



**QUALITY MANUAL: IBE C2 Management Processes**

**Summary on changes compared to previous version**

- *Textliche Überarbeitung der Qualitätspolitik*
- *Herstellung Konsistenz Organigramm und Kap 2.2 (QR – und Stellvertreter Bestellung)*
- *Geänderter Name von EMI Q2 Service contracts hier angepasst*

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The table of contents of the quality manual, a list of all quality procedures as well as terms, definitions and abbreviations can be found in IBE C0 Content.

	Author / Revison	Examination	Valid from / Approval
Function	<b>QR</b>	<b>QR</b>	<b>HI</b>
Date			
Signature			

## QUALITY MANUAL: IBE C2 Management Processes

# 2 MANAGEMENT PROCESSES

## 2.1 Quality policy

The overall objective of the work of the IBE is to promote climate change mitigation and air quality control measures via a high quality emission inventory reporting under the relevant national, european and international frameworks and conventions.

To achieve this, the IBE is committed to strict impartiality (see C1.6) and quality management.

In this context, the term quality means:

1. Fulfilment of requirements for emission inventories as listed in EMI Q1 to provide a solid data basis for the political processes in the context of greenhouse gas and air pollutant emissions.
2. Providing emission inventories that facilitate the definition and evaluation of measures, which needs a forward looking maintenance and improvement of the emission inventory. Therefore, the IBE keeps its staff updated on the latest technical expertise, scientific findings and the latest developments, by encouraging the participation of its staff in international technical and political processes and ensure the transfer of knowledge within the IBE.
3. Compliance with the ISO/IEC 17020 standard by ensuring the implementation and continuous improvement of a QMS as described in this manual by the IBE and its personnel. The QMS procedures are designed to facilitate the preparation of the emission inventories in a professional and timely manner, particularly to enhance the transparency to allow full reproduction, and the correctness via quality checks and validation activities. One of the key managerial functions is raising the personnel's quality awareness.

The aim of the IBE is to provide an example by setting a high quality standard - even higher than specified in the requirements - so as to improve the quality of air emission reporting in the long term, and to inspire other countries to set up similar systems.

The **quality objectives for emission inventories** are above all to fulfil all relevant requirements in terms of content and format:

“**TACCC**”: transparency, accuracy, completeness, comparability, consistency

(as defined in the IPCC 2006 GL as well as the EMEP/EEA emission inventory guidebook), and timeliness.

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### 2.2 Quality representative

The quality representative (QR) is nominated by the head of inspection body (HI) and part of the top management team of the IBE.

Quality representative: DI Günther Schmidt

Deputy and assistance: DI Manuela Wieser

The QR bears the responsibility for the establishment, implementation, maintenance and continuous improvement of the QMS pursuant to ISO/IEC 17020 and the requirements of the AkkG.

The QR acts as interface between QMS requirements and the implementation of the QMS of the IBE.

The tasks of the QR are in particular:

- Maintaining and optimising the QMS of the IBE through
  - preparation, administration and revision of the quality manual
  - preparation, administration and revision of quality procedures in cooperation with the personnel
  - control and archiving of quality documents and quality records
  - identifying and managing corrective and preventive action
- Reporting to the HI about the performance of the QMS and any necessary corrective and preventive action
  - QMS monitoring (particularly the planning, conducting and evaluation of internal audits)
  - compilation of an annual report on the QMS (which serves as a basis for the management review by the HI)
  - contribution to quality planning (undertaken by the HI)
- Raising the personnel's quality awareness and QMS training
- Cooperation with the accreditation body
- Cooperation with other accredited or certified organisational units of the Environment Agency Austria.

In terms of education, training, technical knowledge, skills and experience, the skills required to be a QR are:

- QMS training (in addition to general training, which might also be internal training, training at the Austrian Standards Institute and approved by the competent accreditation body ("Grundlagen der Akkreditierung"))
- Several years of experience in the implementation of a QMS
- Basic knowledge of the preparation of emission inventories
- Fundamentals of project management
- High level of quality awareness
- Very good English language skills
- Good IT skills, particularly MS Office

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### 2.3 Personnel

The qualifications of its personnel, and particularly of the “inspectors” (personnel performing inspection activities required by ISO/IEC 17020), are a key priority for the IBE (see quality policy *IBE C2. 1*).

The procedures for selecting (including job specifications for key functions), training, formally authorising and monitoring inspectors are set out in *IBE Q1 Personnel*.

The different functions of the IBE personnel are listed in the table below, the figure also contains names of the allocated personnel. A staff member might have more than one function, and not all IBE members might act as inspectors.

At least two Sector Experts (SE) per sector form the sector team, whereas one team member is additionally nominated as sector coordinator (Sector Coordinator – SC). The SC has an additional, coordinating role.

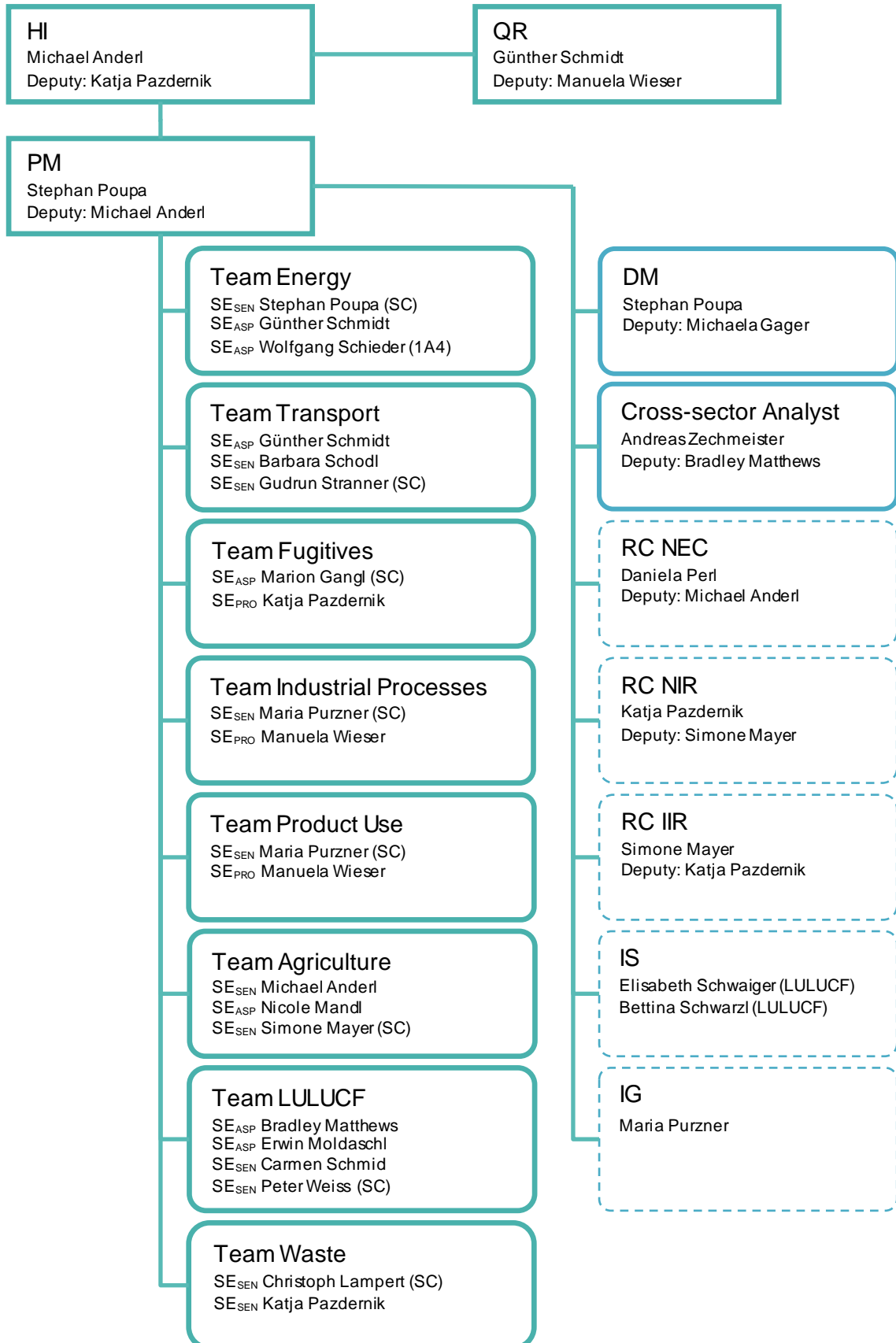
Type of function	Code	Inspection activities	Further specification (e.g.)
<u>Key functions:</u>			
Head of Inspection body	HI	no	-
Deputy	D	no	HI-D, RC-D, ...
Quality Representative	QR	no	-
Sector Expert	SE	YES	SE <sub>Sen</sub> *, SE <sub>Jun</sub> * /for the appointed sector
Sector Coordinator	SC	no	for the appointed sector
Data Manager	DM	no	-
Cross-sector Analyst	CA	no	
Project Manager	PM	no	-
<u>Supporting functions (slashed boxes):</u>			
Report Coordinator	RC	no	RC <sub>NIR</sub> , RC <sub>NEC</sub> , ...
Inventory Support	IS	no	-
Inventory Generalist	IG	no	-

Personnel holding key functions is considered as key personnel.

**\* Criteria for experience levels (SE experience):**

- “asp”: Aspirant; until authorization
- “jun”: Junior expert; from authorization to 2 years experience
- “pro”: Professional expert at least 3 years experience
- “sen”: Senior expert 7 years experience, or 4 years plus review experience

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**2.3.1 Responsibility Table**

The following table gives an overview on main responsibilities (dark) and tasks (light):

<b>Requirements</b>	<b>Responsibilities</b>				
<b>EN ISO/IEC 17020:2012</b>	<b>MD</b>	<b>HI</b>	<b>QR</b>	<b>PM</b>	<b>SE</b>
<b>4 General requirements</b>					
4.1 Impartiality and Independence	x	X	x	x	x
4.2 Confidentiality				X	x
<b>5 Structural requirements</b>					
5.2 Administrative requirements	X	x			
5.2 Organisation and management		X	x		
<b>6 Resource requirements</b>					
6.1 Personnel		X	x		
6.2 Facilities and equipment	X	x			
6.3 Subcontracting		x			X
<b>7 Process requirements</b>					
7.1 Inspection methods and procedures		x		x	X
7.2 Handling inspection items and samples					
7.3 Inspection records					X
7.4 Inspection reports		x			X
7.5 Complaints and appeals			X		
7.6 Complaints and appeals process		x	x	x	X
<b>8 Management system requirements</b>					
8.1 Options					
8.2 Management system documentation		X			
8.3 Control of documents			X		
8.4 Control of records			X		
8.5 Management review		X	x		
8.6 Internal audits			X		x
8.7 Corrective actions		x	x	x	X
8.8 Preventive actions		x	X	x	x

**2.4 Internal communication**

Good internal communication is essential for the IBE's effective performance in line with the IBE's quality policy.

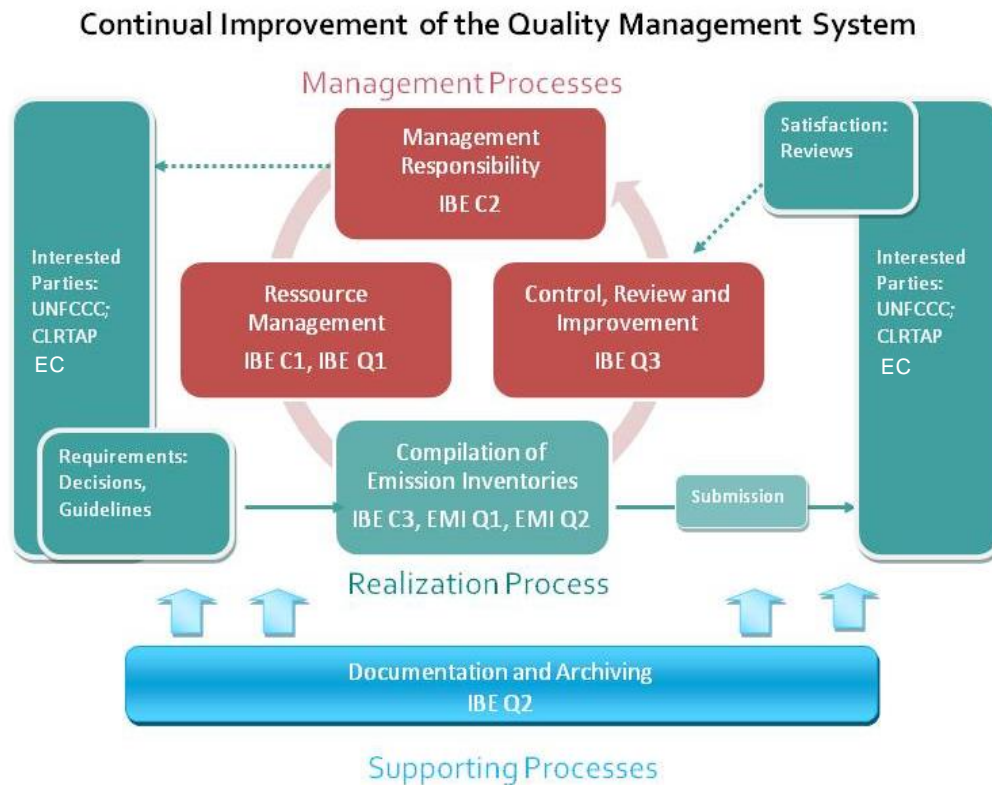
A Jour-Fixe is held about every month, additional and ad-hoc meetings upon demand (refer to *IBE Q1.5*). Each staff member is called upon to pass on any news and information relating to the tasks of the IBE, including information obtained in external trainings. Feedbacks on the QMS and the inventory system as input for continuous improvement are on the agenda for all regular meetings.

In addition to meetings, e-mails are used for communication.

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### 2.5 QMS documentation

The QMS is structured according to a process-based design:



The QMS documentation consists of documents relating to quality and technical aspects.

Quality documentation consists of:

- the quality manual, which is a description of the system and includes all essential regulations:

In addition to a general chapter (*IBE C0* - which includes the contents of the manual, a correspondence matrix for the manual and ISO/IEC 17020 as well as applicable terms, definitions and abbreviations), the manual contains three chapters (related to the main responsibilities of the IBE management):

- *IBE C1 Organisation:*
  - describes the organisation of the Environment Agency Austria and the IBE (**main responsibility: MD**)
- *IBE C2 Management Processes:*
  - includes general regulations related to management requirements for the QMS (**main responsibility: HI and QR**)
- *IBE C3 Technical Processes:*
  - includes general regulations related to the technical processes (**main responsibility: PM**)

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References to other, related chapters and/or quality procedures (giving more detailed guidance on issues that are outlined in the quality manual) are given at the appropriate place.

- quality procedures including blank forms for records (if needed):

These quality procedures are binding guidelines for processes within the QMS on a more detailed level than the general approach as described in the manual.

They are related to

- *IBE C2 Management processes* or supporting processes (ID “*IBE Q*”):
  - *IBE Q1 Personnel*
  - *IBE Q2 Documentation and Records*
  - *IBE Q3 Review and Improvement*
- *IBE C3 Technical processes* (ID “*EMI Q*”) - the realization process, particularly the compilation of the emission inventory, but not including the technical documentation (see below):
  - *EMI Q1 Emission Inventories*
  - *EMI Q2 Service Contracts*

References to related documents and records as well as detailed information on records (further specifications, how and where they have to be archived/saved) is included in every quality procedure.

Technical documentation consists of:

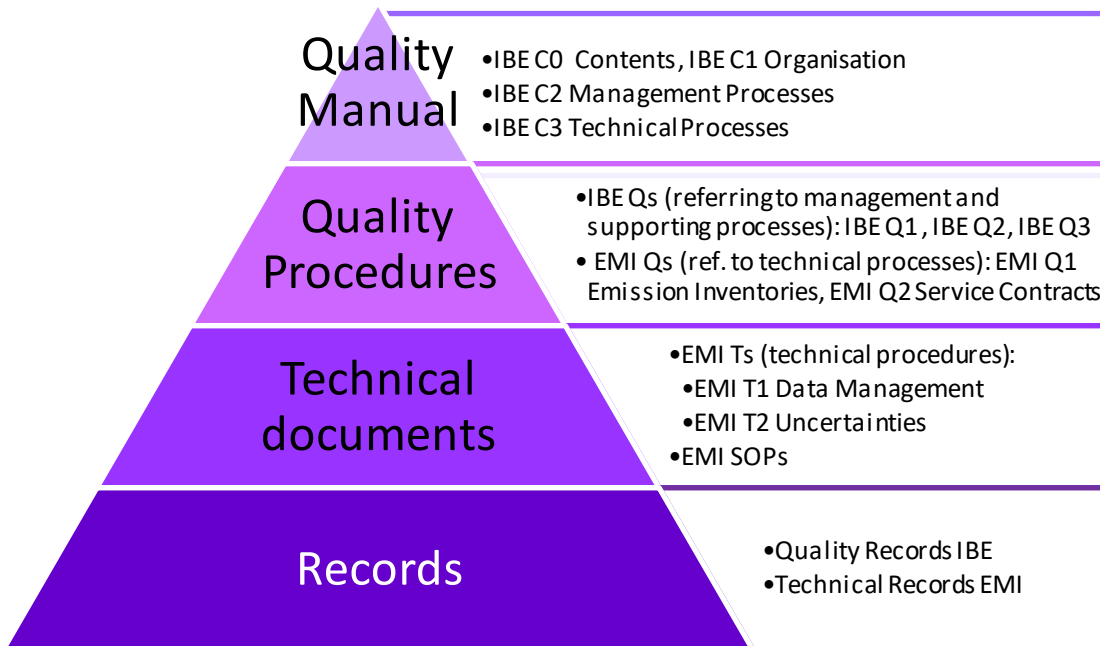
- standard operating procedures (SOPs) for the inspection activities (preparation of estimation estimate on source level)
- technical procedures (with ID “*T*”) for the preparation of the overall inventory:
  - *EMI T1 Data Management*
  - *EMI T2 Uncertainties*

All documents and records are listed in IBE\_Documents.



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The pyramid below illustrates the hierarchical structure of the QMS documentation:



All personnel involved in the inspection activities have access to the QMS documentation. Quality Manual, quality procedures, technical documents and quality records (electronic versions) are made available in the IBE Archive, all technical records are archived in the EMI Archive. Directory, name, structure as well as information on access rights are included in IBE Q2.7.2 and EMI Q1.15.1 respectively.

The quality manual is made publically available on the homepage of the Environment Agency Austria<sup>1</sup>. Quality procedures may be circulated upon request; however, their distribution is not controlled and therefore they are not subject to review by the QR. Documents are generally only forwarded as pdf-files.

In general, technical documents (SOPs and technical procedures) and records (relating to both quality and technical aspects) are considered to be internal documents, and are not circulated. They are generally made accessible only to the review team in the course of an official review (UNFCCC review, CLRTAP review, reviews by the EC, accreditation audits).

However, granting access to technical documents to other persons or institutions is subject to the approval by the HI, provided this is not in conflict with the IBE's confidential data procedures (see *IBE C3*).

The procedures for the compilation, revision, approval and supervision of QMS documentation are set out in *IBE Q2 Documents and Records*.

<sup>1</sup> [www.umweltbundesamt.at](http://www.umweltbundesamt.at)

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## 2.6 Management review

The HI reviews the IBE's management system once a year. The QR prepares a report as a basis for the review of the last year, covering all aspects required according to IEC/ISO 17020, also including a risk assessment. In the course of the review an annual plan for the IBE is made. The outcome of the review process (including the plan for the QMS and relevant technical issues for the following year) is documented in a report ("IBE Management review report"). The procedure and responsibilities for the review process are set out in *IBE Q3 Review and Improvements*.

## 2.7 Internal Audits

There are two types of internal audits:

Implementation audits test the implementation of the QMS; they are performed once a year and cover all procedures of the QMS.

Conformity audits check whether the QMS conforms to the requirements of ISO/IEC 17020 and the regulations of the Austrian Accreditation Law; these audits are performed once a year. If no substantial problems are identified and no substantial changes to the QMS are made, fewer conformity audits are needed (once before every accreditation audit).

The QR is responsible for planning, conducting and documenting internal audits; the procedure is set out in *IBE Q3 Review and Improvements*. For the purpose of auditing his/her own work, the QR consults (where needed) other Environment Agency Austria personnel qualified according to ISO/IEC 17020.

## 2.8 Corrective and preventive action

Corrective action is taken as required by the outcome of quality control (QC; see technical procedures described in Chapter 3) and quality assurance procedures (QA, particularly internal audits) as well as complaints and appeals.

Preventive action includes

- efficient internal communication (see *IBE C2.4*),
- regular QMS training sessions for the personnel (see *IBE Q1 Personnel*),
- participation in international/European working groups as well as good cooperation with other institutions (see *IBE C2.10*) as well as
- technical QA (input data audits and expert peer reviews) and verification measures as described in *EMI Q1*.
- An annual risk assessment in the course of the management review

Furthermore, preventive action is undertaken upon suggestions from HI, particularly in the course of the management review, or staff members.

Procedures for corrective and preventive action are set out in *IBE Q3 Review and Improvements*.

**QUALITY MANUAL: IBE C2 Management Processes****2.9 Cooperation with the accreditation body**

The IBE shall cooperate with the Austrian accreditation body („Akkreditierungsstelle“), particularly:

- for the submission of an annual activity report („Jahresbericht“ formerly known as „Tätigkeitsbericht“) by the first of March of the following year, in line with the respective guidelines of the accreditation body.
- for the submission of the currently valid insurance policy
- in notifying the accreditation body of changes affecting the requirements for accreditation (following section 24 (1) according to the Accreditation Act (AkkG)), such as
  - changes of the management personnel of the IBE,
  - the organisational status,
  - substantial changes in the QMS or the manual and of
  - new or revised inspection methodologies.
- in granting access to the accreditation body to permit inspection of compliance with the requirements of accreditation procedures specified in section 30 of the Accreditation Act (AkkG).

The QR shall visit the homepage of the Austrian accreditation body regularly (at least once a year in preparation of the report for the annual management review) so as to be up-to-date regarding the accreditation requirements. Furthermore, the QR or HI shall attend the accreditation body’s refresher course (every two years) or seek relevant information from other staff of the Environment Agency Austria who attended the course.

**2.10 Other Cooperation**

The QR attends the “QUS Jour Fixe” meetings at the Environment Agency Austria, where the QRs from all certified and accredited organisational units of the Agency meet several times a year.

The HI (or a representative nominated by the HI) participates in ON, CEN and ISO working groups which are relevant for the IBE’s scope of inspection activities (ISO TC 207 / SC7 – GHG management and related activities).

To receive technical training and to be able to prepare comparable emission inventories in the long term, the IBE personnel participates in the UNFCCC and EC review process.

As stated in the IBE’s quality policy (*IBE C2.1*), participation of the IBE personnel in international technical and political processes is a high priority for the IBE. The IBE is thus involved in the following EU-internal or international working groups that are relevant for its activities:

- Working Groups under the Climate Change Committee (DG Climate Action)
  - WG1 on GHG inventories
  - WG2 on projections and policies and measures
- Participation in the Review Process
- Participation in the Inventory Review according to EU Monitoring Mechanism Regulation (No. 525/2013 of the European Parliament and of the Council of 21



INSPECTION BODY FOR  
EMISSION INVENTORIES

ENVIRONMENT AGENCY AUSTRIA **umweltbundesamt**<sup>U</sup>

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May 2013 on a mechanism for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change and repealing Decision No 280/2004/EC)

- Participation in the CLRTAP Review Process
- Participation in the NEC Review Process
- Participation in Expert Panels of the TFEIP (Task Force on Emission Inventories and Projections under the UNECE Convention on Long-range Transboundary Air Pollution)