

Big Science Morning – Ouality Management in Big Science

How to describe and present your quality system

- Experience and lessons learnt

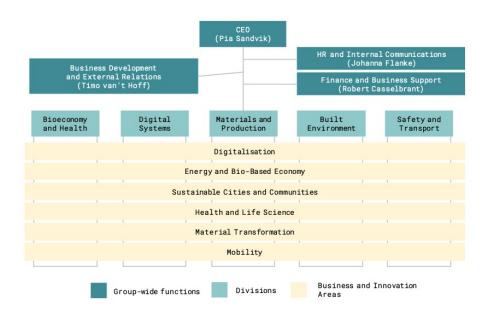
Håkan Nilsson

Senior Adviser in Measurement Science and Technology at RISE Business Development Management at Big Science Sweden The Government's research and innovation bill states that the overarching goal for the research institutes gathered under the RISE AB umbrella is to be internationally competitive and facilitate sustainable growth in Sweden by strengthening competitiveness and innovation in the business Community.

We do this by:

- Increasing our own and our customer's international presence and competitiveness.
- Strengthening regional business communities and industrial clusters.
- Creating a robust infrastructure for innovation for the benefit of industry and society.
- Contributing to innovative, sustainable solutions to social challenges.
- Supporting small and medium-sized businesses nationwide.









F4E-OMF-1082 DESTRUCTIVE AND NON-DESTRUCTIVE TESTING OF MATERIALS AND MOCK-UPS AT ROOM AND ELEVATED TEMPERATURES

	idm@F4E Reference:	F4E_D_2L9XMT v1.2	Call No	F4E-OMF-1082			
	2020-OJS0	2020-OJS089-212536-en.pdf					
	2020-OJS0	2020-OJS098-235389-en.corrigendum.pdf					
•	. Annexes fo						
ac	. Annexes to	be filled in and subm	itted.zi	р			
a	Annexes to	the Draft Contract.zip)				
X	F4E-OMF-1	1082-Annex_2_Financia	al_Prop	osal_Form_typo cor	rection.xlsx		
	OMF-1082	OMF-1082-Invitation_to_Tender_Open_procedure Modif corrig 2.pdf					
	Q and A be	efore submission 26.06	ill.pdf				
-	Reference a	and applicable docum	enst of	Annex B.zip	_		

Engagement at RISE

Project group of four people was established

Technical involvment

- Two divisions
- Five departements
- Three sub contractors

F4E support documentation and process was good but extensive

Under estimated the time effort – in particular regarding description of the quality plan



Example from Studsvik Nuclear AB

Table of contents				
		Page		
Identific	cation	i		
Revisio	n history	ii		
Q	SYSTEM COMPLIANCE	. 1		
Q1	Management of Scope	3		
Q2	Management of Schedule	3		
Q3	Management of Deliverables	4		
Q4	Management of Risk	4		
Q5	Quality Plan	4		
REFERENCE DOCUMENTS		5		
List of Appendices 1 Certificates				

Q SYSTEM COMPLIANCE

This Quality Plan describes the quality system to be implemented by Studsvik throughout the progress of the work to ensure that the contract requirements are met and that evidence of such compliance is maintained. Our quality management system is described in our internal manual xxx, which is based on the guidelines in ISO 10005 (quality plans) and ISO 10006 (management of quality).

Studsvik is certified according to quality management system (ISO 9001:2015), environmental management system (ISO 14001:2015) and occupational health and management system (OHSAS 18001:2007). Studsvik is also certified by SWEDAC for Surveillance tests according to the standard ISO/IEC 17025:2005. These certificates are attached in Appendix 1 of this draft QA plan. Management regarding safety, environment, quality and working environment are summarized in an internal management document, xxx, called xxx. The master and detailed documentation used in the management system of Studsvik Nuclear AB is shown in Figure 1, the organizational structure of Studsvik Nuclear AB is shown in Figure 2 and the proposed organizational structure of the project is shown in Figure 3.

is shown in Figure 1, the organizational structure of Studsvik Nuclear AB is shown in Figure 2 and the proposed organizational structure of the

In addition to the above, Studsvik Nuclear AB is, as are all nuclear facilities in Sweden, subjected to the Swedish The Act on Nuclear Activities, SFS 1984:3, Lagen om kärnteknisk verksamhet, and the revisions in SFS 1992:1536 and SFS 2018:1415, which together regulates the activities performed at all nuclear facilities in Sweden. The governmental agency that supervises this is The Swedish Radiation Safety Authority, Strålsäkerhetsmyndigheten.



Example from RISE in progress

Table of contents

Introduction and description of RISE	3	
RISE Quality management system compliance	3	
Management of scope	4	
Organization over all	4	
Project organization and roles	4	
Facility	9	
Equipment	10	
Methods	12	
Verification and validation	13	
Metrological traceability	15	
Quality assurance of results	15	
Management of process	16	
RISE Process Model	16	
Schedule	16	
Deliverables	16	
Assessment and validation	17	
Nonconformity and deviations procedures	17	
Risk management	17	
Quality Plan	18	
Quality assurance activities	18	
Audits	18	
Assessments and Surveillance	18	
Appendices	18	

RISE Quality management system compliance

RISE is accredited for ISO 17020 (Inspection), ISO 17021 (certification of management systems), ISO 17024 (certification of personnel), ISO 17025 (testing and calibration) and ISO 17065 (product certification). RISE is also the Swedish National Metrology Institute which secures traceability of measurements and is appointed as Technical Service and Notified Body.

RISE and RISE management system are regularly audited by <u>SWEDAC</u>, the Swedish Accreditation board.

The management system is processed based and includes control of documents and several supporting systems and databases such as database for competences, equipment, methods, chemicals, non-conformities and project information.

Referring to supporting systems as:

- Project document platform, time and economy
- RISE Project model
- Equipment and its status, like traceability and calibration
- Nonconformities and deviation procedures
- Monitoring of environment in labs
- Competence of involved personell





Document Type Document Number Date Revision State Confidentiality Level

Page

Document Template ESS-0037830 Apr 22, 2020 2 Released Internal 1 (9)

ESS TEMPLATE FOR PROJECT QUALITY PLAN

TABLE OF CONTENT		PAGE
1.	SCOPE	4
2.	INPUT TO THIS QUALITY PLAN	4
3.	QUALITY GOALS	4
4.	MANAGEMENT RESPONSIBILITIES WITHIN THIS QUALITY PLAN	4
5.	DOCUMENTATION AND STORAGE OF DATA	
6.	CONTROL OF RECORDS WITHIN THIS QUALITY PLAN	
7.	RESOURCES	
7.1.	Materials	5
7.2.	Human resources	5
7.3.	Infrastructure and work environment	
8.	REQUIREMENTS	
9.	CUSTOMER COMMUNICATION	5
10.	DESIGN AND DEVELOPMENT PROCESS	6
10.1.	Control of Design and Development changes	
11.	PURCHASING	6

12.	PRODUCTION AND SERVICE PROVISION	
12.1.	Installation and post-delivery activities	7
13.	IDENTIFICATION AND TRACEABILITY	
14.	CUSTOMER PROPERTY	7
15.	PRESERVATION OF PRODUCT	7
16.	CONTROL OF NONCONFORMING PRODUCT	
17.	MONITORING AND MEASUREMENT	7
18.	AUDITS	8
19.	IMPLEMENTATION AND REVISION OF THE QUALITY PLAN	8
19.1.	Review and acceptance of the quality plan	
19.2.	Implementation of the quality plan	
19.3.	Revision of the quality plan	9
19.4.	Authorized deviations to this quality plan	9
20.	GLOSSARY	9
21	REFERENCES	9

<<LIST OF APPENDICES>>

<<Appendix 1 Name of Appendix>>

<<Appendix 2 Name of Appendix>>

Experience and lessons learnt

- Procurement documentation might be extensive
- Be aware of questions and answers during the time after publication
- Quality is something you must have within the organisation and documented
- Third party certification or accreditation v s self declaration?



 Time effort for an offer will easily be under estimated but once experienced it will be easier and faster in coming procurements

