and the interrelationship of the bodies is described in Section 3 of this Quality Manual. Oversight is provided in a number of ways, by the Research Council for matters related to the research programme, by the Delegates in general matters.

5.2. Objectives Setting

Objectives are set within the Board of Directors, taking due account of the input from the other bodies of EURAMET, EURAMET stakeholders, and the changing external environment. New objectives generally result in defined actions recorded in the minutes of the Board of Directors meetings. Actions are followed up and documented at subsequent meetings to ensure close out.

5.3. Risk Management Process

5.3.1. Risk Management

EURAMET identifies and manages significant risks to the organisation and activities.

The approach adopted is based on identifying and categorising pre-control probability and pre-control impact, and identifying eventual consequences. Risks are prioritised based on the categorisation and where necessary a risk reduction approach is identified, and the post control probability and impact reassessed.

Document:



A Risk Register is maintained by the EURAMET Secretariat and is reviewed annually by the EURAMET Board of Directors, or more frequently if events or changing circumstances warrant it.

Risks considered include (but are not limited to):

- Relationship risks: legal, contractual, including Memorandum of Understandings
- Financial risks
- Operational risks
- Reputation risks
- Health and Safety risks
- Human Resources risks

Probabilities and impact for each are categorised as Low, Medium, High or Very High and "probability X risk" used to prioritise risks.

Electronic data is backed up daily at both Secretariat locations (Braunschweig and Teddington).

5.3.2. Disaster Recovery

Both host organisations (PTB and NPL) have large sites and the EURAMET facilities benefit from the host organisation protection and support services (site security, accident response, fire fighting, first aid etc). The host organisations are also able to provide alternative possibilities to house the Secretariat in case of local fire or flood.

Key contractual documents related to European Commission funding in particular are additionally stored as electronic and hard copies and at both locations.

NPL maintains a formal "Business Continuity Plan", "IT Disaster Recovery Plan" and "Internal Communications Plan" (specially addressing "major incidents"). The details of the plans are not public but are available for review at NPL.

5.3.3. Internal Security

Documentation is stored in offices dedicated to the EURAMET Secretariat and controlled by the EURAMET Secretariat. NPL and PTB maintain formal security policies.

5.3.4. Data Protection

EURAMET protects sensitive data, taking particular account of the use of the host organisation IT systems in accordance with principles described in the "Procedure on IT Baseline Protection".

At Braunschweig and Teddington EURAMET benefits from the host organisation IT security systems and policies, and within those organisations access is restricted to EURAMET staff, or to additional allocated where there is a legitimate reason to do so.

At Teddington arrangements comply with the UK Data Protection Act, and the EMRP-MSU laptops, in addition to normal password protection, are fully encrypted. At the Secretariat units in Braunschweig arrangements, in particular for maintaining the database, comply with the German Federal Data Protection Act.



5.4. Control Activities

5.4.1. General Requirements

EURAMET ensures that key activities are defined in formal procedures. Governance standards related to transactions include segregation of duties within the Secretariat, with oversight from other appropriate officials, as described in the "EURAMET & EMRP Governance Financial Management Procedure". "Rules for HSBC bank accounts: Authorisation and execution of payments" and "Rules for Commerzbank accounts: Authorisation and execution of payments" documents.

5.4.2. Safeguarding of Assets

The key assets controlled by EURAMET are fees from members and funding from the European Commission.

The process of internal control over safeguarding of assets is designed to provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of EURAMET's assets that could have a material effect on the financial statements.

Effective financial controls that contribute to the safeguarding of assets, including the prevention and detection of fraud, are keeping dedicated bank accounts and maintaining proper accounting records. Additionally, good business practice requires that assets be appropriately secured and maintained, used for the purposes intended, and periodically accounted for.

The Accounting System is described in Section 6.

5.4.3. Verifications

Transactions are verified by the EURAMET Head of Secretariat, and in the case of Article 169 funding transactions, by the EMRP Chair.

5.4.4. Fraud

The separation of functions between the EURAMET Head of Secretariat , the G-MU, the AF-CU and the EMRP-MSU, combined with the verification and oversight by other functions (EURAMET Chairperson, EMRP Chair), combined with the internal and external audit programmes give a high degree of assurance against fraud.

Potential conflict of interest is addressed in the agreements between EURAMET and PTB, EURAMET and NPL for the Secretariat, and in the EURAMET Code of Conduct and Acceptance of Role for other positions and roles. The Board of Directors has the right to remove personnel who fail to perform in any way, including conflict of interest.

5.4.5. Operating Performance

Reviews of Operating Performance are undertaken at regular intervals.

Operations related to general EURAMET are reviewed by the Board of Directors and General Assembly respectively.

Operations related to the EMRP are reviewed by the EMRP Committee.



5.4.6. Reporting

The Quality Manager will report at least annually to the Board of Directors on the functioning of the Quality Management System.

EURAMET is required to present annual tax declarations with supporting evidence periodically which must be appropriate for its "not for profit" status to the German tax authorities.

5.5. Communication and Information

5.5.1. Information Management System

EURAMET uses a variety of means to communicate to its bodies, members, associates and stakeholders, and has developed a Communication Strategy.

Methods of communication include:

- The EURAMET Website (public)
- The EURAMET Website (restricted serving as intranet)
- "EMRP online" working area for applicants and reporting of EMRP activity
- Newsletter
- Written Communications from the Chairperson
- Presentations at major metrology conferences
- Briefings at Technical Committee meetings held at member NMIs around Europe

EURAMET files appropriate documentation and provides an online hyperlinked capability to appropriate procedures.

Additionally working documents are made available in the appropriate areas of the EURAMET website.

5.6. Monitoring

Each year the Board of Directors will appoint two people from the Board of Directors, who are not chairpersons, to conduct an internal financial audit and prepare a report for the General Assembly. The internal financial audit is performed in accordance with the "Internal Financial Audit" document.

The purpose of the internal financial audit is to assess the operating effectiveness of internal controls across EURAMET (e.g. authorisation of transactions, account reconciliations, segregation of duties). It complements the external audit and concentrates on:

- The structure of the accounting system
- The allocation of costs to business areas (e.g. member services, iMERA-Plus, A169)
- The suitability and efficiency of the processes used
- The fulfilment of internal procedures
- The separation of functions related to payments: authorisation, execution, and accounting
- A check of random samples of transactions: business trips, procurement etc.



Their report should make proposals for improvement of the financial management where necessary, especially in terms of efficiency, transparency, and security.

In addition, Quality management system audits are performed by the Quality Manager. Audits are carried out on the regular basis and reported to the following Board of Directors meeting.

Document:



6. Accounting Systems

6.1. General

EURAMET is governed by financial regulations dealing with non-profit organizations. EURAMET's financial resources as described in Section 3.3 of this Quality Manual are based on §§ 6 and 17 (4) Byelaws and Rule A. III. 6 Rules of Procedure. The main focus of the accounting system is to show a high degree of transparency of the money provided by the members and associates and that funded by the European Commission (EC). In order to meet this demand EURAMET is using an adapted bookkeeping-system in conjunction with different bank accounts.

The organisational structure regarding authorisation and control, the execution and the accounting of payments is separated. Each step in the transaction chain is being carried out by different EURAMET staff members or officials. This ensures that no one transaction is being completely processed by one person – the four-eye principle is valid at all times in all matters. Further details are described in the "Rules for Commerzbank accounts: authorisation and execution of payments" and the "Rules for HSBC accounts: authorisation and execution of payments"

6.1.1. Bank

EURAMET maintains separate bank accounts with a local branch of the Commerzbank AG in Braunschweig and with HSBC Trinkaus & Burkhardt AG in Berlin.

Addresses:

Commerzbank AG Filiale Braunschweig Friedrich-Wilhelm-Platz 1 D-38100 Braunschweig Germany

HSBC Trinkaus & Burkhardt AG Kurfürstendamm 234 D-10719 Berlin Germany

Three bank accounts are used for the management costs (Commerzbank):

- A) EURAMET general management
- B) EMRP iMERA-Plus
- C) EMRP A-169

Two bank accounts are used for research funds (HSBC)

- D) for A-169 Joint Research Projects (JRP): a trust account
- E) for A-169 researcher grants: a normal account

6.1.2. General Rules and Regulations

The Secretariat prepares a budget for the general operation of the association once a year, which is approved by the General Assembly after discussion with the Board of Directors.

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Document: G-PRM-QMH-001 Chairperson



The EMRP Programme Manager prepares in agreement with the EURAMET Head of Secretariat the annual budgets for the management support of the EMRP under iMERA-Plus and under Article 169, which is approved by the EMRP Committee.

The Secretariat is responsible for keeping proper accounting records in accordance with the required principles of accounting. The accounting records disclose at any time the financial position of EURAMET and enable it to prepare financial statements in compliance with the EURAMET rules and German legislation.

6.2. Financial Reporting

6.2.1. Presentation of Financial Statements

The financial statements have to be prepared according to §§ 17 (5, 7, 8) Byelaws and the German legislation, in particular in accordance with the German Fiscal Code (AO) complying with the legislation dealing with not for profit organizations.

The Secretariat prepares several financial reports:

- an annual report for the members of the organization, presented to BoD and GA,
- regular intermediate accounts (bi-monthly) for budget follow-up purposes, which are presented to the BoD in the case of significant variances,
- an annual tax declaration for the German tax authorities,
- a statement showing the status of research funds for iMERA-Plus and Article 169,
- and an audit report of the proper application of funds and on the annual financial statement.

6.3. Accounting System

6.3.1. Description of Accounting System

The AF-CU is in charge of maintaining an accounting system and executing the accounting for EURAMET under the responsibility of the Head of the Secretariat. The accounting system is an accrual based double entry booking system performed on the Lexware Financial Office Premium Software. The accounting system is technically supported by a consultant for IT-management and a free hotline advisor.

The continuous accounting process is under the advice of a German tax counsellor.

The accounting system is described in the "Description of the EURAMET Accounting System" document.

6.3.2. Description of Accounting Process

The details of the accounting process are described in the "Description of the EURAMET Accounting System" document and "Financial Accounting System Procedure".

6.4. Related Processes

6.4.1. Accounting Policies

The accounting policies have to be in accordance with:

• Byelaws § 1 (5)



- German Commercial Code
- Tax Code
- and with the due care and diligence of a prudent businessman.

Further details of the accounting policies are under development.



7. Independent External Audit

7.1. Audit of EURAMET Accounts

EURAMET accounts are audited by an external company. The external company is proposed by the internal (financial) auditors and approved by the General Assembly in accordance with the Byelaws, § 11 (7).

Accounts are also presented to the German Finanzamt to confirm the "not for profit" status of EURAMET (initial application, after the 1st year, and then every 3 years).

Costs related to Joint Research Projects funded through iMERA-Plus and Article 169 will be subject to periodic auditing covering 100% of the costs, using FP7 compliant auditors following FP7 audit guidelines (mutatis mutandis).

7.2. Other Audits

The costs invoiced by NPL for hosting the EMRP-MSU are audited according to the EURAMET-NPL Secretariat Agreement, which includes the costs related to the management and support of the EMRP.

7.3. Auditing Standards

7.3.1. EURAMET Accounts

The audit of the annual financial statements is conducted in compliance with the required auditing principles as set out in the relevant auditing standards issued by the Institut der Wirtschaftsprüfer in Deutschland e.V. [German professional institute]. (IDW Stellungnahme zur Rechnungslegung: Rechnungslegung von Vereinen (IDW RS HFA 14)). Audit reports are prepared in compliance with the Generally Accepted Standards for the Issuance of Longform Audit Reports for the Audits of Financial Statements (IDW PS 450).

7.3.2. NPL Project Accounts

NPL project accounts are subject to independent external audits periodically. Audits are conducted in compliance with the International Standards on auditing (UK and Ireland) issued by the Auditing Practices Board.



8. Procurement

8.1. This Section establishes the policies and procedures for purchasing goods and services by EURAMET to ensure that accountability is maintained.

EURAMET follows the best value for money principle obtaining high quality goods and services that meet the applicable specifications at competitive prices and within the timeframe required, in order to achieve the mandates of the association.

- 8.2. EURAMET purchases are very limited, for example, to small value consultancy, airline tickets, conference material, publishing and promotional material.
- 8.3. EURAMET could benefit from the host (PTB and NPL) purchasing processes, provided they satisfy the principles laid down in this section of the Quality Manual, and when appropriate, additional requests specified by the Board of Directors (for purchases over €5000).
- 8.4. Procurement is the responsibility of the EURAMET Secretariat and is carried out in compliance with the Procurement Guideline.



9. Project Selection Procedures and Project Management

9.1. General Principles

EURAMET performs EURAMET Project Activities (EURAMET Technical Committee (TC) projects) and EMRP Project Activities.

9.2. EMRP Project Activities

9.2.1. General Principles of EMRP Project Activitites

- **9.2.1.1.** EURAMET understands that the success of the objectives of the European Metrology Research Programme (EMRP) is achieved through:
 - competitive selection of joint research projects (JRP) and pooling excellence in metrology research
 - opening the system to the best science and capacity building measures by awarding researcher grants
- **9.2.1.2.** The EMRP-MSU manages the selection procedures based on the strategies defined through consultation with the EMRP Committee and EMRP sub-committees.
- **9.2.1.3.** Key actors are informed of the selection procedures within each Call.
- **9.2.1.4.** The evaluation assessment is conducted by independent experts (Referees) drawn from the European Commission's FP7 expert database.
- **9.2.1.5.** The final decision on the selection of JRPs is made by the EMRP Committee taking due account of the ranking by the Referees.

The final decision on the selection of Researcher Grants is made by the JRP-Consortia and the EMRP-MSU.

- **9.2.1.6.** The Research Council provides strategic advice and reviews the overall call and selection process, and the ranking list of selected proposals and produces an independent opinion to the European Commission.
- **9.2.1.7.** Actions are taken to ensure that the project selection procedures adhere to the principles of excellence, fairness, equal treatment, objectivity, transparency, absence of conflict of interest, confidentiality, efficiency and speed.
- **9.2.1.8.** EMRP Project Activities are implemented through periodic EMRP Calls and Calls for Researcher Grants respectively.

Each call has a two-stage process, accompanied by a Call for EMRP Researcher Grants (Stage 3 and Open Call):

- Stage 1 Call for Potential Research Topics (PRTs) [fixed deadline]
- Stage 2 Call for JRP proposals & REG applications [fixed deadline]
- Stage 3 Call for REG & RMG applications [fixed deadline]
- Open Call for ESRMG applications [up to two cut-off dates per year]

9.2.1.9. EURAMET establishes and publishes guiding documents for the submission of proposals, as well as the related evaluation, selection and award procedures. The framework of documents,



for the calls and the selection of the proposals, is maintained on the dedicated webpage (www.emrponline.eu).

9.2.2. Submission of Proposals

- 9.2.2.1. Proposal forms and guidance notes for applicants are provided on the webpage for each stage of the call. A helpdesk is operated by EMRP-MSU to support applicants.
- **9.2.2.2.** EURAMET establishes and publishes guiding documents for the submission of proposals, as well as the related evaluation, selection and award procedures.
- 9.2.2.3. Proposals are submitted in response to calls and are made electronically through a set of detailed templates with associated guides.

9.2.3. Eligibility Check

9.2.3.1. Proposals/applications must fulfil the eligibility criteria to enter the evaluation phase. Each stage is subject to an eligibility check.

Those proposals, which fulfil the overall eligibility criteria, are then evaluated against the evaluation criteria defined at the publication of the call.

9.2.3.2. If it becomes clear before, during or after the evaluation phase that one or more of the eligibility criteria have not been fulfilled, the proposal/application is declared ineligible by EURAMET, and is withdrawn from any further examination. Where there is a doubt on the eligibility of a proposal/application, EURAMET reserves the right to proceed with the evaluation, pending a final decision on eligibility. The fact that a proposal/application is evaluated in such circumstances does not constitute proof of its eligibility.

9.2.4. Evaluation of Proposals

- **9.2.4.1.** Each stage is subject to an evaluation process.
- 9.2.4.2. EURAMET evaluates the JRP proposals/Researcher Grant applications submitted in response to a call with the assistance of independent experts (Referees) to ensure that only those of the highest quality are selected for funding. The evaluation at Stage 2 includes a face-to-face "Review Conference" to allow discussion between proposers and evaluators. The European Commission is invited to attend the "Review Conference".
- **9.2.4.3.** An Independent Observer can be appointed to assess the evaluation process and report on the conduct and fairness of the evaluation to the European Commission.
- 9.2.4.4. The minimum number of Referees to review each JRP proposal and each Researcher Grant application shall meet the requirements of the European Commission.
- 9.2.4.5. EURAMET draws up a list (including, if necessary, a reserve list) of appropriate Referees using the European Commission's FP7 expert database, to which EURAMET has been granted privileged access.

The Referees are required to have skills and knowledge appropriate to the tasks assigned to them. They must also have a high level of professional experience in the public or private sector in one or more areas of the activity in which they are asked to assist.



EURAMET takes all reasonable steps to ensure that Referees are not faced with a conflict of interest between their own research/business interests, and their evaluation activities for EURAMET.

All Referees are required to sign a Declaration of Confidentiality and Any Conflict of Interest prior to beginning any evaluation identifying any conflicts of interest that may undermine their impartiality.

- **9.2.4.6.** The core evaluation criteria and any additional evaluation criteria developed by the EMRP Committee are published with each call.
- **9.2.4.7.** The core evaluation criteria are.

for the Joint Research Projects (JRPs):

- Scientific and/or technological excellence
- Relevance to the objectives of the EMRP
- The potential impact through the development, dissemination and use of the project results
- The quality and efficiency of the implementation and management

for the Researcher Grants:

- Scientific and/or technological excellence
- Relevance to the objectives of the EMRP project (JRP)
- Quality and implementation capacity of the applicant and his/her potential for further progress
- Quality of the proposed activity in scientific training and/or transfer of knowledge
- **9.2.4.8.** Proposals are independently accessed by a minimum number of Referees against evaluation criteria. Proposals are ranked based on scores at the end of the evaluation process.
- **9.2.4.9.** A single ranked list will be established by the panel of Referees based on the consensus scores of the evaluation criteria.

The EMRP Committee meets afterwards and agrees on the final ranked list of JRPs to fund.

The final list of selected JRPs is published. The coordinators of the JRP proposals are sent written notification of the outcome of the selection decision.

- **9.2.4.10.** The Research Council provides an independent view of the overall results of the evaluation of a call (Stage 1 and Stage 2).
- 9.2.4.11. Researcher Grants are selected by the JRP-Consortia and EURAMET.

The selection decision made by the JRP-Consortia will be approved by EURAMET, subject to conformity of the selection process to relevant rules and instructions.

9.2.5. Negotiation of Project Contracts

9.2.5.1. Proposals/applications which have passed the evaluation process and received high ranking in the list are invited to negotiations.



- **9.2.5.2.** During negotiations the submitted proposals/applications will be fine-tuned, taking into account any recommendations and comments from the Referees, in order to ensure the efficient implementation of the JRP/Researcher Grant in its execution phase. The negotiations aim to:
 - agree on the scientific/technical details of the JRP/Researcher Grant and to finalise the details of the work to be carried out within the associated budget,
 - collect financial and administrative/legal information needed for preparing the contracts on the basis of Referees' remarks and comments
- **9.2.5.3.** If the negotiation phase is successful, the contract can be signed between EURAMET and for the JRP the JRP-Consortium (represented by the JRP-Coordinator) and for the Researcher Grant the EMRP Researcher Grant Beneficiaries.

9.2.6. Monitoring and Reporting

9.2.6.1. EURAMET will monitor the JRPs in terms of scientific, administrative and financial progress at JRP/Researcher Grant and programme level.

Monitoring will take place at regular intervals and be integrated into all stages of the project cycle. Monitoring includes reports on progress and quality of the JRPs/Researcher Grants as well as on finances of the JRPs.

- **9.2.6.2.** Reporting will be undertaken on project and on programme level:
 - Reporting on project level (downstream):
 - The JRP-Consortia report at JRP level to EURAMET as required by the JRP-Contract.
 - The Grant Researchers report at JRP level to EURAMET via the JRP-Coordinator on the progress of the Research Activities, and on training and knowledge transfer activities undertaken as required by the EMRP Researcher Grant Contract.
 - Reporting on programme level (upstream):
 EURAMET has the obligation to assess and report to the European Commission at programme level, which is based on the information received from all of the JRPs/Researcher Grants.

9.2.7. Related Procedures

The guiding documents for the submission of proposals, as well as the related evaluation, selection and award procedures are published on the dedicated webpage (www.emrponline.eu/downloads.html).

The framework of documents comprises the call text with deadlines, scope, eligibility criteria, description of selection process and selection criteria together with supporting guidance, proposal forms and exemplar proposal forms, and supporting documents for the Researcher Grants.

Access to internal operational procedures is limited to the EMRP Committee and the Board of Directors.

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10. Public Access to Information

- 10.1. The Information Management System is described in Section 5.5 of this Quality Manual and a Communication Strategy is outlined.
- 10.2. EURAMET provides a website, which contains general information about the EURAMET activities for information to the public. Responsibilities for the information on the EURAMET websiteare described in the "Maintenance of EURAMET web-site: Responsibilities" document.
- 10.3. EURAMET's general policy for activities receiving public funding is to make information publicly available unless there is a specific reason not to (for example related to confidentiality, individual data etc.).
- **10.4.** In case of the dissemination of 'ad hoc" information which due to its content or timing cannot be issued through the normal communication procedures, principles described in the "EURAMET Guidelines for issuing "ad hoc" information" apply.



Acronyms

BoD : Board of Directors

CMC : Calibration and Measurement Capabilities

DI : Designated Institute

EMRP : European Metrology Research Programme

ESRMG : Early Stage Researcher Mobility Grant

GA : General Assembly

JRP : Joint Research Project

NMI : National Metrology Institute

RMO : Regional Metrology Organisation

NPL : National Physical Laboratory

PRT : Potential Research Topic

PTB : Physikalisch-Technische Bundesanstalt

QMS : Quality Management System

R&D : Research and Development

REG : Researcher Excellence Grant

RMG : Researcher Mobility Grant

SC : Sub-Committee

TC : Technical Committee