QUALITY MANUAL

NUCLEAR CARGO + SERVICE GMBH

Hanau

TRANSKEM SPEDITION GMBH

Location Leese

Contents

1 PREFACE/ FIELD OF APPLICATION

The objective of NCS, a company belonging to the DAHER Group is the management of forwarding, freight and storage business and development of packaging conceptions, especially in the field of nuclear- and heavy load logistics.

The objective of the 100 % NCS subsidiary TRANSKEM (TK) is to perform road transports of radioactive materials, by order of NCS.

NCS headquarters with offices, secured parking place for lorries and storage buildings for interim storage of non-fissile radioactive materials (e.g. contaminated packaging and radioactive wastes), as well as maintenance halls, is located within a industrial area at Hanau-Wolfgang.

Infrastructure like

- Plant security
- Radiation protection
- Fire brigade

are either existing at NCS (radiation protection) or are available via a third party contract (plant security and fire brigade of the "Industriepark Wolfgang GmbH" situated on an area close to NCS).

Next to this, NCS has branch offices in Berlin, Darmstadt, Düren, Freiberg and Hagen.

NCS has a staff of employees with a long experience in the field of logistics and transports of dangerous, especially radioactive, and heavy goods.

To carry out transports, NCS has an own fleet of vehicles equipped accordingly. Next to this, TK has a fleet of vehicles located at Leese.

Rail transports are carried out by DB Schenker Rail Deutschland AG and other railway companies on behalf of NCS. For this purpose, Deutsche Bahn AG and NCS have concluded a general agreement.

Concerning TRANSKEM, the field of application of the quality management system at present only covers road transports of radioactive material carried out by TK-Leese.

The preliminary conditions given in the quality manual as well as all accompanying valid instructions, guidelines and QM documents are binding for all NCS and TK staff members.

2 STATUS OF REVISIONS

Rev. No.	Revised Pages
1	6, 7
2	7, 10, 16, 18, 19, 24, 27, 34, 40
3	6, 7, 10, 12, 18, 24, 27, 34, 37-41
4	all pages (edited)
5	all pages (update)
6	11, 12 and complete update

Author: M. Kübel	**Date:** 16.08.2011
Release: K. Schymke	**Date:** 16.08.2011

3 PUTTING INTO FORCE

On 1 August 1989, General Management put into force Edition 1 of this manual

This edition 5 supersedes all previous editions and is put into force on

01 October 2003

Hanau, 22.09.2003

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Managing Director TRANSKEM GmbH

This page bearing the original signatures (revision 0 dated October 01, 2003) is available at the QA-Department.

4 QUALITY MANAGEMENT-SYSTEM

4.1 General requirements

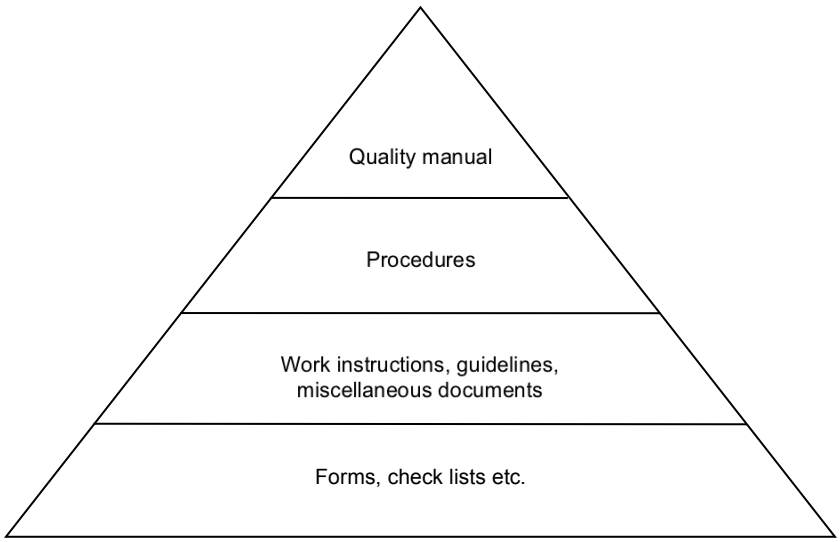
The purpose of this quality management system is to assure a permanent and optimal quality of services. It describes the QM measures which were introduced and which must be permanently observed in order to fulfil the essential objective of avoiding errors and faults. This quality management manual is valid for all organisation units and for all NCS and TRANSKEM staff members. It may be consulted by all staff members over the NCS intranet.

4.2 Documentation requirements

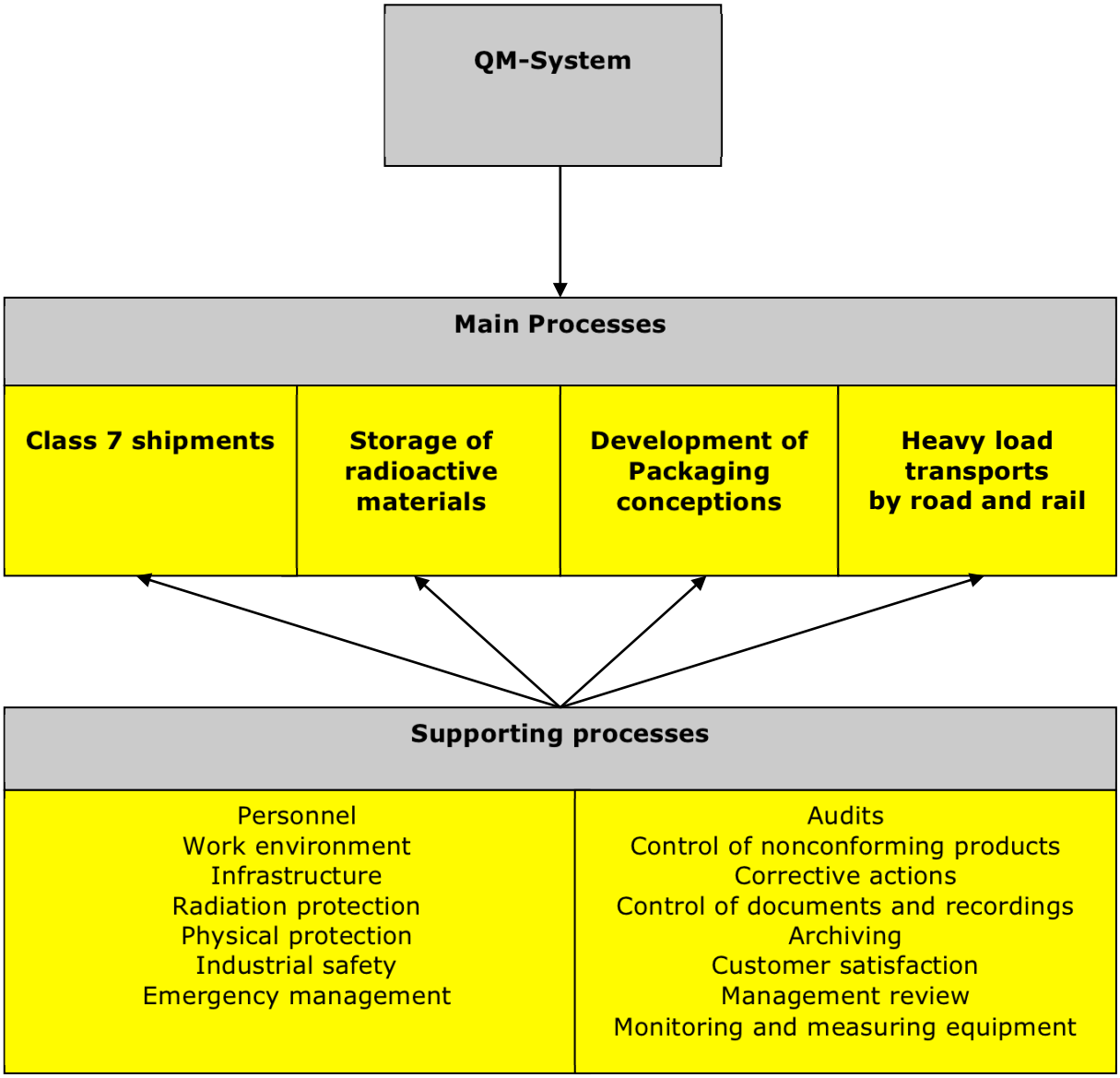
4.2.1 Quality manual

NCS and TRANSKEM keep up a process oriented QM system based on DIN EN ISO 9001 (cf. next page for a process overview). It contains all QM requirements which must be observed by all organisation units and by all NCS and TRANSKEM staff members.

Documentation related to the QM system has a step shaped structure, the highest step being the QM manual and the others consisting of procedures, guidelines and work instructions. The QM manual is organised and structured according to DIN EN ISO 9001:2008.



Process overview



Requirements from German standard KTA 1401 and from IAEA TS-G-1.4 „The Management System for the Safe Transport of Radioactive Material" are also fulfilled.

The head of ST-QS will check and, if necessary, update the indications given in the quality manual according to prevailing business conditions at least every five years, or if it becomes necessary due to circumstances. This adaptation may cover the whole quality manual or only given chapters.

Chapters which have undergone changes will be identified by increasing the index of revisions. In case of total renewal, the edition number will increase, the index of revisions starting again at "0".

The quality manual within NCS and TK is no longer distributed as hard copies, but only through the NCS intranet. This assures that the latest version is always accessible to every staff member.

4.2.2 Control of documents and records

This quality management element describes the decisions made to assure a correct flow of information. It is thus assured that the correct and valid versions of all required documents are available at all places within the Company and to the customers and suppliers. These determinations are valid for the whole Company (NCS and TK).

The procedures required for preparation/modification, checking, publishing, archiving and removal of documents are defined in guidelines.

As a general rule, every organisation unit (department, group) will prepare the documents necessary for its activity, being thus responsible for these documents. In case of documents which cover more than one organisation unit, a responsible organisation unit is appointed.

Documents will be checked by another person as the author. The person who checked the document may also release it.

Any suggestion for changes of documents must be addressed to the author, who will check the usefulness and consequences of the change.

Changes will only be carried out by the author or by a person, who shall at least have the same specialised knowledge as the author.

Identification of changes in the documents and the replacement of modified documents are described in a guideline.

The originals of instructions, guidelines and forms are kept by AT/AK. Furthermore, the documents are saved in a data base with their number, title, author and other characteristics, so that an overview of the documents used by NCS is possible at any time.

Furthermore, a document matrix is adjusted in the intranet, where every person working in a department may consult the valid form and version of instructions and guidelines relevant to his work.

4.2.3 Control of external documents

External documents in the sense of this chapter are laws, decrees, standards and other regulatory documents.

The corresponding heads of departments or groups are responsible for assuring the availability of external documents in their area of responsibility.

Responsibilities for purchasing are organised as follows:

Department AT: standards and other technical regulations

Department SP: forwarding and transport Regulations (accepted dangerous goods)

Department KBU: customs regulations, trade and export control regulations

Department FV: commercial, fiscal, work and social regulations

Departments BES and HCS: railway regulations for the own area

ST-S: Regulations concerning physical protection

ST-SS: Nuclear and dangerous goods Regulations

Knowledge concerning the putting into force of new or modified documents is regulated as follows:

- Standards: subscription of Beuth publishing company in the Internet
- Railway Service Regulations: BKU, TVA, business communications of DB AG
- Miscellaneous documents: information through the Nuclear Fuel Cycle Trade Association, Specialised association for radiation protection, change service of the publishing company for loose sheet collections, professional magazines.

The mentioned departments or specialised teams will inform all the concerned sections about the contents and the putting into force of new of modified documents, either in writing or over the intranet. Corresponding records will be kept.

Reference to documents applicable for Chapter 4

RL-Q-89-01 Preparation and Administration of Documents

FV-95-01 Archiving of Documents

5 MANAGEMENT RESPONSIBILITY

5.1 Management commitment

The NCS and TRANSKEM Management are responsible for the development and realisation, as well as for continuous improvement of the efficiency of the quality management system.

The Management fulfils its responsibility by:

- Definition of quality policy,
- Definition of quality objectives,
- Carrying out of management reviews,
- Assuring that resources are available,
- Making legal and customer requirements plausible to the staff during regular company meetings or through putting up of notices.

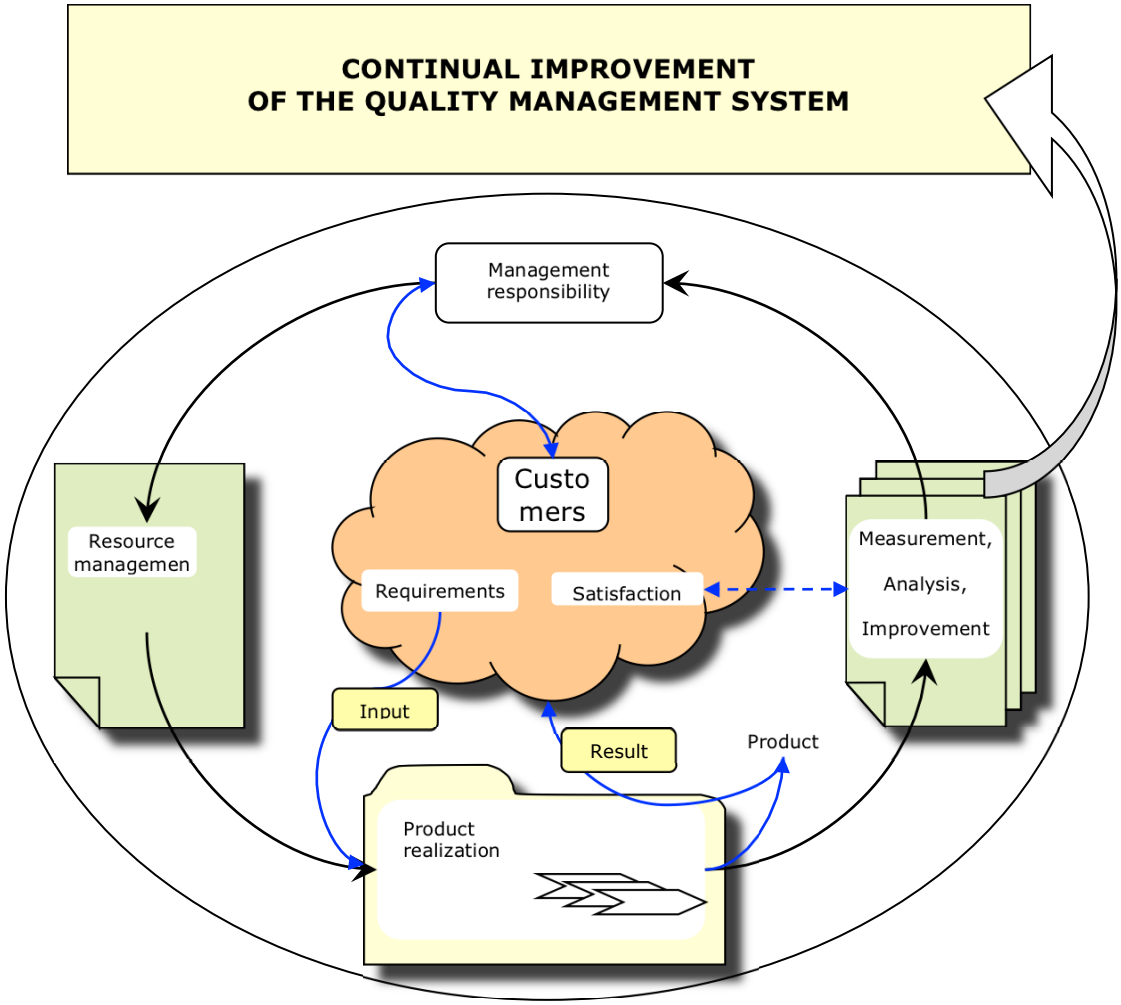
5.2 Customer focus

An essential criterion for increasing customer satisfaction is to find out the customer's requirements. Measures to assess customer requirements and to define objectives and measurement magnitudes are defined by means of a set of instructions.

5.3 Quality policy

The quality policy of NCS and TRANSKEM is described by means of the following basic company principles:

- As a service company in the field of transport and storage of radioactive materials, development of packaging conceptions, as well as transport of heavy cargo NCS performs high quality special services. The zero error principle is used for guide.
- In particular transport and storage of radioactive material are perceived very sensitive by the public. Therefore measures to avoid incidents have the highest priority (risk management). The customer is the centre of our actions. The organisation must serve this aim.
- NCS is a profit oriented company. Awareness of costs and optimisation of turnover are the main basis for achieving lasting profits. Profit is a precondition for attractive and safe jobs seen from a long-term point of view.
- Qualified and motivated personnel are the most important active asset of the company, and are the base for success.


CONTINUAL IMPROVEMENT
OF THE QUALITY MANAGEMENT SYSTEM
Management responsibility
Custo mers
Resource managemen
Requirements
Satisfaction
Measurement, Analysis, Improvement
Input
Result
Product
Product realization

5.4 Planning

5.4.1 Quality objectives

The main objectives for the whole company are:

- faultless implementation of orders
- avoiding of incidents during transport and storage
- customer satisfaction
- Return of Capital Employed (ROCE)
- motivated and well trained staff

The objectives are defined annually. The presentation of results will be, e.g., in the form of a „Balanced Score Card".

5.4.2 Quality management system planning

The QM system is described concerning its structure and process organisation. This includes all organisational, technical and personnel measures necessary for quality assurance. When elements of the QM system are to be found in other documents, it is noted by references.

This assures a total overview of responsibilities and of the course of safety relevant measures, and it is clearly defined which organisations are responsible for, and how the requirements for an effective quality assurance are to be assured.

Attachment 2 to this manual gives an overview of responsibilities concerning quality relevant tasks, subdivided according to working responsibilities and duties of participation, in the form of a responsibility matrix.

The extent of planned and implemented quality assurance measures is oriented according to the safety technological significance of the activities (transports, storage, and development of packaging conceptions).

In case of nonconformities, and next to the required corrective action, the instances usually responsible for this type of activities are informed (planning, purchasing etc.), so as to assure the launching of necessary preventive measures.

Secure project management, purchasing etc. requires correct cooperation from all organisation units.

Therefore, the following principles apply to all NCS and TRANSKEM staff members:

- Every measure must be planned and carried out with the care required by its safety relevance. This includes the preparation of documents for assuring the supervision of measures.

- Noticed or assumed faults must be immediately reported to the responsible instances, even if they occur outside the own field of responsibility.
- All staff members shall work together in a cooperative manner, supporting each other in the accomplishment of their respective tasks.

5.5 Responsibility, authority and communication

5.5.1 Responsibility and authority

Responsibilities and authorities are presented in the NCS organisation chart and result from the corresponding job descriptions, according to the following pattern:

- Position Title
- Subordinations
- Superseding relations
- Deputy relations
- Objectives
- Special authorisations and duties
- Tasks and duties

Furthermore, the allocation of responsibilities from organisation units to the implementation steps is represented in the form of a matrix for each corresponding main process.

5.5.2 Management representative

Responsibility for quality assurance within the General Management of NCS and TRANSKEM is governed by the business distribution plan.

The Managing Directors have entrusted the planning, introduction, maintenance and permanent improvement of the QM system to the head of the Quality Assurance Department (ST-QS).

It is the duty of ST-QS to implement the Company's quality management system in the organisation and to make sure that it is understood and followed at all levels. For this, ST-QS has the full support of the Managing Directors.

5.5.3 Internal communication

Company meetings, putting up of notices, circular notices and regular meetings of heads of departments, in which the head of ST-QS participates next to the Managing Directors, assure that communication will go beyond the departments.

According to generally valid organisation principles, tasks, competencies and responsibilities must match each other. The activities required for the realisation of the company's duties are delegated to the following instances, according to functional and hierarchical company structures:

- departments and
- Groups

Independent units were established for overall tasks (quality assurance, security, radiation protection).

5.6 Management review

5.6.1 Review input

The review of the QM system consists of the following necessary data:

- Results of audits,
- Feedback from customers,
- Process performance and process conformity,
- Status of preventive and corrective actions,
- Follow-up actions from previous management reviews,
- Changes that could affect the QM system,
- Recommendations for improvement.

5.6.2 Review output

Management will make decisions on the base of the reviews and, if necessary, will carry out actions concerning the following points:

- Improvement of the effectiveness of the QM system and its processes,
- Improvement of product related to customer requirements,
- Resource needs.

Reference to documents applicable for Chapter 5

RL-Q-03-01	Review of the Quality Management System
RL-Q-03-02	Monitoring and Measurement of Customer Satisfaction
VA-T-03-01	Class 7 Shipments
VA-SLT-04-01	Heavy load transports by road
VA-SLT-06-01	Heavy load transports by rail

VA-V-03-01	Development of Packaging Conceptions
VA-L-03-01	Storage of Radioactive Materials
Job descriptions	

6 RESOURCE MANAGEMENT

6.1 Provision of resources

The heads of department will assess the resources necessary to carry out their duties (e.g. personnel requirements, facilities, trainings) and will communicate these to the Managing Directors. In the same way, results of customer requests, customer complaints and internal audits may be consulted to assess resource needs.

The Managing Directors are responsible for the provision of the necessary resources.

Larger purchases will be introduced into the annual planning.

6.2 Human resources

The following are responsible for compliance with the qualification requirements towards personnel entrusted with quality relevant tasks:

- Managing Directors for the heads of departments,
- Heads of departments for their subordinated staff members

An overview of the required personnel qualifications for:

- Heads of departments
- Group leaders
- Transport personnel

is to be found in guidelines/instructions.

Newly hired staff members shall be thoroughly introduced to their new job by their superior. A training and advanced training plan is established for all staff members. This is updated annually and adapted to the company's situation (instruction sessions required by law are not part of this training and advanced training plan).

Participation in internal and external training/advanced training sessions is documented on the plan.

Staff members are continuously supervised as to their qualification by their superiors, within the scope of their personnel supervisory duties.

If there are discrepancies between the requirements of the job and the actual qualification of the person holding it, the actions necessary to put an end to these discrepancies will be discussed with the concerned person and, if necessary, with other instances.

Staff members will be informed among others about quality activities within the Company and at the interfaces with external institutions during department meetings.

A certain amount of experience feedback occurring during these meetings will increase the qualification of staff members.

Impending quality relevant changes will be presented during these meetings, so that the staff members will always be informed about the current situation.

6.3 Infrastructure/work environment

The required infrastructure and work environment are assessed, provided and maintained, in order to achieve the needed product quality to fulfil legal and customer requirements.

For this purpose, the works medical service and the safety representative will regularly, at least once a year, inspect the workplaces.

Furthermore, it is the purpose of department meetings to form the infrastructure and the work environment in such a way that quality is continuously improved in relation to work.

Management will decide about required investments in the field of infrastructure and work environment, taking into account the suggestions of and consulting with the departments. The required investments are entered into the annual planning.

Reference to documents applicable for Chapter 6

RL-Q-03-03 Personnel qualification

RL-Q-91-03 Training in the fields of radiation protection and security

RL-Q-03-04 Department meetings

RL-Q-05-01 Organisation of health protection and industrial safety

7 PRODUCT REALISATION

7.1 Planning of product realisation

NCS has no hardware production. NCS services are dealt with as individual projects.

The basic proceedings for project implementation are defined in the procedures for business fields „Class 7 Shipments", „Storage of Radioactive Materials" and „Development of Packaging Conceptions".

7.2 Customer related processes

There exist guidelines for working out, modification and checking of offers as well as of orders/contracts, which assure that:

- Customer requirements will be assessed and taken into account appropriately,
- Services are completely and unambiguously described,
- It is possible to render the totality of the required services,
- Nonconformities between the offer and the order/contract are cleared.

Communication with the customer results from a multitude of single events and is regulated by daily work.

This consists especially in contacts with representatives from the authorities, customer contacts during contract implementation, due to complaints, customer visits, visits to industrial fairs as well as taking care of customers in general.

7.3 Design and development

7.3.1 Design and development planning

Department AT carries out activities for the design and development of packagings, as well as corresponding studies.

The head of department AT plans and supervises these design and development projects. In case of activities implying more than one department or company, he will assure coordination.

When transport studies are to be carried out, the managers will always appoint instances responsible for the projects.

The development of new security systems (e.g. security vehicles) is assured by the "Security Department".

Generally, the development of new products is initiated by customers. The technical and economical requirements towards the product are assessed and taken into account during development/design. The head of department AT coordinates development projects. He works out a development plan which appoints the members of the development team, defines their tasks, the development steps and the schedule.

Any staff member of the Company is entitled to suggest changes of products. Technical and economical checking of such suggestions is assured by project management and by the sales department. Management will release the development project.

Interfaces occurring between the single developments activities on the occasion of new developments are defined in the development plan. All staff members participating in the development will be handed a copy of the development plan. In case of changes, the project manager will issue new copies of the development plan.

During the development process, all staff members participating in the latter will make calculations, prepare drawings, part lists, testing instructions and testing records, etc. This assures documentation and assures comprehensibility of the project.

7.3.2 Design and development inputs

Based on the safety requirements, authorities, appointed experts, customers and NCS themselves will define the necessary characteristics of hardware developments, studies, etc., in system requirement specifications or similar documents.

When doing so, the following indications will generally be made:

- General regulations
  - Laws, decrees etc.
  - Requirements imposed by authorities, etc.
  - Customer requirements
- Field of application
- Description of performance criteria
- Reliability criteria
- Requirements in case of periodical inspections/repairs
- Interfaces with neighbouring systems (hardware/software related)

7.3.3 Design and development outputs

The results of development projects are documented in general in such documents as e.g.

- Drafts, concepts

- Drawings
- Specifications
- Safety reports
- Reports concerning studies, etc.

If necessary, development outputs will be documented in form of hardware (e.g. models, prototypes, test samples).

7.3.4 Design and development review

Control steps are planned within the course of the single development projects, in order to make sure that the defined quality requirements are actually achieved. When doing so, preliminary requirements which might have been expressed by exterior inspection instances, customers, etc., will be taken into account.

7.3.5 Design and development verification

The degree to which the development objective has been achieved is checked internally through NCS by means of the conditions in the system requirement specifications or in similar documents, and, depending on project conditions, also submitted to external controls (authorities, experts, customers).

If required, these controls will be carried out using samples.

7.3.6 Design and development validation

Assurance that the product is capable of fulfilling the requirements inherent to the use to which it is foreseen will be, as a rule, verified through cold handling.

7.3.7 Control of design and development changes

Changes of the design and development parameters will take place whenever customer requirements or requirements imposed by the authorities change during the course of development, or if it should become apparent, when checking development, that the defined objectives cannot be achieved.

Changes of quality related documents (e.g. system requirement specifications, safety reports) will be carried out through the corresponding responsible instance and will only be valid when carrying the corresponding control/release remark.

7.4 Purchasing

All suppliers of safety related products and services will be supervised by means of adequate quality assurance measures. These include:

- a first evaluation of the quality capabilities of possible suppliers
- an evaluation of samples
- periodic evaluations of suppliers

Hardware suppliers will as a rule be required to prove that they have a certified QM system.

Suppliers of transport services will be submitted to periodical reliability inspections through the responsible authorities issuing approvals, and will be evaluated annually by NCS on the base of experience gained during collaboration.

Purchasing documents for the different fields of business are very different as far as their contents and form are concerned. Corresponding details are regulated in the corresponding procedures. A goods reception inspection is instituted to assure the verification of purchased products. The instructions "Inspection of Incoming Goods" give more detailed information about this.

7.5 Production and service provision

7.5.1 Control of production and service provision

NCS has no hardware production.

Proceedings for the assurance of service performances are treated in detail in the procedures „Class 7 Shipments", "Heavy Load Transports by Road and Rail", „Storage of Radioactive Materials" and „Development of Packaging Conceptions".

7.5.2 Validation of service provision processes

Service provision processes (transport, storage, development of packaging conceptions) have been successfully introduced years ago. A large amount of projects carried out to this day have shown that the implied processes are perfectly suited to achieve the planned results, and thus require no further validation.

7.5.3 Identification and traceability

Recordings concerning quality relevant activities, e.g. for

- Products (cask documents etc.)
- Projects (transport documents etc.)

- Systems (QM audit reports etc.)

are gathered and assembled by the corresponding project manager or, if no such person has been appointed, by the instance responsible for documentation in the concerned case.

The documents will be examined according to documentation criteria for

- Completeness
- Unambiguous allocation
- Legibility
- Traceability
- Actualisation

The durations of archiving are given for the different types of documents and may vary between 6 months and 30 years, or the useful lifetime of the hardware.

The archiving time for the quality manual is 5 years.

Several methods may be used for archiving, e.g. commercial folders, microfilm, etc.

The archived documents must be identified at least by the following indications:

- Instance responsible for the document
- Contents of the document
- End of archiving period

7.5.4 Customer property

When the customer supplies

- Products (e.g. packagings, loading systems)
- Documents (e.g. transport documents)
- miscellaneous supplies

he must supply these in good and verified conditions.

The NCS or TRANSKEM department receiving this must make sure these supplies are in perfect conditions, if necessary requiring the support of ST-QS.

Customer property shall be treated carefully. Damages or losses shall immediately be reported to the customer by the concerned NCS or TRANSKEM department.

7.5.5 Preservation of product

Products are not manufactured by NCS.

Proceedings to avoid damages of packages repaired, sandblasted and painted on behalf of customers, during handling, storage and transport, are described in a work instruction belonging to the process "Storage of Radioactive Materials".

7.6 Control of monitoring and measuring devices

All monitoring/measuring devices used to evaluate safety relevant quality characteristics (e.g. for radiation protection), are kept locally by the corresponding instances in a file, and are subject to permanent monitoring.

Those responsible for the corresponding monitoring/measuring devices will make sure that inspections/calibrations are carried out in due time. When a monitoring/measuring device appears to be nonconforming, it will be identified by means of a blocking sticker and the blocking will be recorded in the file.

ST-QS will make random inspections to assure themselves that the different monitoring/measuring devices are correctly identified as far as release of blocking are concerned.

Nonconformities in this respect will be entered into the quality report.

Reference to documents applicable for Chapter 7

VA-T-03-01	Class 7 Shipments
VA-SLT-04-01	Heavy Load Transports by Road
VA-SLT-06-01	Heavy Load Transports by Rail
VA-V-03-01	Development of Packaging Conceptions
VA-L-03-01	Storage of Radioactive Materials
VA-SS-03-01	Radiation Protection
RL-Q-95-03	Contract Review
RL-Q-95-04	Working out of Price Offers
RL-Q-06-01	Purchasing
QS-89-05	Inspection of Incoming Goods
RL-Q-89-08	Control of Monitoring and Measuring Devices
FV-95-01	Archiving of Documents

8 MEASUREMENT, ANALYSIS AND IMPROVEMENT

8.1 General

In the following it will be explained how the QM system is measured, analysed and submitted to permanent improvement.

8.2 Monitoring and measurement

8.2.1 Customer satisfaction

Customer satisfaction will be assessed through the concerned department by means of a questionnaire, in general on the occasion of end-of-the-year meetings with the customers. The results are evaluated by ST-QS. If several departments have the same customer, the department responsible for this is appointed.

8.2.2 Internal audit

Planning of internal audits will be oriented according to the necessity of periodical controls of the effectiveness of the QM system. It shall be foreseen that all organisation units involved in the QM system will be audited annually. The intensity of the audits will depend on the safety relevance of the concerned processes.

Audits are carried out by ST-QS. If necessary, ST-QS may appoint another instance for this, which, however, must necessarily be independent.

If nonconformities are found during the audit, these will be presented to the audited organisation and evaluated by ST-QS.

ST-QS may, in agreement with the concerned heads of department or members of general management, decide to apply special safety measures (e.g. supplementary inspection steps).

Every audit carried out will be documented in an audit report.

ST-QS will act as accompanying instance and coordinator for audits carried out by external instances (customers, authorities, etc.).

8.2.3 Monitoring and measurement of processes

The processes seized in the QM system are monitored and measured in relation to product conformity.

Performed audits, questioning of customers and supplier evaluations provide information as to the effectiveness of the processes.

If it is found that objectives are not achieved, the process will be thought over again on the one hand, and the objective on the other.

The objectives and measuring magnitudes of the individual processes are defined in the corresponding process descriptions.

8.2.4 Monitoring and measurement of product

The inspection status of hardware and documents is identified by means of stamps, labels, accompanying cards, control reports, signatures or other adequate means indicating that requirements are fulfilled or not, based on the quality controls which were carried out. The verification of the inspection status is maintained throughout the service performance process.

The control instance responsible for release is indicated in the records.

8.3 Control of nonconforming products

If a product (e.g. packaging, study or preliminary drafts for this) does not fulfil quality requirements, it is marked and/or segregated in order to make sure it will not be used by mistake. The corresponding processes have been defined in such a way that identification, documentation, evaluation and measures for further treatment are given in advance.

Corrective actions will be carried out at once by the responsible instances, inasmuch as they are known, in order to allow for the continuation or finishing of the service performance process.

The different procedures indicate which instances are responsible for making decisions concerning nonconforming products, and how necessary corrective measures are to be carried out.

8.4 Analysis of data

Documented quality data obtained from monitoring and measurement of processes in the different fields of business are evaluated by ST-QS.

The evaluations are presented to the heads of departments and to the members of management, so as to document the actual status of quality level with the assistance of their feedback.

They are furthermore the base for the evaluation of the QM system through General Management.

8.5 Improvement

8.5.1 Continual improvement

The QM system can only be effective if identified faults are permanently eliminated (avoiding of repetition of faults, etc.) and the system is continuously adapted to internal/external changes (optimisation).

Indications of faults in the QM system will follow, for example, from

- Fault messages
- Customer complaints
- Audits

Changes will be necessary due to

- Technical progress (e.g. security systems)
- Extended NCS services
- New organisation routes/structures within NCS
- New requirements from authorities, customers, etc.

The QA-department will be required to work out suggestions for the improvement of the QM system, or to request other NCS departments to do this, due either to faults or to changes.

These suggestions will be submitted to General Management, which will make corresponding decisions within the scope of their general responsibility for the Company.

8.5.2 Corrective action

Corrective action will be carried out, especially in order to effectively eliminate systematic faults. It follows from this that every fault does not necessarily have to trigger corrective action.

The action may relate to improvements related to:

- Hardware/software
- Processes
- Systems

The reasons for triggering corrective action are the evaluation of quality data, of audits and the evaluation of single nonconformities.

After the faults were analysed, corrective action is discussed during quality meetings and the necessary activities are defined when planning of measures and of schedules.

This quality related measure planning is coordinated and its execution supervised by ST-QS.

When changes of the structure or running organisation, of processes and/or auxiliary means follow as a cause of corrective action, ST-QS will make sure that these changes are introduced into the corresponding documents.

8.5.3 Preventive measures/risk management

The totality of instructions and the corresponding forms, the extensive controls and especially training and motivation of personnel constitute the preventive measures of the quality management system.

Furthermore, possible errors during the implementation and realisation of transports were investigated, and corresponding regulations were worked out to avoid errors.

Reference to documents applicable for Chapter 8

RL-Q-91-01	Planning and Carrying out Audits
RL-Q-03-01	Review of the Quality Management System
RL-Q-03-02	Monitoring and Measurement of Customer Satisfaction
RL-Q-95-01	Planning and Implementation of Corrective Actions
RL-Q-95-02	Reporting and Evaluating Errors

ATTACHMENT 1: NCS AND TRANSKEM ORGANISATION CHART