

QUALITY FRAME

A Fact based peer Review Approach for the
Mutual development of organisational Excellence

A manual for innovation initiatives

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1. Preface and Scope

A range of potential benefits of innovation initiatives may be better realised through a co-operative exchange of practice, experience and knowledge. Examples of such co-operation projects are CREST (e.g. recommendations on policy making), MAP Projects, PAXIS Network (ITC evaluation/best practices), Gate 2 growth, ERA-Nets (good practice exchange) and Europe Innova. Major conclusion from these projects one the one hand was a growing demand for further exchange of good practice. On the other hand it was observed that the quality of practice depends on specific conditions within the innovation environment and on the specific objectives which are supposed to be realised.

The QUALITY FRAME focuses on these issues and tested an approach that is based on two aspects:

- ▶ mutual understanding of quality criteria and indicators adopted from a proven flexible quality management model - rather than apparently good or best practices.
- ▶ “friendly” review and consulting in between business acquaintances, in confidentiality and based on facts – rather than formal Evaluations or PR influenced good practice presentations.

The adoption of jointly agreed quality criteria as well as harmonised and transparent quality management long-term practices by European funding agencies could have an impact at national level facilitating and at the same time the possibilities of transnational co-operation.

Unlike the rather formal and inflexible ISO 9000 series models, the chosen EFQM © Excellence Quality Management Model and its RADAR assessment scheme provide a good frame for the cause.

The following paper is documenting the results of the feasibility study “IMQ NET”, carried out between autumn 2006 and early 2008. The objective of the study has been to develop and test an effectively structured methodology for good practice exchange in between innovation initiatives. The study was financed

by the EC – DG Enterprise and Industry.

Coordinated by VDI/VDE IT, 15 expert advisors from European technology support programmes contributed actively to the design of the methodology and performed its pilot case.

The methodology was tested successfully in late 2007 at GRNETs “GO ONLINE” E-business support programme in Athens.

While here the focus was on technology support programmes as subject, the core methodology may be applied to other groups of similar non-competitive organisations or departments thereof.

In the following, the structure and process of QUALITY FRAME is explained. Supporting forms and the catalogue of non-binding quality criteria are documented to give this paper the character of a manual.

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2. Summary

Good practices often suffer from a lack of relevance outside their initial context of use – and the benefit of participation in good practice exchange is to be found mostly in the discussion with professionals with similar tasks.

It was the objective of the IMQ NET feasibility study to develop and test an effective methodology for good practice exchange. Practices should be related to measurable objectives and exchange should focus on the improvement of individual practices in individual contexts of Initiatives.

Continuous improvement methodologies and quality management concepts are recognised drivers for individual organisational innovation. They are common in European innovation initiatives/organisations. This at least is the result of a survey carried out by VDI/VDE-IT in 2007: A majority of the answering sample claimed to apply comprehensive quality management systems to their organisations. QUALITY FRAME is based on the idea to combine proven quality management and continuous improvement methodologies with a methodology for mutual review and consulting.

Methodology

Managers of programme-quality or department from 3-4 innovation initiatives constitute a QUALITY FRAME peer group. They

- ▶ develop and document a common understanding of “high quality” of their type of innovation initiative Technology Support Programmes TSPs – specified in a specific criteria catalogue adopted from the EFQM model (Copyright © 1999 - 2003 EFQM)
- ▶ have the capability to evaluate management practices according to the EFQM Model, (or acquire it in dedicated training courses)
- ▶ began the utilization of the RADAR© assessment method of the EFQM© approach for major parts of their respective individual initiatives/organisations
- ▶ open their individual initiatives to peer reviews and consultings with regard to core management aspects and results of their programmes
- ▶ consult each other in the core aspects of their programme management

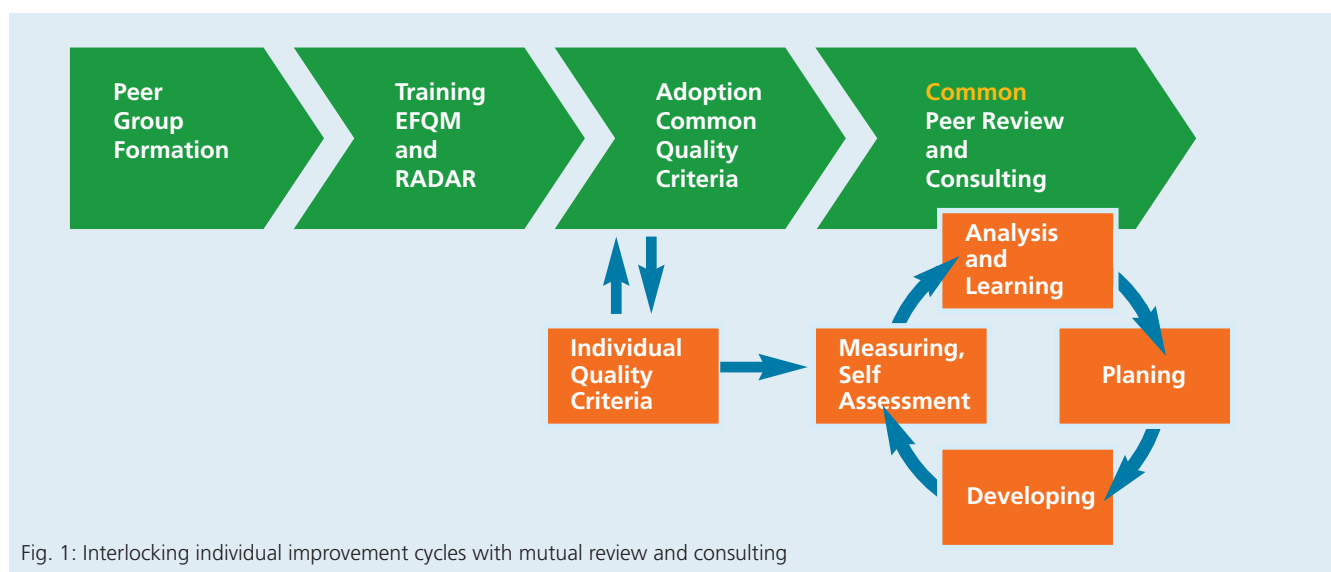


Fig. 1: Interlocking individual improvement cycles with mutual review and consulting

¹ Armbruster, H.; Kirner, E., Lay, G. et al.; Patterns of organisational change in European Industry (PORCH); Karlsruhe 2006. They propose to enrich the EIS European innovation Scoreboard by these indicators

Core policy elements of the methodology are:

- ▶ The main concern of the approach is governance and the improvement of individual programmes/initiatives, but single practices may serve as “good practices”.
- ▶ The focal point is on potentials for improvement – indicating that rather the opposite of “good practices” is discussed.
- ▶ The mutual review and consultation is meant to be “friendly”, to be performed in trust, inbetween business acquaintances and in confidentiality.
- ▶ Confidentiality in the process of reciprocal consulting is of high importance and the peer groups of programme managers shall work together over long periods of times.
- ▶ QUALITY FRAME utilises the EFQM© excellence model. The generic catalogue of quality criteria is – in connection with our pilot case – tailored to the typical requirements of TSPs. This documents a common understanding of possibly applicable quality criteria of results and enablers for technology funding programmes. For their assessment, the RADAR© scoring matrix is used.
- ▶ Assessment and analysis are based on facts. For QUALITY FRAME users it is inevitable to define measurable results, to assign management approaches to objectives, and to measure results.
- ▶ QUALITY FRAME is open to general quality management award procedures. It is possible to take part in EFQM©-based national or European competitions – and thus to utilise experience from outside the innovation initiative service sector.

Impact

The expected impact of the utilisation of the QUALITY FRAME approach can be divided into four aspects:

- ▶ Common understanding of good management of types of innovation initiatives – and a long term alignment of practices, where appropriate
- ▶ Improvement of the management and operational quality of individual initiatives
- ▶ Enhancement of the management competency of the involved quality or programme managers in their specific service sector
- ▶ Ministries and financiers, evaluators and other stakeholders of innovation initiatives may consider participation in QUALITY FRAME as a quality indicator.

² RADAR© is the Acronym for the EFQM scoring and assessment matrix, it stands for **R**esults **A**pproach **D**eployment **A**ssessment and **R**evue

³ This is a step towards a rational base for mutual recognition and co-operation operational and strategic matters. Scale and Scope effects may then be realised.

3. Methodology



Fig. 2: Reciprocal peer review and consulting process

Individual QM systems

It is understood that QUALITY FRAME participants utilise a quality management system for their participating programmes or organisations, preferably, but not necessarily, the EFQM© Model. It is vital though, that they fulfil the following criteria:

- ▶ Objectives are specified in a scalable way
- ▶ Approaches are documented and linked to intended results
- ▶ Results are measured
- ▶ Cause-result interactions in between approaches and results are named

Participating programmes/organisations are requested to undertake a self assessment as preparation for the QUALITY FRAME workshop of the programme/initiative/organisation.

This is usually done periodically in a systematic way through programmes/organisations that have installed QM systems. But, for QM starters or those who want to change to a comprehensive model self assessment is the predominant method to start.

Accordingly, for parties interested in participation it is not necessary to have a QM system in place already, but to be committed to start deploying it in due time regarding the minimum requirements above.

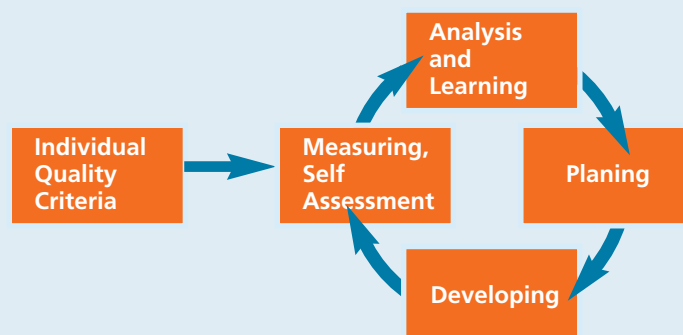


Fig. 3: Basic continuous improvement characteristics of an internal quality management utilisation

⁴ The EFQM organisation proposes different methods for self assessment. Guidelines are available from there.

Participating programmes or organisations – peer group formation

Interested parties in QUALITY FRAME constitute their participation by naming one or more specific programmes that are subject to individual quality management (see below) and reciprocal peer review and consulting.

Each programme/organisation sends one committed core member and one deputy. For the reason of trust and confidentiality it is strongly advised to maintain continuity of participation whenever possible.

The matchmaking of interested parties is usually undertaken by the parties themselves, e.g. during or followed by an EFQM training session.

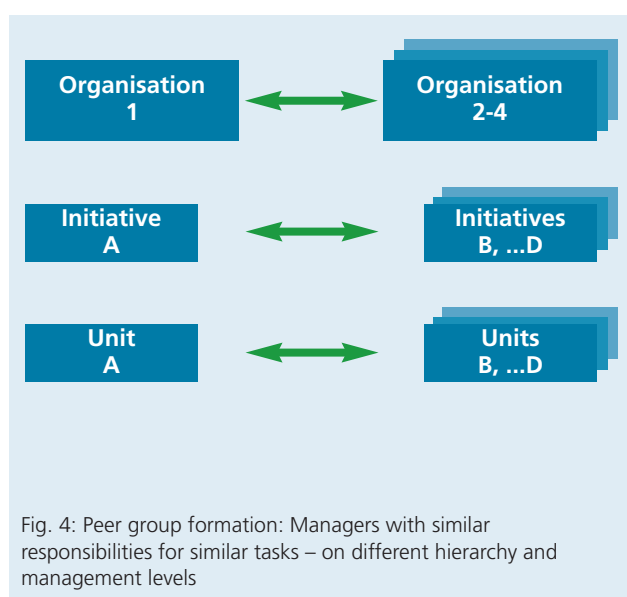


Fig. 4: Peer group formation: Managers with similar responsibilities for similar tasks – on different hierarchy and management levels

Constitution and development of peer groups for reciprocal consulting

Peer groups are informal circles of 3-5 programme managers or quality managers. They constitute themselves on a voluntary base. It is understood that the participation in this peer group implies the discussion of management matters, that the participation is intended to last for several years.

Each member shows the following characteristics:

- ▶ An innovation initiative of similar type is in place or planned at the expert's organisation. (Core aspects of) the initiative is (are) subject to a QM approach compatible with EFQM® requirements.
- ▶ There is considerable impact on the management of the individual programme
- ▶ He/she is a trained and certified EFQM® assessor (e.g. in the frame of the IMQ Net project)
- ▶ He/she has signed the confidentiality agreement in-between the peer group members

The participation of programmes requires a positive vote of all earlier members of the respective peer group, just as the exchange of committed core members or deputies.

It is expected that the group exists for several years.

The QUALITY FRAME workshop cycle

The core cycle of the QUALITY FRAME consists of a series of workshops to be held at the locations of the peer group members' respective programmes. It is the purpose of the single workshop to present the management practice of the hosting programme and the results of the self assessment to the visiting peer group members. The host's programme is reviewed and consulted by the visiting peer group members from the other programmes/organisations.

All programmes are hosting one workshop every year. The number of workshops depends on the number of programmes/organisations participating in the peer group.

These workshops are prepared and hosted by the hosting peer group member.

⁵ The QUALITY FRAME approach is based on the thesis that programmes are units with distinctive objectives, results and processes and thus may well be subject to Quality Management in a reasonable way. Nevertheless, whole organisations may participate (according to this thesis: a number of programmes, plus coordination)

Preparation of a QUALITY FRAME workshop

Participating programmes/organisations are requested to undertake a self assessment as preparation for the QUALITY FRAME workshop of the programme/initiative/organisation (see above). It is recommended that the dates for QUALITY FRAME workshops are integrated into the assessment and review phase of the hosting programme/organisation.

A brief document with the main findings with regard to the criteria groups (approaches, results, assessment, improvement plans) shall be elaborated (min 10, max 25 pages), in English or another language that all members of the peer group understand. It shall be sent to the visiting peer group members in time to read it on their travel to the workshop. Besides, additional general information about the programme shall be sent, inasmuch as it is available in a language understood by all peer group members (programme flyers, internal process descriptions, yearly reports, evaluation reports, slide sets etc.).

The QUALITY FRAME workshop

The QUALITY FRAME workshop takes place at the site of the hosting programme/organisation. Attendants are the peer group members, a top management representative of the hosting programme and a limited number of additional relevant experts or managers from the hosting programme, insofar as accepted by all peer group members.

The QUALITY FRAME session is chaired by the hosting programme. A lead assessor is determined to assure the correctness of the process and the completeness of the documentation. The workshop is opened by a top management member of the hosting organisation who explains in short the organisation and the QM system of the programme/organisation.

It is followed by more detailed presentations of the peer group member of the hosting organisation, with regard to

- ▶ The participating programme
- ▶ The QM System applied to improve the programme and a short summary of the self assessment findings
- ▶ The fact base and the results of the self assessment with regard to the 9 quality criteria categories.

The visiting peer group members assess and review the practices of the hosting programme, in a first step individually during or directly after the presentation of the topics.

In the break before the evening, the individual findings are refined ("homework").

In an informal (evening) session the individual results and improvement possibilities are discussed.

In the following morning session, joint recommendations are discussed and compiled by all peer group members.

The lead assessor will present the main findings and recommendations to a top management representative in a final roundup session.

QUALITY FRAME workshops usually last from late morning to late morning/lunch of the following day (see standard agenda QUALITY FRAME, chapter 5.2).

Documentation

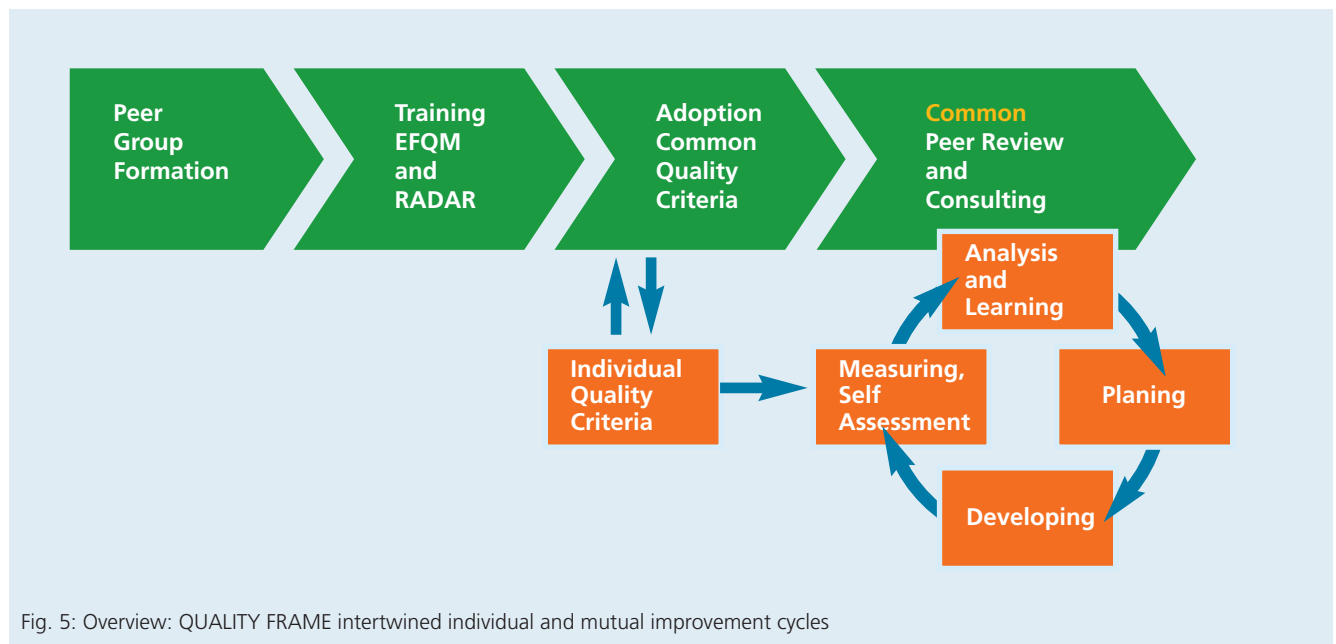
Brief minutes are prepared (participants list, a documentation who presented which topic of the agenda) by the hosting programme, basically to document the proper execution of the standard agenda and the participation of the peer group members.

Additional, but confidential documentation are:

- ▶ The presentations of the hosting programme
- ▶ The collection of the individual assessment sheets and

⁶ or at least 5 of them in the first yearly cycle. The "red strings" or "fundamental concepts" structuring approaches may be used to group EFQM criterion group presentation and discussion.

- ▶ the consensus discussion results (joint recommendation presentation, usually in .ppt format for easier use by all peers).



4. Background and Core Policies

Quality Management as an approach?

Quality Management (QM) is a term defined differently, but in any case it comprises a **family of methodologies or tools** directed at **continuous improvement** of organisations, or subunits thereof. Some models intend to cover systematically whole organisations or some of its units. Some tools focus on specific aspects – e.g. Six Sigma or Quality Circles.

According to the “PORCH” study of the DG Enterprise and Industry, the use of “Total” Quality Management and concepts directed at continuous improvement are considered to be of high positive impact on

- ▶ The increase of quality
- ▶ The innovation ability
- ▶ The reduction of costs

Quality Management (QM) systems are widely and successfully applied to continuously improve the management and operational quality of companies and services.

The QM model, the tools used for continuous improvement, and the focus as well as the implementation of QM systems vary greatly: Design and management of TSPs vary, e.g. due to different individual innovation system conditions and different technology support strategies. On the other hand, most support programmes use similar instruments to achieve similar objectives. Consequently, there is a high potential for programmes to be improved by utilising each others expertise.

We already do all this in our periodic evaluation!

Yes, it looks like it – on the first view. And in fact, some of the QUALITY FRAME quality criteria are quite similar to the common criteria used for evaluations.

But there are differences compared to a typical programme evaluation:

- ▶ Quality Management is primarily an internal management approach. It offers the possibility to set individual priorities for improvements by the management, which may or may not coincide with prevailing evaluators’ opinions.
- ▶ Quality management approaches are part of the (daily) management processes. Internal approaches to detect and realise improvement possibilities are interlinked with external QUALITY FRAME peer review and consulting. Resources for improvement are used more intensively by involving the executing professionals/employees. This offers possibilities for quick and unbureaucratic improvements.
- ▶ QUALITY FRAME bases on the confidentiality of all who take part in the peer groups. This confidentiality is necessary to discuss problems that no programme manager would like to read about in evaluation reports, and maybe not even the ministry that ordered the evaluation.

In a rather loose reference to the findings of the PORCH study it could be said that the existence and effectiveness of the quality management system in and between innovation initiatives may well be considered a major evaluation criterion itself.

The choice of the EFQM© model

The IMQ Net feasibility study was intended to realise a structured reciprocal peer review and consulting methodology. On the one hand a proven model needed to be chosen that allowed an adoption to specific objectives and intended results of innovation initiatives/technology funding programmes in general. On the other hand it needed to have the potential for the use in individual programmes. Moreover, the methodology needed to be

⁷ Armbruster, H.; Kirner, E., Lay, G. et al.; Patterns of organisational change in European Industry (PORCH); Karlsruhe 2006

⁸ Before an external evaluator identifies, documents, reports, discusses problems in an evaluation report, they can already be solved. In this way, this type of problems will never make it into an evaluation report.

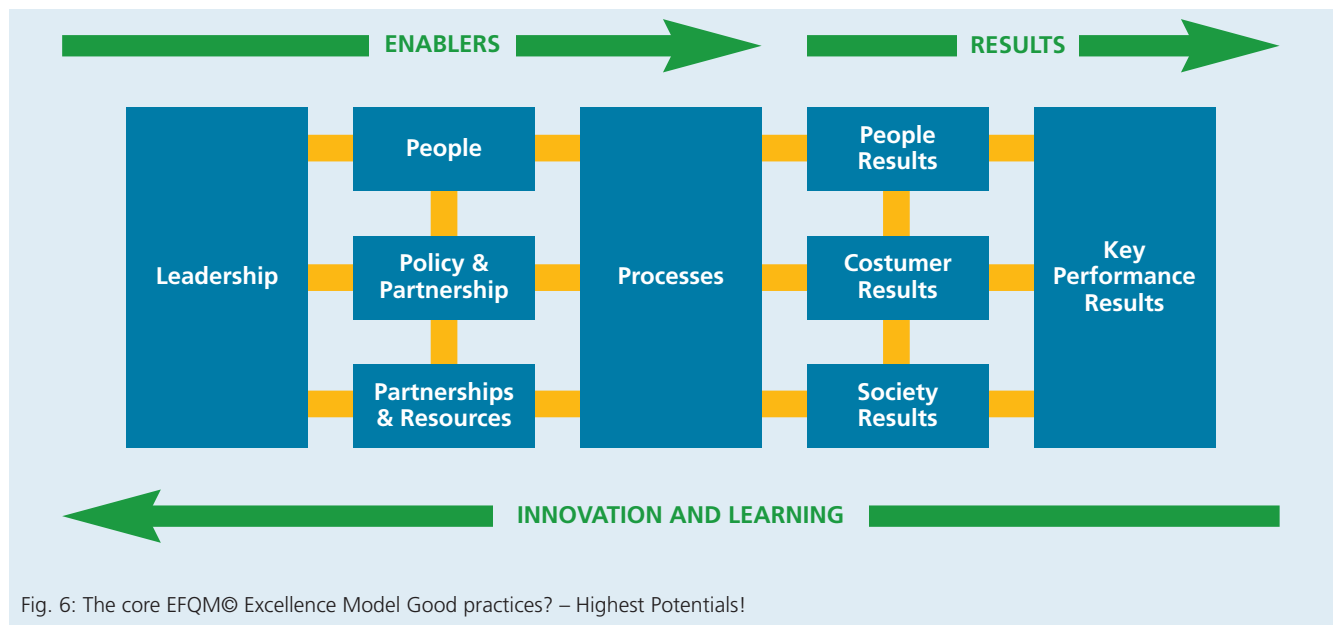


Fig. 6: The core EFQM® Excellence Model Good practices? – Highest Potentials!

designed suitable for peer review and consulting in between innovation initiatives.

Concerning comprehensive models two of them are widespread: The ISO 9000 series Management Quality models and the EFQM® Excellence model of the European Foundation for Quality Management. Both models are far too complex to be presented in detail here.

In the public sector, the “CAF”, Common Assessment Framework, is used for self evaluation. The CAF criteria are adopted from EFQM® Excellence model, but the assessment approach is less specific than the RADAR® method as part of the EFQM approach.

After intensive discussions, the expert advisory group of the IMQ NET project chose the EFQM® model for its flexibility concerning the conformance to the specifics of innovation initiatives.

The work with a catalogue of sector specific quality indicators as used here may not only serve continuous improvement. It is also a suitable tool for the design of future programmes to specify objectives, to assign

priorities to management topics, and to guide the design of processes and resources for future initiatives.

Companies that use the EFQM® Excellence model show a better long-term performance with regard to financial indicators (growth, profitability) than those in their respective business sectors that do not utilise it.

Good practices are exchanged throughout the innovation community. Without doubt, there is a lot to learn from the experience and practices of initiatives with similar tasks. Quality Management models focus on improvement of individual practices and the EFQM model is heavily based on the critical discussion of individual practices. Improvement potentials are considered to be the path to excellence - and the grade of excellence of current practices is rather a side-note than the focus.

Moreover, the EFQM® model is based on the presumption that the intended results shall be caused by management approaches. These relate usually to individual circumstances.

⁹ Comprehensive information on the EFQM® Excellence model in general is available via www.efqm.org

¹⁰ ORGANISATIONAL EXCELLENCE STRATEGIES & IMPROVED FINANCIAL PERFORMANCE, Centre of Quality Excellence, the University of Leicester, Copyright 2005 EFQM and BQF.

The flexibility of the model was demonstrated in the pilot case, covering a technology support programme of GRNET in Greece, utilising the criteria for full-service technology support programmes. The test went very well because of the guideline character of the non-binding criteria in the criteria catalogue

Confidentiality and trust in small closed peer groups

It is the intention to discuss the worst problems rather than success stories. This requires both courage and trust in between the involved parties.

The peer groups shall maintain continuity over several years concerning its participants as well as the actions conducted.

QUALITY FRAME imposes strict confidentiality within the peer groups, verified through the signature of non-disclosure agreements by all participants.

Basic generic quality criteria from the EFQM© model - specific quality criteria for distinctive forms of services - individual sets of criteria for individual initiatives

The catalogue of quality criteria needs an adoption to specific requirements, e.g. with regard to the business sectors like in our case to technology funding programmes.

A catalogue of quality criteria for technology funding programmes was compiled following up discussions in between experts. Few of the basic EFQM© quality statements were altered. The existing statements were supplemented by exemplary statements on how these basic quality criteria may be realised in TSPs.

These were collected and compiled with specific regard to the situation of technology funding programmes. While in the “enabler” criteria moderate changes and additions were made, the “results” criteria were extensively illustrated through technology funding specific quality criteria. This listing represents the

common understanding of the IMQ Net expert advisors about the quality criteria for TSPs (see Annex 5.1).

Not all those criteria are adequate to be used in individual programmes or organisations.

For the individual use, the criteria need to be further selected and/or adopted to the programmes’ objectives, its stakeholders and relevant external conditions, its size, speed and rhythm of change, etc.

The catalogue of sector specific quality indicators, as used here, may not only serve continuous improvement. It is also a suitable tool for the design of future programmes, to specify objectives, to assign priorities to management topics, and to guide the design of processes and resources for future programmes.

Common generic EFQM© assessment scheme – The RADAR© matrix

The EFQM model offers an assessment scheme, the so called RADAR Scheme (Results - Approach - Deployment - Assessment and Review). It is a tool for the assessment of practices as well as the achievement of results and the planning of improvements.

It may be used for the assessment of individual organisations, TSPs or other innovation initiatives. It is used here also for mutual peer reviews and assessments.

Training in the use of the scheme is widely available, as there is support for the utilisation of the model itself (just surf the web for your national quality management organisations).

Different assessment levels and communities – individual - QUALITY FRAME – national/European quality awards

The programmes that use EFQM© have the possibility to take part in national and European award application procedures. Thus, in total three levels of assessment are possible:

- ▶ Individual self assessment
- ▶ Mutual peer review and consulting in the context of QUALITY FRAME
- ▶ Participation in national award applications including their consulting aspect

Figures and facts

Following the EFQM© fundamental concept of “Management by Processes and Facts”, QUALITY FRAME peer reviews and consulting requires a distinctive and detailed specification of objectives, measurements of results, and specified cause-result relations. Discussions shall be based on facts.

Effort

The (additional) effort for the individual improvement processes depends on the extent to which continuous improvement and quality management are already practised.

The effort for the external peer group formation, training and adoption of the EFQM© excellence model may cause app. 3-4 personweeks in the initial year plus 5-10 days trainer/consultant-cost, for subsequent years 2-3 weeks per partner per year.

Terms used:

TSP

Technology Support Programme. A set of resources and structures dedicated to achieve objectives with regard to enhancing technology development.

IMQ NET

The Innovation Initiatives Quality Management Network. The QUALITY FRAME approach's name in the design and test phase.

SRPRC

Structured Reciprocal Peer Review and Consulting. The core activity of the QUALITY FRAME process, starting with the documentation of the self assessment, including the friendly review and consulting of a single hosting programme, ending with the documentation of the conclusions of this single QUALITY FRAME.

Hosting Peer

The person responsible for the TSP that is subject to an onsite QUALITY FRAME process.

Visiting Peer

The persons visiting a hosting peer, responsible to review and consult a TSP.

5. Annex

5.1 Catalogue of Criteria

Can not be published here due to IP regulations of the EFQM organisation.

5.2 Standard Agenda QUALITY FRAME Workshop

Structured Reciprocal Peer Review and Consulting - a Workshop Following the IMQ Net Methodology

- Agenda -

Hosting Programme/Organisation:

Chair of Session (individual, core member of host, hosting and moderation):

Lead Assessor (assure process and documentation):

Secretary (minutes):

Contact phone number:

Date (day, time):

Location:

Release of (date)

Agenda

Day 1, late morning (e.g. after arrival of peer group members with morning flight)	Welcome, Organisation and QM System	A/The Top Manager of Hosting Programme/Organisation
Day 1, late morning	General information on the participating programme, its objectives, size and the relevant innovation system surrounding	Chair member
Lunch		
Afternoon 1	Presentation of practices, results, assessment results	Chair peer group member
Afternoon 2	(continued)	Chair peer group member
Early evening break	Home work: refining individual assessments/recommendations of assessors	All visiting peer group members
Dinner	Informal exchange	
Day 2, morning	Discussion, strengths, weaknesses, recommendations for improvement, consensus	All visiting peer group members
Day 2, late morning	Presentation of findings and recommendations to top management level executive(s) of hosting programme/organisation	Lead assessor

