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Abstract

Acergy Norway AS is a seabed-to-surface engineering and construction company for the offshore oil and gas industry worldwide. They deliver services in many market segments such as Inspection and Maintenance and Repair (IMR), Conventional Field Development, Subsea Umbilical Risers, Flowlines (SURF) and Trunklines. Acergy use a fleet of highly adaptable ships and a range of additional services. To be able to deliver these services Acergy is dependent on a great number of sub suppliers.

A consequence of cooperating with so many suppliers is that one get a vast amount of information that needs to be systemised. Acergy need a system where one can exclude poor suppliers and make it easy to find good suppliers that they know are capable of delivering their services/commodities with the right quality and on time.

To optimize the use of their suppliers and with the previous in mind, Acergy has developed a supplier database where information of their supplier's performance, frame agreements, cost savings, and performance assessments are stored. This information is used in various situations such as buying processes for standard products, buying processes for non standard products and in the supplier management processes.

The purpose of this thesis is to study the existing supplier database in Acergy in relation to the management of suppliers, in addition to identifying potential improvements. An examination of the official procedures, the software system and a literature study on the different relevant issues has been performed. In addition to this there have been interviews with company employees.

Even though the supplier database has been developed and is functioning, there is a challenge to optimize the use of the database, in order to inform of it and the use of it. In this paper it is concluded that the training and information of the supplier database in Acergy is insufficient and should be improved.

Increased globalization and communications facilities have in the later years again increased the suppliers possibilities to take part in multinational tendering processes. However, this has given new challenges for buyers, who now have a great number of suppliers to choose from in some product groups. It is therefore further important for the buyers to choose the right collaborating supplier, in order to optimise the supply chain management process.

For a company like Acergy to get the lowest price is not necessarily the most important, but more quality and delivery. Should a project be delayed or have to be redo part of the work, this will mean a great extra costs for the company. These costs will most likely exceed the cost savings connected to the choice of the supplier with the lowest price, if this product shows to have poor quality. This brings to light the importance of building good relationships with the suppliers and use effort in development in these relations. In respect to this Acergy has established an independent unit to manage the supplier relations. However the output of this paper recommends an extension of this unit to increase the communication with the most critical suppliers.

A study of Acergy`s supplier database

To keep track of the experience data related to each supplier and to use this experience in impending procurements, a performance assessment of the supplier is done. This is an important part of the supplier database where the supplier is scored on a various set of assessment criteria's. The outcome of this assessment is an average value that is used as an easy check in the selection of suppliers to tendering lists. However there are some drawbacks with the method as it exists today, for instance that there is no differentiation between suppliers in respect to the complexity of their deliveries. To improve the quality and usefulness of this activity, this paper suggests a differentiation between regular and complex procurements.

In addition to the above this thesis discusses a number of issues related to the supplier database with appurtenant recommendations. The supplier database needs to improve in areas like supplier feedback and gathering of experience and it needs to be cleaned for duplications and non existing suppliers.

It is emphasized in the thesis that the findings are based on my subjective understanding of the gathered information. However, it is my opinion that the implementation of the recommendations would increase the quality and usefulness of the supplier database.

Table of contents

ABSTRACT	1
TABLE OF CONTENTS	3
ACKNOWLEDGEMENTS	6
DEFINITIONS AND ABBREVIATIONS	7
CHAPTER 1 - INTRODUCTION	8
PURPOSE OF THIS THESIS.....	8
WHAT WILL BE DONE?	8
OUTLINE OF THE THESIS.....	8
PART ONE – DESCRIPTION OF THE SYSTEM	11
CHAPTER 2 - INTRODUCTION TO THE SUPPLY CHAIN MANAGEMENT IN ACERGY ..	12
2.1 THE SUPPLIER MANAGEMENT PROCESS	12
2.2 PROCUREMENT OF STANDARD PRODUCTS AND SERVICES	13
2.3 PROCUREMENT OF THE THIRD PARTY VESSEL SERVICES	13
2.4 PROCUREMENT OF NON-STANDARD PRODUCTS AND SERVICES.....	13
2.5 THE PROCESS NAVIGATOR	13
2.6 FAMILIARIZATION	14
CHAPTER 3 - PURPOSE OF THE SUPPLIER DATABASE	15
CHAPTER 4 - DESCRIPTION OF THE SUPPLIER DATABASE	16
4.1 SUPPLIER AND SUBCONTRACTOR LISTING.....	16
4.1.1 THE MAIN LIST	16
4.1.2 THE SUPPLIER CATEGORIZATION SECTION	17
4.2 PERFORMANCE ASSESSMENTS	19
4.2.1 SCOPE	19
4.2.2 TO BE SCORED BY	20
4.2.3 CATEGORY SCORES	20
4.2.4 PERFORMANCE SUMMARY	21
4.2.5 REVIEW AND APPROVAL	21
4.2.6 THE SCORING PROCESS	21
4.2.7 ADDITIONAL COMMENTS	23
4.2.8 WHEN TO MAKE A PERFORMANCE ASSESSMENT	24
4.2.9 SEARCH OPTIONS.....	24
4.3 FRAME AGREEMENTS	24
4.3.1 SEARCH OPTIONS.....	24
4.4 SAVINGS AND VALUE CAPTURE REPORTS AND OVERRUN REPORTS	25
CHAPTER 5 - USERS OF THE SUPPLIER DATABASE	26
CHAPTER 6 - USE OF THE SUPPLIER DATABASE	26
CHAPTER 7 - INTERNAL EXPERIENCE GATHERING AND SUPPLIER FEEDBACK	28
7.1 INTERNAL EXPERIENCE GATHERING.....	28
7.2 FEEDBACK TO THE SUPPLIERS	28
CHAPTER 8 - SUPPLIER RELATION MANAGEMENT PROGRAM	29
CHAPTER 9 - ACHILLES NORWAY	29

A study of Acergy's supplier database

PART TWO – THEORY	31
CHAPTER 10 - SUPPLIER ASSESSMENT	32
10.1 OBJECTIVE OF THE MEASUREMENT	32
10.2 BENEFITS OF SUPPLIER PERFORMANCE MEASUREMENT	33
10.3 USE OF THE GATHERED DATA	34
10.3.1 IMPROVEMENT OF SUPPLIER'S PERFORMANCE.....	35
10.3.2 IMPROVEMENT IN SUPPLIER SELECTION.....	35
10.3.3 IDENTIFICATION OF SUPPLY RISK	35
10.3.4 DRIVE AND PRIORITISE SUPPLIER DEVELOPMENT.....	35
10.3.5 CONSOLIDATION OF THE SUPPLIER BASE	36
10.3.6 PREDICT SUPPLIER PERFORMANCE	36
10.3.7 SEGMENTATION OF THE SUPPLIER BASE	36
10.4 CHOICE OF DATA ELEMENTS/ PERFORMANCE CRITERIA.....	36
10.4.1 QUANTITATIVE ELEMENTS	38
10.4.2 QUALITATIVE ELEMENTS	39
10.5 CHOICE OF MEASUREMENT SYSTEM.....	40
10.5.1 CATEGORICAL.....	40
10.5.2 WEIGHED-POINT	40
10.5.3 COST-BASED	40
10.5.4 SUBJECTIVE.....	41
10.5.5 SURVEY METHOD.....	41
10.5.6 COMPARATIVE METHOD.....	41
10.5.7 PERCENTAGE BASED METHOD	42
10.5.8 USE OF THE DESCRIBED METHODS.....	42
10.6 SOURCES OF DATA.....	42
10.7 CONCLUSION.....	43
CHAPTER 11 - SUPPLIER RELATIONS	44
11.1 COGNITIVE CAPITAL	44
11.2 STRUCTURAL CAPITAL.....	44
11.3 RELATIONAL CAPITAL	45
11.4 CONCLUSION.....	47
CHAPTER 12 - SUPPLIER COMMUNICATION AND FEEDBACK	48
CHAPTER 13 - REDUCTION OF THE SUPPLIER BASE	50
13.1 WHY OPTIMIZE THE SUPPLIER BASE?.....	50
13.3 GENERAL STEPS IN THE OPTIMIZATION PROCESS	54
13.4 DISCUSSION	55
13.5 CONCLUSION.....	56
PART THREE - INTERVIEWS	57
CHAPTER 14 - THE INTERVIEWS	58
14.1 RESEARCH APPROACH AND METHODS.....	58
14.2 CONTENT OF THE INTERVIEWS	58
14.3 INTERVIEW WITH A SCM REPRESENTATIVE.....	59
14.4 INTERVIEW WITH AN ENGINEERING REPRESENTATIVE	65
14.5 INTERVIEW WITH A QC REPRESENTATIVE.....	70
14.6 INTERVIEW WITH AN ACHILLES REPRESENTATIVE	73
14.7 COMMENTS ON THE INTERVIEWS	76

A study of Acergy`s supplier database

PART FOUR – DISCUSSION, CONCLUSION AND RECOMMENDATIONS	77
CHAPTER 15 - DISCUSSION AND CONCLUSIONS	78
15.1 SUPPLIER COMMUNICATION AND FEEDBACK	78
15.2 PURPOSE AND USE OF THE SUPPLIER DATABASE	79
15.3 PERFORMANCE ASSESSMENTS	80
15.3.1 THE SCORING PROCESS	80
15.3.2 VIEWING OF THE PERFORMANCE ASSESSMENT	81
15.3.3 MANIPULATION OF THE PERFORMANCE ASSESSMENTS	81
15.3.4 PERFORMANCE CRITERIA	82
15.3.5 SEARCH ALTERNATIVES FOR THE PERFORMANCE ASSESSMENTS	83
15.4 SUPPLIER LIST	84
15.5 CHOICE OF MEASUREMENT SYSTEM	84
15.6 SUPPLIER DEVELOPMENT AND IMPROVEMENT	85
15.7 SAVINGS AN OVERRUN REPORTS	86
15.8 FRAME AGREEMENTS	86
15.9 REDUCTION OF THE SUPPLIER DATABASE	86
15.10 SUPPLIER RELATIONS	87
15.11 TRAINING AND COMMUNICATION OF THE SUPPLIER DATABASE	88
CHAPTER 16 - RECOMMENDATIONS	90
REFERENCES	92
APPENDIX 1 - LIST OF THE USEFUL ASSESSMENT CRITERIA	95
APPENDIX 2 - THE SCORING FORMS FOR THE PERFORMANCE ASSESSMENTS	99
APPENDIX 3 - PROCEDURE GR-SCM-001	
INTRODUCTION TO SUPPLY CHAIN MANAGEMENT	105
APPENDIX 4 - PROCEDURE GR-SCM-007	
WORK INSTRUCTION FOR THE SUPPLIER DATABASE	123
APPENDIX 5 - PROCEDURE GR-SCM-013	
WORK INSTRUCTION FOR SUPPLIER PERFORMANCE ASSESSMENT	148

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Definitions and Abbreviations

Definitions

Supply base:	“A focal firm’s supply base is defined as only those suppliers that are actively managed through contracts and the purchase of parts, material and services. (Choi & Krause 2005, p.637)”
Product:	Products or Services to be delivered by the Supplier / Subcontractor
Supplier:	A Supplier or a Subcontractor delivering a product or service
QA approved:	Suppliers who is approved by the Quality Assurance department
Early supplier involvement:	“When a manufacturer is tapping into supplier’s technologies and expertise in product design and development (Ragatz et al 1997 cited in Kannan et al 1999, p.1036)”.
Dun&Bradstreet:	The Dun & Bradstreet Corporation is a provider of credit information on businesses and corporations. Often referred to as just D&B, the company is perhaps best known for its D-U-N-S (Data Universal Numbering System) identifiers assigned to over 100 million global companies.
Frame Agreement:	The current Utilities EU Directive, and the proposed consolidated public sector EU Directive, both define a framework agreement as an agreement with suppliers, the purpose of which is to establish the terms governing contracts to be awarded during a given period, in particular with regard to price and quantity. (The Office of Government Commerce 2009)

Abbreviations

RFQ:	Request for quotation
QA:	Quality assurance
QC:	Quality Control
KPI:	Key Performance Indicators
SPM:	Supplier Performance Management.
NEC:	Northern Europe and Canada
SCM:	Supply Chain Management

Chapter 1 Introduction

Purpose of this thesis

In the existing industry there seem to be an increasing dependency of cooperation between companies and their suppliers. This dependency comes from increased competition and a demand for decreased costs and delivery times. Acergy deals with a great number of suppliers and they are using a supplier database to manage these. The purpose of this thesis is to study the structure and use of this supplier database and find possible improvements in relation to this.

What will be done?

First of all I will start with a general description of the supplier database and its various underlying functions, such as performance assessment, frame agreements, savings and value capture and procurement overrun reports. This description will focus on the intended mode of operation of these elements with respect to the procedures.

Second I will gather information about the actual use of the same elements by use of interviews/conversations with Acergy`s personnel. The focus here will be to generate information that can lead to critical questions and improvements on the actual structure and use of the supplier database.

Third I will address the outcome of the gathered information in a discussion about the structure and use of the supplier database. The focus here will be to discuss alternative solutions to possible problems brought to light in the previous investigation and lead the discussion into some conclusions.

The outcome of this paper will end up in a list where I present my subjective recommendations of the findings of this project.

Outline of the thesis

Part One - Description of the system

The content of this part is mainly a collection of relevant information concerning this thesis from Acergy`s internal procedures. The extended information should be sufficient to follow the discussion later in this paper, but if there are any confusion or need for more details on certain elements the procedures are attached.

- Chapter 2 Introduction to the Supply Chain Management in Acergy: A brief description of the SCM principles and the different processes.
- Chapter 3 Purpose of the supplier database: A gathering of what the procedures say about the purpose of the different elements in the supplier database.
- Chapter 4 Description of the supplier database: A description of all the elements in the supplier database such as Supplier and subcontractor listing, performance assessment, frame agreements and the savings and value capture reports and overrun reports.

A study of Acergy's supplier database

- Chapter 5 Users of the supplier database: An overview over the different groups of users of the supplier database.
- Chapter 6 Use of the supplier database: An introduction to how the supplier database is used today.
- Chapter 7 Internal experience gathering and supplier feedback: A description of how these properties are exploited today.
- Chapter 8 Supplier relation management program: A brief description of the purpose and the field of action of the program.
- Chapter 9 Achilles: An introduction to the system and an overview of the most important properties and benefits.

Part two – Theory

This part is focusing on the theory of the discussed problems to be addressed in this thesis.

- Chapter 10 Supplier assessment: Contains the theory on issues like the objectives and benefits of the measurement, use of the gathered data, choice of performance criteria, choice of measurement system and the different sources of data.
- Chapter 11 Supplier relations: This chapter focus on the theory with respect to the relation between companies. This is done in the light of the cognitive, structural and the relational capital.
- Chapter 12 Supplier communication and feedback: A description of the different communication channels and a stepwise review of the communication loop.
- Chapter 13 Reduction of the supplier base: Contains the theory on issues like why a company should reduce the supplier database, the potential risks and the general steps in such a process.

Part three – Interviews

- Chapter 14 The interviews: Interviews with SCM, QC and Engineering personnel.

Part four – Discussion and Conclusion

- Chapter 15 Discussion and conclusions: In this chapter a subjective discussion is carried out on the basis of part one, two, three and informal conversations with personnel in Acergy.
- Chapter 16 Recommendations: A list over the proposed improvements of the structure and use of the supplier database.

Part one – Description of the system

Chapter 2

Introduction to the Supply Chain Management in Acergy

The Supply Chain Management in Acergy consist of four main processes: Supplier Management Process, Procurement of Standard Products, Procurement of Non-standard Products and Procurement of Third Party Vessel Services.

All SCM activities are governed by a set of principles and associated rules and these are stated in the procedure GR-SCM-001, introduction to Supply Chain Management. The principles are:

1. Acergy will develop an SCM strategy at Group and Regional levels.
2. The SCM function is responsible for managing and developing the relationship with Acergy`s suppliers.
3. The SCM function will ensure that personnel are qualified, have the right competencies and are provided with the appropriate business tools.
4. People in the SCM process shall always behave in an ethical and professional manner.
5. SCM is responsible for managing the RFQ activity and making Awards under the authority of the Project Manager / Budget Holder.
6. All Awards will be managed in accordance with the SCM process with the appropriate follow-up on cost, delivery, quality & HSE until the product/services are delivered to the agreed site.
7. The SCM function ensures continuous enhancement through the capture and capitalisation of lessons learnt.

The associated rules are not included here, but can be found in the attachment, procedure GR-SCM-001 page 6-7. A brief description of each SCM activity will now follow.

2.1 The Supplier Management Process

The Supplier Management Process contains:

- Development and deployment of a Sourcing Strategy
- Process and systems for approving suppliers for use by Acergy
- Process and systems for collecting and sharing information about suppliers

The main system for these processes is the Supplier database, which is the main focus in this paper and will be thoroughly explained later in this chapter.

2.2 Procurement of standard products and services

The procedure GR-SCM-001 defines standard products or services as:

- Simple, off the shelf, catalogue items
- Products with low to medium risk and complexity
- Products requiring no or little engineering
- Spare parts and consumables
- Minor fabrications

These products or services are not critical to Acergy`s businesses and therefore these are not getting the same focus as the procurement of non-standard products and services. According to the GR-SCM-001, the procurement of standard products is normally undertaken within the regional SCM departments.

2.3 Procurement of the third party vessel services

Third Party Vessels are defined as “any ships or barges which are to be obtained from an entity which is not part of the Acergy group of companies”. The procurement of these services always includes tendering stages and should be done by a SCM chartering specialist.

2.4 Procurement of non-standard products and services

The procedure GR-SCM-001 defines non-standard products or services as:

- Complex and/or high value products
- Products containing some degree of engineering and/or design
- Products requiring some degree of customised manufacturing and/or fabrication
- Products/Services which need technical and commercial follow up during contract execution
- Products to be incorporated into Client permanent equipment or an Acergy asset
- Products critical to the project

These products or services are often critical to Acergy`s businesses therefore these procurements gets higher focus and treatment than the former. The procedure GR-SCM-001 states that: “The procurement of non-standard products or services commences at tendering stage. Is normally undertaken using allocated SCM personnel working with the support of a Contract Manager in an integrated project environment”.

2.5 The Process Navigator

These four processes, the supplier management process, procurement of standard products and services, procurement of the third party vessel services and procurement of non-standard products and services are presented in an activity based flowchart format called the Process Navigator. Each process is divided into sub-processes, and there are a total of fourteen sub-processes in the Process Navigator for SCM as shown in figure 1 on the next page. The process navigator is a tool to help the personnel finding all relevant information about a certain work task. This includes procedures, flow charts, schemes and documentation.

2.6 Familiarization

It is stated in the procedure GR-SCM-001, Introduction to Supply Chain Management, that all SCM personnel are required to be familiar with the SCM processes in accordance with the requirements of their functional description. To emphasize the focus in this thesis it is in place to mention that for most of the personnel this includes the supplier database. To assure that this familiarization is done in practice, all SCM personnel has to complete a familiarization form where they confirm that they are familiar with the supplier database.

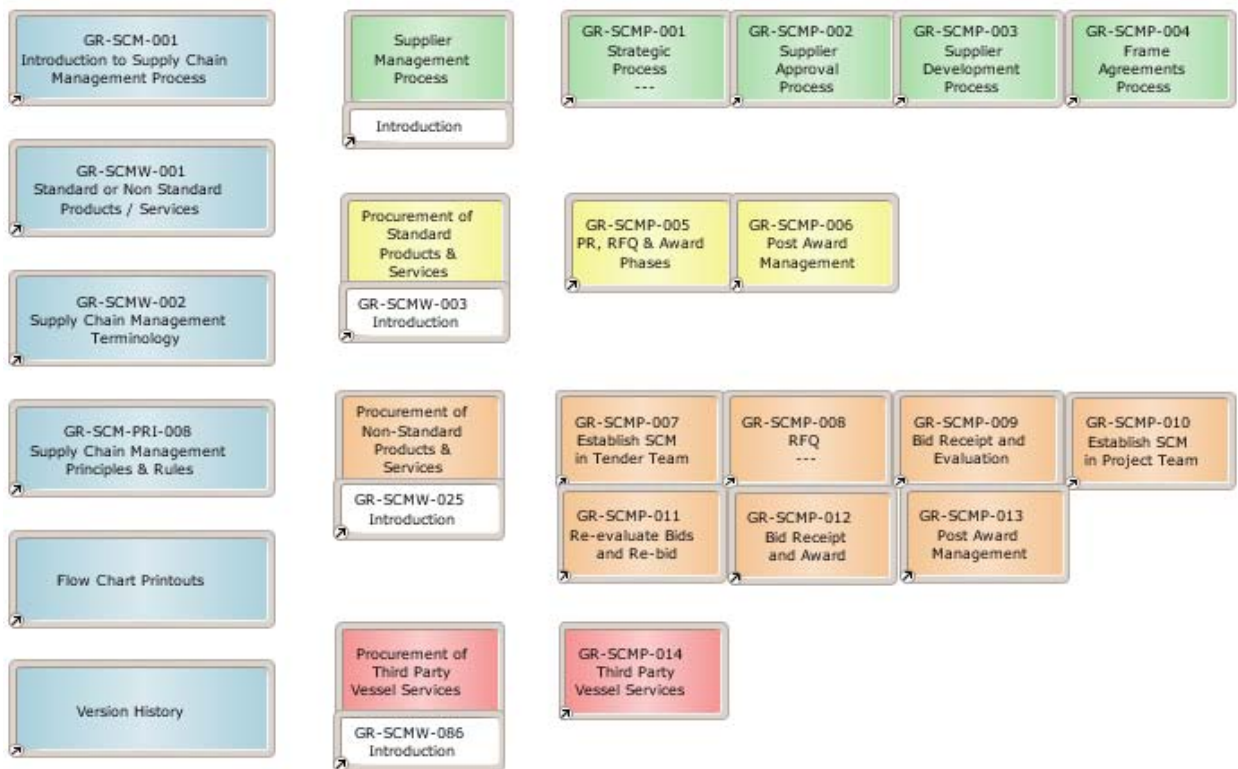


Figure 1

Source: Internal procedure GR-SCM-001

Chapter 3

Purpose of the supplier database

The procedure GR-SCM-007, Work Instruction for the Supplier Database, states that the objective for the supplier database is to capture, maintain and share of information pertaining to each of the suppliers. It should work as a supporting tool for the SCM processes such as buying process for standard products, buying process for non-standard products and supplier management processes.

In relation to this, the supplier database work as an easy way to ensure that all used suppliers are QA approved, this means that they are qualified and are able to deliver the product they support in relation to quality and time.

The database will also support the exchange of experience between personnel participating in the processes around buying products and entering into contracts. Further procedure GR-SCM-007 states that the results of the performance assessments shall be used in the communication with the suppliers in purpose to drive a continuous effort towards improved performance.

In addition to this the database is also a tool for managing the frame agreements Acergy has with their suppliers. The purpose of frame agreements and pre-agreed terms and conditions is to obtain savings and to save time in the RFQ and award process.

It also gives a possibility to report and manage cost savings. It is stated in the procedure Savings and Value Capture Reporting Guideline, that the purpose of this is to:

- Measure across Group, regions and projects the potential benefits to the Groups performance from actions taken related to procurement.
- Create a focus in procurement activities which could lead to achieving benefits to the profitability of projects.
- Identify any procurement “best practice” that should be more widely used across the Group.
- Support the SCM goal of driving performance improvement and delivering an increased contribution to the Group's business results.

Opposite to this there is also cost overruns reporting, and the purpose of this is to capture lessons learned in order to learn from best practice or to avoid repetition.

To make the supplier database fulfil these purposes the procedure GR-SCM-001 states that: “It is important that we maintain up-to-date information on suppliers and actively manage their qualification status using the Acergy supplier management database, as the common tool across the Group”.

Chapter 4 Description of the supplier database

In brief the supplier database is a database used for the capturing, maintaining and sharing of information pertaining to each of Acergy`s suppliers. The database comprises of the elements Supplier and Subcontractor Listing, Supplier categorization section (suppliers main page), Frame Agreements, Performance Assessments, Savings and Value Capture Reports and Procurement Overrun Reports. All of these elements will be carefully explained in this chapter.

4.1 Supplier and Subcontractor Listing

According to the procedure GR-SCM-007, the supplier and subcontractor listing is: “The backbone of the database. Here all relevant information about the supplier shall be listed, such as contact details, contact persons names, affiliation, products that the supplier is approved for, status and if we have a frame agreement or other pre-agreed terms and conditions with them. Further there are links to the latest performance assessment, a space for additional notes and comments, and there is an audit trail, such that changes to the status can be tracked and that the people having done the input and changes can be consulted.”

4.1.1 The main list

In the main list (first screen when you enter the supplier database) the information of the supplier, region, status and products are shown. To support easy findings in this list there are search options, these are: All companies, by status, region, product, region and product and by product and region.

In figure 2 a screenshot of the Supplier and Subcontractor List is displayed.

Supplier	Region	Status	Products
20/20 Business Insight Ltd	NEC	Approved	562 - IT systems and software
2G Products	NEC	Approved	744 - Steel
2IA Automation	AFMED	Do Not Use	522 - Consultancy
360 Treasury Systems AG	NEC	Approved	562 - IT systems and software
3B Consultancy Services Ltd	AFMED	Approved	600 - Surveying services
3C Metal	AFMED	Potential	534 - Fabrication in Steel - High Complexity
3F	AFMED	Approved	535 - Fabrication in Steel - Medium Complexity
3M United Kingdom	NEC	Approved	760 - General materials
4 Subsea AS	AFMED	Potential	530 - Engineering
A-Guly Contracting AS	SHIPS	Approved	832 - Ships other equipment
A-PLANT RENTARC (ABERDEEN)	NEC	Approved	722 - Hired equipment
A B Manufacturing	NAMEX	Potential	
A Nobles & Son Ltd	AME	Approved	592 - Rigging
A T & T	NAMEX	Approved	774 - Telephone & communication services
A & B Industries Of	SHIPS	Potential	826 - Ships yards, docking, repair, modifications and maintenance
A & B Valve And Piping Systems, Inc.	NAMEX	Potential	554 - Forged Items - Standard Catalogue Products
A & M Dockside Repair, Inc.	SHIPS	Potential	826 - Ships yards, docking, repair, modifications and maintenance
A & P Tyne	SHIPS	Approved	826 - Ships yards, docking, repair, modifications and maintenance

Figure 2

Source: Screenshot from the Supplier Database.

A study of Acergy's supplier database

4.1.2 The supplier categorization section

When entering a supplier from the main list, the supplier categorization section will appear. This scheme is shown in figure 3 and here you can see that the scheme is divided into six sections.

Subcontractor/Supplier categorisation

Company details

Name :	Parent :
Status : Approved	Frame agreement (s) :
Approval process level : <input type="radio"/> 0 - Non-critical <input type="radio"/> 1 - Additional Verification <input checked="" type="radio"/> 2 - Full Audit & Inspection	Contact name :
Last assessment : 6,5	Assessment doc link :
Company code : 00000	Telephone :
Region :	Fax :
Address :	Website : Open Link
Email address :	

Products and services supplied

Product code	Description	Approval process level	Products/Services supplied
740	Seafastening	1	Seafastening
618	Welding /welding services	2	Welding services offshore Welding services onshore

Comments and notes

Categorization criteria

Criteria	Meets criteria	Description
<input checked="" type="radio"/> Supplier questionnaire received and evaluated	<input type="radio"/> Yes <input checked="" type="radio"/> No	The company is registered and is running a legal operation. Relevant contact information is obtained. We are able to communicate electronically with this supplier to issue RFQs, receive bids and perform clarifications. The information provided in the Supplier questionnaire is evaluated as satisfactory, and subject to further verification we expect that the supplier will be approved.
<input checked="" type="radio"/> ISO 9001 quality management system or equivalent	<input type="radio"/> Yes <input checked="" type="radio"/> No	The supplier has provided evidence that they operate an appropriate quality management system in accordance with ISO 9001 related to their scope of services or goods.
<input checked="" type="radio"/> HSE management system and performance	<input type="radio"/> Yes <input checked="" type="radio"/> No	The supplier has provided evidence that they operate an appropriate HSE management system accredited to ISO or equivalent related to their scope of services or goods, and that their HSE performance is acceptable.
<input checked="" type="radio"/> Acceptable technical and project management capabilities	<input type="radio"/> Yes <input checked="" type="radio"/> No	An assessment of the supplier's technical, manufacturing and project management capabilities has been made and it is expected that the supplier will perform to an acceptable level. After each project/purchase order a performance assessment shall be made. Should the score be below 5 it shall be brought to the supplier's attention. The supplier must explain how they will improve the areas of concern, and agree an improvement plan with Acergy. Consistent and continued failure to address poor performance could cause the supplier to be moved to the category "Do not use". When they demonstrate that the areas of poor performance have been addressed the status can be upgraded to "Approved" again. This will be dealt with as appropriate at Regional or Group level.
<input checked="" type="radio"/> Pre-agreed terms and conditions, frame agreement or good track record	<input type="radio"/> Yes <input checked="" type="radio"/> No	We have established a frame agreement or pre-agreed terms and conditions with the supplier, which shall be used when making RFQs and commitments. The frame agreement can be exclusive or non-exclusive. Or we have a record of on-time, on-quality delivery with limited number of commercial issues.

Supporting documents

Supplier status audit trail

Date	Actioner	From status	To status	Reason
17/06/2008			Approved	Approved by

Figure 3

Source: Screenshot from the Supplier Database.

A study of Acergy's supplier database

The first one is the “company detail” section, here all the information about the supplier is gathered. This includes the name, status, criticality level, latest performance assessment, region, address, parent company if any and the frame agreement if there is one.

Second there is a section named “products and services supplied” where the products the supplier is approved for is displayed. The selection of the products is done by product codes, also known as commodity codes. A consequence of the setting of this code is that this automatically set the criticality level. There are three of these levels, depending on the criticality and complexity of the product to be delivered:

- 0 Simple non-critical products
- 1 Products with medium criticality
- 2 Complex and critical products

The criticality level governs the approval process, such that suppliers of complex critical products shall be more carefully investigated than suppliers of non-critical products.

The third one is a section to put additional “comments and notes”. This can be free text or documents and typically information is reports from visits, price information, supplier's workload, new products or technology development and delivery time trends.

The fourth section contains the categorization criteria. This is four questions where yes or no should be entered. These criteria in addition to the mentioned criticality level are deciding the supplier's status in the supplier database according to the matrix in figure 4.

Applicable to category		Criteria	Potential	Approved	Preferred
0 - 1 - 2	Supplier Evaluation Tool	Supplier Questionnaire received and evaluated	√	√	√
2	On site Review	ISO 9001 Quality Management System or equivalent	–	√	√
		HSE Management System and Performance	–	√	√
		Acceptable Technical and Project Management Capabilities	–	√	√
2	Business Relationship criteria	Pre-agreed Terms and Conditions	–	Facultative	√
		Frame Agreement	–	–	√

Figure 4

Source: Procedure GR-SCM-007, p.12

A study of Acergy's supplier database

The statuses categories are preferred, approved, potential, under scrutiny and do not use. These are defined in the procedure GR-SCM-007:

- Potential: First supplier status when entering the supplier database.
- Approved: Status for approval of product level 0 criticality after pre-qualification questionnaire has been received and evaluated, using Supplier Evaluation Tool. For approval of product level 1 criticality further verification shall be put in place. For approval of product level 2 criticality on site review must be carried out.
- Preferred: Status where suppliers must automatically be present at the bidders list, typically suppliers with whom we have Pre-agreed T&C's or signed Frame Agreements.
- Under Scrutiny: Status where supplier has badly performed with insufficient assessment result, whether HSE, QA, QC, commercial, expediting issues, etc..... Provide action plan to overcome difficulties.
- Do not use: Action plan failure.

By June 2009 the supplier database contains 3364 suppliers and by these 1121 is under the NEC region. These are distributed between the categories as follows: 60 potential, 927 approved, 77 preferred, 14 under scrutiny and 43 is given the label do not use.

The fifth section is called "supporting documents" and is an area to put all relevant documentation used in the approval process. This is to support an easy review over the process if there are any disagreements.

The last section in this scheme is the "supplier status and audit trail". Here the last three status changes and the full supplier audit trail are displayed. This is done to make it possible to see who approved the supplier, who made the changes and why.

4.2 Performance Assessments

The performance assessment is a scheme built up by different sections and these are: Scope, scored by, scoring, performance summary and review and approval section. A description of each section follows, and the scheme is shown in figure 7 on page 22.

4.2.1 Scope

The "scope" section contains information about which supplier the performance assessment is about, scope of work, the commodity code, name of the project it belongs to and the final committed cost among other things.

4.2.2 To be scored by

Second there is a section "to be scored by" where you find information about who has participated in the performance assessment. There is always a SCM person on this list, since it is only the SCM who can initiate a performance assessment. On the performance assessments there should also be different reviewers making scores on the performance criteria. About who should be reviewers on these assessments the procedures says:

"For standard products the buyer, the expeditor and/or QC as well as logistics are typically reviewers on the assessment. For non-standard products the project team including SCM, Engineering, QA, expediting / QC, HSE and project management should be participating. For multiple small purchases from the same supplier, for frame agreements and for long ongoing subcontracts the assessment can be made on a yearly basis or with other appropriate frequency".

4.2.3 Category scores

Then there is the "category scores" section. This consists of ten different criteria, each with a belonging score from the participants on the performance assessment. The used performance assessment criteria are as follows:

1. Post-award Health Safety & Environmental Activities
Subcontractors and suppliers compliance with their own published HSE procedures, Group HSE requirements and with statutory procedures / requirements.
2. Pre-award Commercial
This is an assessment in support of tendering requirements. It is suppose to say something about the subcontractors and suppliers responsiveness to requests for budget or firm quotations.
3. Subcontractors' & Suppliers' Management Of The Work And Schedule
Suppliers and subcontractors performance in completing the scope of supply in accordance with the contractual delivery date.
4. Post-award Commercial
Subcontractors and suppliers performance in dealing with us, in respect of scope changes, related claims, variations and back charges.
5. Management and Control Of Sub-subcontractors & Sub-suppliers
Subcontractors and suppliers ability to control significant sub-contractors and sub suppliers in their supply chain that impact or affect the prime subcontractor / suppliers performance.
6. Subcontractors' & Suppliers' Engineering, Technical Execution and Competence
Subcontractors and suppliers engineering systems, comprehension of the scope of work and development of the scope of work.
7. Quality Assurance & Control
Subcontractors and suppliers conformance to their own quality procedures and systems, and conformance to Group quality requirements.

8. Documentation
Subcontractors and suppliers performance in management and control of the production and submittal of contractual documentation and data.
9. Installation & Commissioning
Subcontractors and suppliers performance in supporting installation and commissioning activities.
10. Start-Up /Initial Operations and Warranty
Subcontractors and suppliers equipment as purchased and observed by Group during initial operations.

4.2.4 Performance summary

In the fourth section, performance summary, there are three areas, one for delivery performance where the alternatives are on time, early or late, the two second ones is text areas where the SCM person responsible for the contract/purchase should obtain the various inputs and fill in comments for exceptionally high or low scores and if there are something he would do different if he were to do a commitment with the same supplier again.

4.2.5 Review and approval

In the last section there are information about who the preparer were and the approver of the performance assessment. According to the procedure the approver shall be the regional manager, or a delegate.

4.2.6 The scoring process

The scoring process is initiated by the SCM person after preparation of the first sections. He chooses who to be reviewers and send an automatically generated e-mail to these. This e-mail contains a scheme for each criterion like shown in figure 5 on the next page. This contains of a descriptive text describing the definitions of Unacceptable, Undesirable, Acceptable, and Excellent for each criteria.

After the reviewers have filled in the scores which is a number from 1-9, they will automatically be included in the performance assessment. It is also emphasized in the procedure that each reviewer should only enter scores for the criteria where he/she has been involved.

In appendix 2 the scoring scheme for each measurement criterion is displayed.

A study of Acergy's supplier database

Pre-award Commercial
 Assessment in support of Tendering requirements. Subcontractors' and Suppliers' responsiveness to requests for Budget or Firm quotations.

Unacceptable	Undesirable	Acceptable	Excellent					
Incomplete response Late untimely response in spite of expediting by us. Rebid required with extensive clarification and negotiation to achieve useable content Formal bid requested but Budget price submitted. Limited validity offered. Numerous unpriced exceptions. High peripheral risk. Lacked understanding of T & C's with many objections and variations required Refused to negotiate delivery	Full but poor response Timely response achieved only after expediting by us. Bid only acceptable after clarification and negotiations Formal bid requested but Budget price submitted. Minimal validity offered. Medium peripheral risk Many exceptions and variations to T & C's. Provided delivery Lead time but failed to demonstrate milestones	Full adequate response Timely response without Group expediting Good quality bid requiring limited pre-award clarification & some negotiations. Bid firm price, Limited Validity. Low peripheral risk Minor exceptions and variations to T & C's Offered compliant delivery Lead time and submitted milestone schedule	Good response Proactive in supplying timely response without expediting by us High quality bid requiring little clarification and pre-award negotiations Bid Firm price & Validity for full Tender period with zero risk Accepted T & C's without qualification Offered improved delivery Lead Time and submitted integrated milestone schedule					
1	2	3	4	5	6	7	8	9

Score for this category (1-9): Next Back Cancel
 Enter 0 if this category does not apply

Figure 5 Source: GR-SCM-013, p.11

In addition to these e-mail schemes there are a brief general description of how to score on the assessment criteria in the procedure GR-SCM-013, this is shown in figure 6.

Unacceptable Many weaknesses - can perform work but cannot meet the desired standards of performance without excessive company intervention / support.	Undesirable Some weaknesses and considerable company intervention / support	Acceptable Few weaknesses and some company intervention / support.	Excellent Generally meets desired standard of performance or exceed the desired standards of performance. Very few weaknesses.					
1	2	3	4	5	6	7	8	9

Figure 6 Source: GR-SCM-013, p.4

After all participants have given their scores, the average score is automatically set, and will be the output of the performance assessment. This is a number between 1 and 9 and shall accordingly to the procedure GR-SCM-007 be used in the bid evaluation process.

In figure 7 on the next page, the performance assessment scheme is shown. Here a SCM representative has created a performance assessment and filled in scores on the criteria. In addition to this there are another reviewer that have made his scores. As displayed, the averaged score of each criterion is added to make the final output score from the performance assessment.

A study of Acergy's supplier database

Subcontractor/Supplier performance assessment								
Scope								
Subcontractor/Supplier :								
Scope of work/supply :								
Product code:								
Region :				Subcontract/Purchase order number :				
Project :				Final committed cost :				
Customer :								
Scored by								
Name								
Role								
SCM :								
Supply chain representative								
Reviewer 1 :								
IMS								
Reviewer 2 :								
Reviewer 3 :								
Reviewer 4 :								
Reviews due by : 6 november 2006								
Category scores								
		SCM	Reviewer 1	Reviewer 2	Reviewer 3	Reviewer 4	Agreed score	Use this score
1	Pre-award Commercial	2	3				2.5	
2	Post-award Health Safety & Environmental Activities	2	3				2.5	
3	Subcontractors' & Suppliers' Management Of The Work And Schedule	2	3				2.5	
4	Post-award Commercial	2	3				2.5	
5	Management And Control Of Sub-subcontractors & Sub-suppliers	2	3				2.5	
6	Subcontractors' & Suppliers' Engineering, Technical Execution And Competence	2	3				2.5	
7	Quality Assurance & Control	2	3				2.5	
8	Documentation	2	3				2.5	
9	Installation & Commissioning	2	3				2.5	
10	Start-Up /Initial Operations And Warranty	NA	3				3.0	
	Overall average						2,6	
Performance summary								
Delivery performance : On time								
Comments on exceptionally good or poor scores								
If you were to do the commitment again with this company, what would you do differently?								
Review & approval								
Current status : Approved								
Prepared by :				Approved by :				
6 november 2006				6 november 2006				

Figure 7 Source: Screenshot from the Supplier Database.

4.2.7 Additional comments

It is considered in the procedure that these previous mentioned descriptions of the performance criteria will not cover specific circumstances. It is therefore important to record the context for certain scores, in particular those in the high and low range, as this helps others to understand better what drove the scoring. In relation to this it is stated in GR-SCM-013 that each individual should include comments as follows:

- Where there are circumstances that influenced the supplier performance that were outside the suppliers control a note should be added to this effect.
- Notes or comments must be factual with no personal opinion or interpretation of events.
- Consider: If you were to place a commitment again with this supplier, what would you do differently? Record views in the comment section for future projects to benefit from.

It is also stated that when recording delivery performance, each individual should note the following:

- Delivery is defined as the contractual commitment date including any change orders that impacted delivery and created a formal revision to the original contractual delivery date.
- Where accelerated delivery has been agreed and paid for, the revised date shall be the contractual delivery date that the performance is measured against.
- Any cause of late delivery should be concisely noted in the comments section of the assessment.

4.2.8 When to make a performance assessment

According to the procedure GR-SCM-007, there should be made a performance assessment after every use of a supplier, and this shall be reported in the supplier database.

Procedure GR-SCM-013 states that: “Upon delivery of a product or completion of the scope of work, the person or team who followed up the purchase order/subcontract shall complete the supplier performance assessment report”.

4.2.9 Search options

The search options for the performance assessments are: New assessments, for review, review status, for approval and approved assessments.

4.3 Frame Agreements

The database shows where frame agreements are in place and the frame agreement can be read by everyone with access to the database. The frame agreement screen informs in which regions the frame agreement is valid, who are the owner and the responsible for the frame agreement, who are the supplier contact and the validity dates. The procedure GR-SCM-001 state that:” The approved frame agreement, any usage instructions, QA certification and subcontractor capability information shall be stored in the Framework Agreement element of the database”. Each Framework Agreement shall also have a commercial representative and a technical representative selected from the appropriate Engineering discipline.

Where there is a frame agreement or pre-agreed terms and conditions in place the suppliers should accordingly to the procedure GR-SCM-001 “be set to the status preferred and are supposed to be treated as first choice sources and must always be given the opportunity to bid for the appropriate services/supply on a worldwide basis”.

4.3.1 Search options

The search options for the frame agreements are: By supplier, category, region /owner, valid to and expired records.

4.4 Savings and Value Capture Reports and Overrun Reports

GR-SCM-001 states that: "Significant savings and value captures shall be reported. The savings are accumulated regionally and for the Group, and held up against predetermined performance criteria set every year by the SCM Management." The same procedure also states that overruns shall be reported in the purpose of learning from mistakes and to reduce the possibility of repetition.

The configuration of these reports are not important for the discussion in this paper so it is not explained in detail, but in figure 8 the configuration is shown.

Savings & value capture report

Type of SVCR (indicate the percentage of total savings for each category)

%	%
<input type="text"/> Procurement process time improvement	<input type="text"/> Milestone payment terms & schedule
<input type="text"/> Delivery / Lead-time improvement	<input type="text"/> Base price reduction
<input type="text"/> Inventory / Materials management	<input type="text"/> Sourcing strategy
<input type="text"/> Procedure / Process change	<input type="text"/> Claim mitigation
<input type="text"/> Logistics / Transportation / Import / Export	<input type="text"/> Extension of scope
<input type="text"/> Group leverage	<input type="text"/> Others

Project overview

Region: <input type="text"/>	Project: <input type="text"/>
Acergy office: <input type="text"/>	Scope of work/supply: <input type="text"/>
Subcontractor/Supplier: <input type="text"/>	Product Code: <input type="text"/>
	Other bidders (if applicable): <input type="text"/> (put each name on a separate line)

Other Acergy contributors (functions/offices)

Description of how it was achieved

Figure 8

Source: Screenshot from the Supplier Database.

Chapter 5 Users of the supplier database

Pursuant to the procedure GR-SCM-007, personnel are divided into different groups with different access privileges. These groups are:

Users: All Acergy staff is members of this group. Users have read-only access to the database, except the frame agreements and the savings and overrun reports. They can be reviewers in performance assessments when assigned by the author.

Authors: SCM people are typically authors and in addition to full read access they can raise assessments and make saving/overrun reports. They can also score assessments when assigned as reviewers.

Approvers: SCM Managers and their delegates are approvers. In addition to above they can approve documents.

Administrators: The members are Group SCM people and people designated by Regional SCM Managers. They have general access and can change people in the various groups.

Pursuant to this, personnel from SCM are the main users of this database. Other departments only have read access to part of the database and they can score on performance assessments when assigned as reviewers.

Chapter 6 Use of the supplier database

Today the main users of the supplier database are as mentioned the SCM personnel. Other departments have limited access to the database and are primarily using other tools in their work. It is stated in the procedure GR-SCM-007 that: “The database shall be used at all stages of projects: Tenders and at execution phases”. This includes the phases:

- Selection of bidders
- When approving suppliers
- When selecting Suppliers in a buying process
- After using a supplier

Figure 9 on the next page are taken from the procedure GR-SCM-007 and shows how the supplier database is suppose to be used in a buying process.

A study of Acergy's supplier database

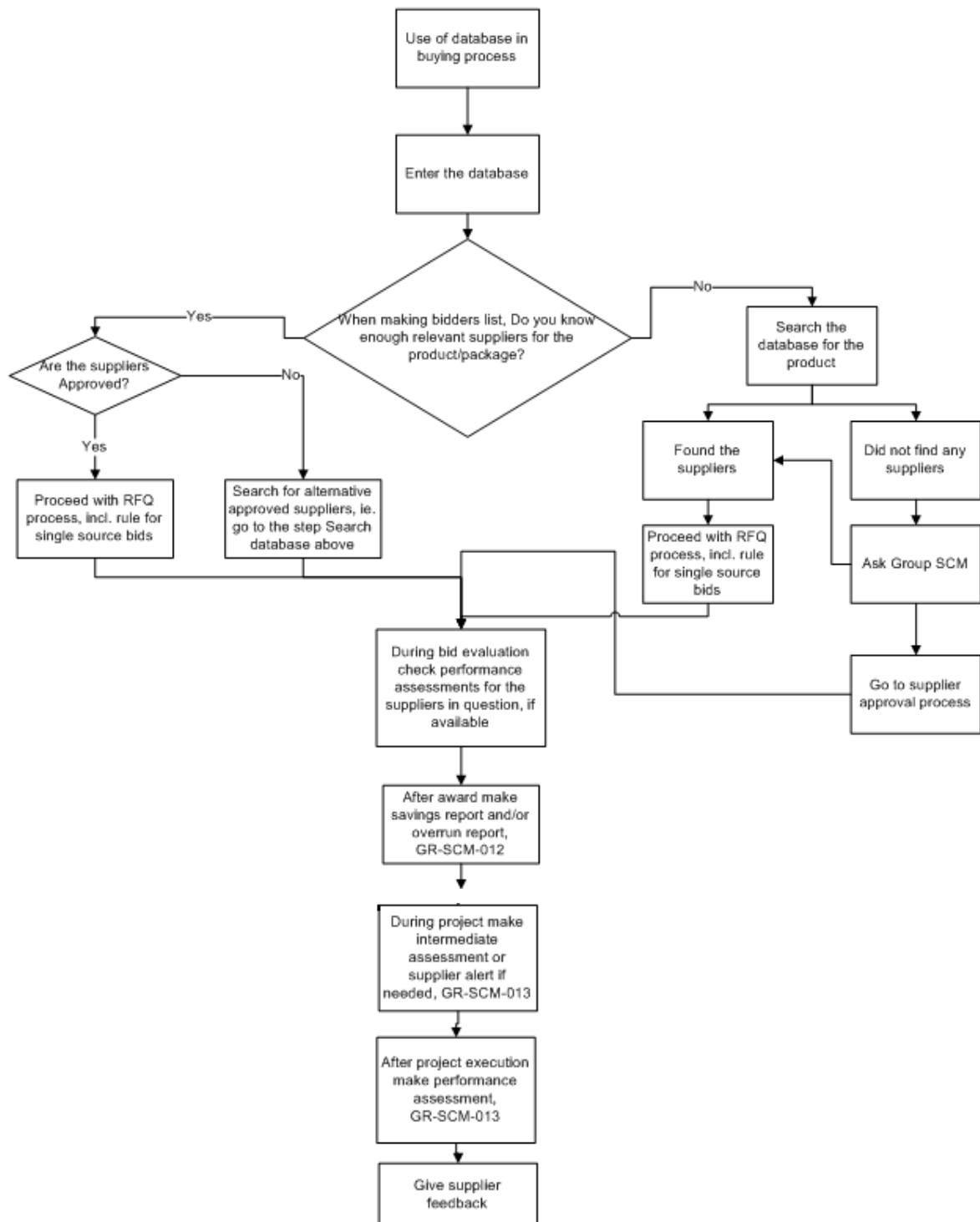


Figure 9

Source: GR-SCM-007, p.7

Chapter 7

Internal experience gathering and supplier feedback

This chapter contains the statements relating to internal experience gathering and supplier feedback in the attached procedures.

7.1 Internal experience gathering

The gathering of experience in the supplier database can be done in two ways. The first possibility is in the performance summary section in the performance assessment. Here there are, as mentioned before, a possibility for the SCM representative to write about various experiences, but if he wants others opinions, he needs to gather inputs from others in the project.

Another possibility for Acergy to take care of the experience is to follow these two statements in the procedure GR-SCM-001:

1. "Lessons learnt and suggestions for future improvements should be directed to the Acergy representatives for each Framework Agreement who will ensure that this information is communicated widely within Acergy".
2. "It is important that each project team and operations provide performance feedback on Framework Agreement holders and this feedback shall be entered into the Supplier and Subcontractor Assessment System".

7.2 Feedback to the suppliers

In the procedure GR-SCM-013 it is stated: "Further the results of our assessments shall be communicated to the suppliers in order to drive a continuous effort towards improved performance". In figure 10 the process after a performance assessment is approved is shown. According to the figure there should be a feedback to the supplier independent of the outcome of the performance assessment. If the score is under 5, Acergy will contact the supplier to initiate an improvement plan and if the score is over 4 they will give a positive feedback.

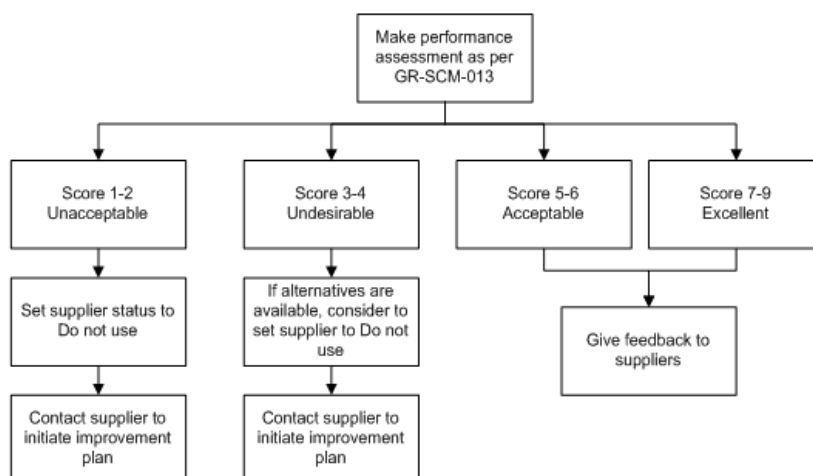


Figure 10

Source: GR-SCM-007, p.8

Chapter 8 Supplier relation management program

In a project-based organization like Acergy, suppliers represent a major part of the total contract price and are of vital importance to ensure a successful delivery of the projects. Acergy has according to themselves realized the importance of working in close cooperation with the suppliers, and therefore there has been established a separate unit within the SCM, "Supplier Relations". This unit functions as a liaison between Acergy and their suppliers.

In relation to this, Supplier Relations has established the Supplier Relations Management Programme where 24 of Acergy's most critical suppliers are included, and the programs aim is to have a meeting with all participants once pr year.

This meeting includes among other things an update and market outlook, presentation of Acergy's activities and market forecasts, KPI review and the suppliers update and feedback.

Chapter 9 Achilles Norway

This is a brief presentation about Achilles Norway, the information here is a summarization of their internet pages www.achilles.com. Here they present themselves as:

"Achilles works to identify, qualify, evaluate, and monitor suppliers on behalf of major organizations worldwide. We build and support buyer-supplier communities in many industry sectors, creating unique and powerful global networks. Our services for sustainable procurement help create opportunities for business and reduce risk in the supply chain.

Achilles Group works with more than 500 of the world's largest companies across a range of industry sectors. Shell, Norsk Hydro, BP, Dublin Airport Authority, Repsol, Network Rail, EDP, Codelco, National Grid, Edf, EnBW, Matsui, Bovis Lend Lease and ExxonMobil are just some of the organizations which have come to trust Achilles collaborative, neutral and insightful approach to sustainable procurement.

More than 30,000 suppliers, too, are currently registered on Achilles' databases of pre-qualified suppliers." Following is a brief description of the services provided:

Identification and qualification

Standard Pre- qualification

Achilles constantly verifies suppliers on products and services, quality and environmental policies and put the information in a web based system which is available online for the buyer.

Total Supplier Management Solution

This is a solution designed for international operating organizations. It supports the access to all suppliers globally via a web-based portal.

Global Business Directories

In this system supplier information from utilities, transport companies and organizations operating in the oil and gas sector is uploaded with a summary of their supplier profile.

A study of Acergy's supplier database

Evaluate

The evaluation is done by on-site audits by independent, verified, highly qualified and competent auditors and results in a detailed report.

Monitoring services

Supplier and product Tracking

The supplier tracking is a system to monitor changes in a supplier's information - typically Contact information, Dun&Bradstreet information or Supplier status information. And the product tracking is a system that provides an opportunity to search for certain product via a service code. The subscription holder will be heralded by email if changes occur.

Additional services

Supplier Management and Development

It is stated that: "Each supplier database offers a dedicated area where company specific information can be administered and which is only accessible for the own organization". The module called "Supplier Management and Development" is a part of the dedicated area that enables the buyers to register new suppliers and add company specific information about the supplier. And in addition to this "the buyer can also copy already registered or pre-qualified suppliers from the database shared with the other buying organization into this module to register the development of the supplier."

eQual - Request for Information

This is a tool that support easy gathering of additional information from suppliers. This is done by questionnaires online if the general information is inadequate or if you want to check suppliers against company specific or tender specific requirements.

Finally we look at some of the benefits Achilles emphasizes by use of their system:

Service feature

Two-way performance feedback mechanism

Collection of rating information against standard scales

Sharing of approved rating information across the community

Feedback about Suppliers must be approved by them before availability to other buyers

A simple online system

Benefit

Provides opportunities for continuous improvement on both sides

Buyers view of performance feedback information is not limited to their own suppliers

Use performance information as a criteria when searching for new suppliers

Develop suppliers through continuous improvement

All supplier information managed in a single location

Part two – Theory

Chapter 10 Supplier assessment

This chapter reviews the existing theory on why, what and how to measure and evaluate the company's suppliers. Monczka et al (1998, p.341) define the supplier performance measurement and evaluation to include "the methods and systems to collect and provide information to measure, rate, or rank supplier performance on a continuous basis". In the following the chapter is divided into subchapters covering:

- 10.1.1 Objective of the measurement: This is an introduction and an argument for the use of a supplier performance measurement and evaluation system.
- 10.1.2 Benefits of supplier performance measurement: In this chapter some of the major benefits of having a measurement system are covered. Some surveys will be mentioned to emphasize the value of these benefits.
- 10.3 Use of the gathered data: The measured data can be used in different ways and can contribute to increased gain as explain in this chapter. Some of the various range of use will be reviewed.
- 10.1.3 Choice of data elements / performance criteria: There are a great number of potential performance criteria available. The subchapter will describe the change that has been in this area lately, show different categories of criteria and bring into light some important findings from former surveys.
- 10.5.1 Choice of measurement system: There are many different measurement systems out there, some of the most common are covered here by a description followed by its advantages and disadvantages.
- 10.5.2 Sources of data: When a measuring is to be done, there are a lot of different sources of data to use, the most common is covered and some benefits and challenges are mentioned.
- 10.6 Conclusion: A brief summary of this chapter is done.

10.1 Objective of the measurement

Should a company measure their suppliers? According to Gordon (2005, p.20) the answer to this question is that the understanding and measurement of supplier performance both prevents problems and promotes improvement and are of great importance to companies. In the last decades the development in the industrial community has contributed to that the companies has become more dependent on each other (Kannan et al 1999, p.1034). This means that for example Acergy is dependent of their suppliers to fulfil their own obligations to their own customers.

10.2 Benefits of supplier performance measurement

According to Simpson et al (2002, p. 29-30) and Gordon (2005, p.24) a company without a measurement system is a company without possibility to determine whether the suppliers they use are good or performing unsatisfactory according to other possible suppliers. Simpson et al (2002, p. 29-30) also states according to this that the supplier can be an important part of the company's value added and competitive advantages. This can come from high quality products, smart advertising or the fact that the supplier has a well known and respected brand (Simpson et al 2002, p.30). Gordon (2005, p.24) exemplify this by if the supplier improve and thereby offer decreased lead times, the buying company can offer corresponding reduced lead times to their end users. This will mean reduced costs and improved end-user satisfaction.

In addition and as a supplement to this Gordon (2005, p.21) lists some of the advantages companies that use a measurement system to measure the supplier's performance can expect:

- Uncover and remove hidden waste and cost drivers in the supply chain.
- Facilitate supplier performance improvement.
- Increase competitiveness by shrinking order cycle times and inventory levels.
- Make informed business decisions that impact the enterprise.

Another important benefit of the measuring and adapting of the suppliers, are according to Jayaraman et al (1999) cited in Simpson et al (2002, p.39) that this will increase the possible lifetime of the company.

The collaboration also give is the possibility to include the suppliers in the early face of product design, so that the developers can use the supplier's expertise to assess and withdraw max information in the development process (Petersen et al 2004, p.383). This can have a huge impact on the development time, quality and cost of the finished product (p.371).

According to Barling (2007, p.37) the "Supplier performance measurement benchmark report" by Aberdeen Group in 2005 stated that 85% of the companies in the survey that had a formal assessment programme in place had much better results than others. The figure 11 shows the relative improvement on four of the performance metrics being used.

Average supplier performance improvement

	PRICE	ON-TIME DELIVERY	QUALITY	SERVICE
SPM programme	23%	23%	21%	21%
No programme	13%	11%	5%	17%

SOURCE: ABERDEEN GROUP

Figure 11 Source: Aberdeen Group 2005 cited in Barling 2007, p.38

10.3 Use of the gathered data

The figure 11 shows that there is a big gain in all of the measured performance elements, but in addition to this improvement in supplier performance, the companies reported that they also used the gathered data to improve other tasks. Examples where improvements of their supplier selection, identification of supply risk, drive and prioritization of the supplier development, segmentation and consolidation of the supplier base, prediction of supplier performance and segmentation of their supplier database (Barling 2007, p.38). According to this, figure 12 below shows how the companies in the research used the gathered performance data and in the following these areas of data usage will be reviewed.

How companies use supplier performance data

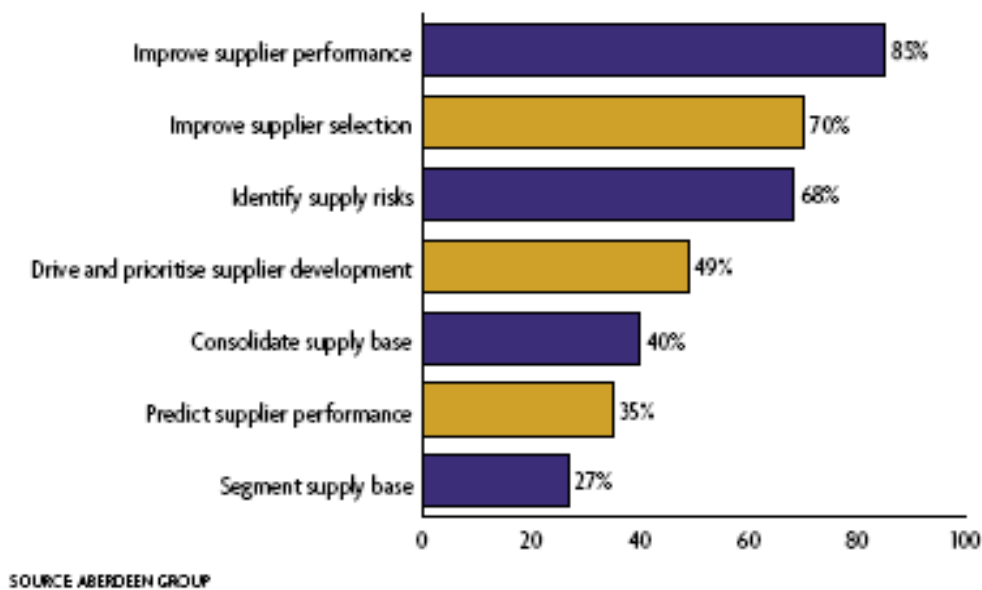


Figure 12 Source: Aberdeen Group 2005 cited in Barling 2007, p.39

There are however an element to be aware of in the light of this, that the increasing use of computer technology and development of sophisticated measurement and evaluation systems opens up the possibility for a gathering of big amount of information.

This represents an advantage for the companies when it comes to save, arrange and use of supplier information, but an important thing to be aware of in this context is that this information is gathered for a reason, and eventually there are people whit according to Petersen et al (2004, p.383) limited ability to process information who shall use the information. This opens for the possibility that some of these advanced systems which contain much information will make it hard for decision makers to withdraw the essential information for a specific decision (Walsh 1995, p282).

10.3.1 Improvement of supplier's performance

Monczka et al (1998, p.343) states that one of the advantages by the measurement is that the company find areas that the supplier needs to be improve. This is also supported by Kannan et al (1999, p.1038) with the statement that "companies often use the gathered supplier data to pinpoint areas where the supplier can improve", and this of course is also a big benefit for the supplier. The supplier gets feedback about where he should improve to be more competitive.

Another interesting implication of the measurement is according to Barling (2007, p.38) that the measurement of a supplier have the potential of triggering a behavioural effect called "the Hawthorne effect". The definition of this effect is according to Ally Dog (2009): "Changes in behavior resulting from attention participants believe they are getting from researchers, and not the variable(s) manipulated by the researchers" (in the Hawthorne case, the amount of light in the work environment). The background for this statement came out of a study where the relationship between light intensity and worker productivity was studied (Ally Dog 2009).

This support the findings of the Aberdeen Group who stated that it is not so important which system you use, but that you make an effort in the measurement and use some kind of system at all. The reason why, is that the survey did not uncover any significant differences in the improvement of the company's performance dependent on the measurement system used (Barling 2007, p.38).

10.3.2 Improvement in supplier selection

A lacking property of the former methods is that they don't take the qualitative factors into account when it comes to evaluate potential suppliers (Simpson et al 2002, p.29). But the last years consciousness-raising in this area have contributed that new methods usually include such factors as reputation, experience, earlier cooperation e.g. These factors are highly subjective and therefore this info must be gathered and approved in some kind of system for later use, some of the various systems is reviewed in subchapter 10.5.

10.3.3 Identification of supply risk

It is often recommended to reduce the amount of suppliers in the company's supplier base. This will be studied in chapter 13 reduction of the supplier base, but one of the main drawbacks by doing this is that the company can go into a lock-in situation with a supplier. One of the most obvious disadvantages of this dependency to the supplier is poor supplier performance or supplier disruption. This will without doubt affect the buying company in some way, e.g. late delivery or poor total quality to the final product (Kannan et al 1999, p.1037). If this happen the company should find alternative suppliers, extend their supply base or more recommendable, by measuring their existing suppliers because it is easier to develop these by increasing their performance to fit the company's needs.

10.3.4 Drive and prioritise supplier development

Monczka et al (1998, p.332) states that: "...suppliers are critical to the success of purchasing and of the entire firm" and follow up with the assertion: "A supplier's performance has a direct impact on a firm's performance".

These statements emphasize the importance of the supplier's degree of importance for an industrial company. To be sure that their suppliers are performing to the maximum, many companies enter into development activities with their suppliers. These activities have no meaning if there is no measurement system in place, but if there is well working system there are many benefits of these cooperative relations. This will be more covered with writing in chapter 11, supplier relations.

10.3.5 Consolidation of the supplier base

Monczka et al (1998, p.333) states that it is important to make strong relationships with key suppliers. And the way to do this is to identify them out of an evaluation process. There are different opinions whether a company should emphasize the importance of competition between supplies versus relying on fewer ones and rather develop a tighter collaboration with these. This will be further studied in chapter 13, reduction of supplier base.

10.3.6 Predict supplier performance

According to Barling (2007, p.37) future market variations are easier to respond to if the company has a measurement system in place. They are then able to monitor and keep control over their supplier's weaknesses and strengths. In today's highly swinging market, knowing your suppliers performance levels and be able to quickly respond to market demands seem to be of great importance.

10.3.7 Segmentation of the supplier base

Segmentation of the supplier database is important to ease the use of this, but it can be difficult to decide how this should be done. Some of the possibilities are to differentiate in the frequency of use, size of supplier, or products/services supplied. In any case the choice of measuring criteria used can be difficult.

Simpson et al (2002, p.34) exemplifies this by a purchasing of standardized low cost products. The importance of measuring quality in this case is of course much less than if a company are buying complex high cost products.

10.4 Choice of data elements/ performance criteria

What you choose to measure/which KPI's to use, is one of the most important factors for the design of a successful assessment system (Monczka et al 1998, p.341). In addition to that this is a very important choice it is a very difficult one. The reason for this is that there is almost an unlimited number of KPI's to pick among (Lysons & Farrington 2006, p.384).

The quantitative traditional ones like price, quality and delivery are still some of the most used, but they are now accompanied by other quantitative and in a increasingly degree of qualitative KPI's.

In fact a survey from the USA made by Simpson et al (2002, p.30-33) where they managed to gather 84 different relevant evaluation forms. They analysed these forms and came up with 142 useful assessment criteria. These where put into 19 categories, and are in figure 13 on the next page listed in descending degree of mentioning in the questionnaires. The complete list of criteria is attached in appendix 1.

FACTORS CONSIDERED BY RELATIVE FREQUENCY OF INCLUSION ON FORM

Evaluative Criteria	Number of Items by Category	Percent	Relative Importance Rating*
Quality and Process Control	566	24.9%	1
Continuous Improvement	210	9.2%	2
Facility Environment	188	8.2%	2
Customer Relationship	187	8.2%	2
Delivery	185	8.1%	2
Inventory and Warehousing	158	7.0%	2
Ordering	132	5.8%	2
Financial Conditions	126	5.5%	2
Certifications	81	3.6%	3
Price	81	3.6%	3
Staff/Customer Service	81	3.6%	3
Leadership/Management	70	3.1%	3
Technology	63	2.8%	3
Education/Training	46	2.0%	3
Invoicing	38	1.7%	3
Packaging	30	1.3%	3
Employees	24	1.1%	3
Warranty	8	0.4%	4
Location	4	0.2%	4

Figure 13 Source: Simpson et al 2002, p.34

To show the various results of such investigations some of the metrics used in the Aberdeen Group survey are shown pursuant to their degree of use in figure 14 on the next page. Of course there are different assumptions and factors that affect the results in such surveys, and these two examples emphasize this and the variety in use of the different criteria.

The supplier performance metrics companies use

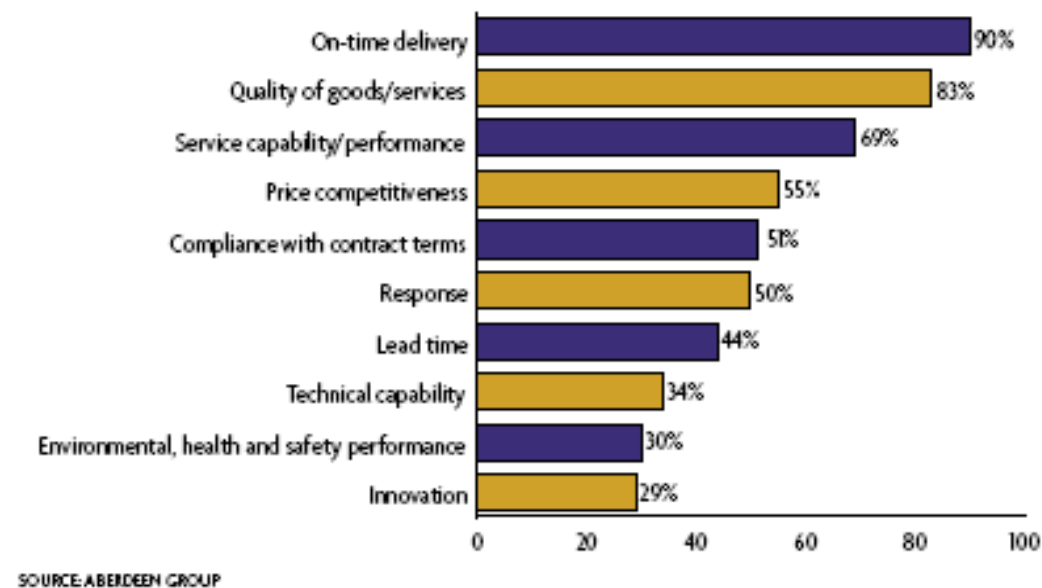


Figure 14 Source: Aberdeen Group 2005 cited in Barling 2007, p.39

10.4.1 Quantitative elements

The theory often suggests the use of quantitative elements to build a trustworthy system for all parts in relation to collaboration with suppliers. There are on the other hand also problems related to use of quantitative elements. Lysons and Farrington (2006, p.385) have mentioned three of these problems:

First of all there is a high cost of collecting quantitative data. An example on this could be the evaluation of quality. There will be needed skilled people, accurate and approved documentation, correction of detected failures and often special equipment and software.

Second the expression “quantitative” can give the impression that this measure is the absolute truth. This is often far from reality, because measures are always based on assumptions, and these are factors that will decide the accuracy of the measurement.

The third problem by relying on quantitative measurement is that you cannot compensate for the factors outside the suppliers control. To do this you need to mix quantitative with some degree of qualitative measurement as will be described in the next subchapter.

Another thing to take into account is that the old fashion quantitative performance criteria such as price, product quality and delivery are also being accompanied by new quantitative elements.

For instance with the high speed of increase in the technology now going on, Radosevitch (1998) cited in Simpson et al (2002, p.30) emphasise that the companies should also assess their supplier's ability to keep up with the development in technology. This is possible to measure quantitative, but according to the survey by Simpson et al (2002, p.36) there seem to be a gap between this theoretical view and reality. Only 13.1 percent of the forms contained the “Use of leading edge technology” factor.

10.4.2 Qualitative elements

According to Simpson et al (2002, p.29) the former evaluation and assessment methods of suppliers have been missing some very important factors. There has been a focus on quality, price and service which omit other factors that are at least as important. These contain most of all of qualitative measures and should be included to improve the relationship between companies. Examples are frequent intercompany communication, partnership equity, and trust among the companies (p.30).

However there seem to be an improvement because the survey suggests that the most of the companies with an assessment system has been following the last decade's trends and are now measuring a much more widespread area of assessment factors (p.34). The survey also shows that the traditional measurements price, quality and delivery still are seen as very important factors, but they are now accompanied by others like customer relationship, facility environment and improvement factors.

In addition to this and as a motivator for driving this improvement Simpson et al (2002, p.38) states that in a research by Tan et al (1998) they found that: "Non price factors such as information shearing are positively related to return on assets, growth in sales, customer service, product quality and competitive position".

Monczka et al (1998, p.342) support the former when they state that in addition to the quantitative factors, suppliers should also be measured with qualitative factors. They then list up six qualitative factors:

- Problem resolution ability / technical ability
- Ongoing progress reporting
- Corrective action response
- Supplier cost reduction ideas
- Supplier new product support
- Buyer / seller capability

Sometimes it can be difficult to see how these qualitative criteria can be used, so here is an example: Petersen et al (2004, p.375) emphasise that some kind of subjective criteria should be considered when considering entering into a collaborative relationship with a supplier when it comes to product design. The authors mention familiarity with the supplier, their relative level of involvement in prior efforts and their engineering design capabilities as possible factors to assess. This will support a much easier collaboration and will increase the possibility of success.

Monczka et al (1998, p.342) suggest a method for evaluate the qualitative factors which starts by giving a score from one to five on each factor. Summarise the score and divide on the total possible points. They also suggest displaying the results in percent, presumable for more easy reading. This is just one of many methods for measuring of supplier performance as we will see in the next chapter.

10.5 Choice of measurement system

According to Monczka et al (1998, p.344) one major decision in the design of a supplier performance measurement and evaluation tool is to choose which measurement and evaluation system to use. They then list three of these systems with their appurtenant advantages and disadvantages:

10.5.1 Categorical

Description: The buyer rates predefined performance categories. The ratings are for example excellent, good, fair or poor (Monczka et al 1998, p.344).

Advantages:

Easy to implement.
Need minimal data.
Different personnel included.
Low cost.

Disadvantages:

Least reliable.
Less frequent generation of evaluation.
Most subjective.
Usually manual.

10.5.2 Weighed-Point

Description according to Lysons and Farrington (2006, p.387): "A weighting factor is established for each of the areas that indicates the value of that area in relation to each of the other factors. A score is then assigned to each factor that indicates the supplier's performance. The score is multiplied by the weight and then averaged".

Advantages:

Flexible.
Allows supplier ranking.
Moderate implementation costs.
Combines quantitative and qualitative factors into a single system.

Disadvantages:

Tends to focus on unit price.
Requires some computer support.

In addition to these Lysons and Farrington (2006, p.387) state that this is an excellent tool for proposal evaluation and support evaluators with the possibility to include all factors while giving more power to the important ones. They also supplement the list of disadvantages by mentioning that in long-term evaluation interest among the evaluators can be lost and the entry of data can be both labour and time consuming.

10.5.3 Cost-Based

Description according to Lysons and Farrington (2006, p.387): "Evaluates supplier performance on total non-productive costs associated with each supplier's performance".

Advantages:

Provides a total cost approach.
Identifies specific areas of supplier non-performance.
Allows objective supplier ranking.
Greater potential for long-range improvement.

Disadvantages:

Cost-accounting system required.
Most complex implementation.
Computer resources required.

Lysons and Farrington (2006, p.386-387) also have some extensions to this method. First of all they mention that suppliers are held responsible for their actions and by this give the supplier motivation to improve more rapidly. Second they point out that this method is difficult to build internally.

Lysons and Farrington (2006, p.386-387) also have a lists six such systems, these are adapted from Hollingsworth (1998). Two of them are already mentioned above and will not be listed here, weighted-point and cost based. The others are listed under:

10.5.4 Subjective

Description according to Lysons and Farrington (2006, p.387): "Generally designed as questionnaires with a numerical rating scale, (say 1-5), completed by a number of reviewers".

Advantages:

Easy to develop and administer.
Can be completed by an unlimited number of reviewers.

Disadvantages:

After first survey, method loses its impact.
No objective basis and ratings.
Too many data entry points.

10.5.5 Survey method

Description according to Lysons and Farrington (2006, p.387): "A purchased service in which a research organization contacts a number of other customers to obtain their views in the performance of the supplier".

Advantages:

Easy to implement
Research organization provides regular updates.

Disadvantages:

Expensive
Quality of data collected may be poor and depends on the source.
Evaluation is based on the experience of other companies.

10.5.6 Comparative method

Description according to Lysons and Farrington (2006, p.387): "Supplier is evaluated independently by evaluators on agreed factors, such as price, quality, delivery etc. Individual ratings are then tabulated and a final rating awarded by the value team".

Advantages:

Speed- can be used to quickly evaluate a supplier on a short-term basis.
Easy to develop.
The suppliers historical performance into consideration.

Disadvantages:

Relative importance of various rating not considered.
Not applicable to long-term evaluation. May take
Dependent on subjective opinions of the evaluators.
Easily "rigged" by an evaluator to give desired outcome.

10.5.7 Percentage based method

Description according to Lysons and Farrington (2006, p.387):” Percentage systems measure the percentage of quality defects or late deliveries”.

Advantages:

Easy to accumulate data
compliance targets
expectations.

Disadvantages:

Does not reflect the severity of quality problems. Provides
Does not accurately reflect level of on-time and
performance.

10.5.8 Use of the described methods

The authors also mention where the methods are used. It is interesting to notice that for example the subjective method usually is the first attempt in a company to design a performance measurement and evaluation system. They further states that this system is to be used by small businesses with small supplier bases, as opposed to the survey method that is recommended used in large companies. Another interesting detail is that the weighted-point method primarily is a tool for long-term rating of suppliers. They also mention that the comparative method is much used when it comes to the selection of suppliers to a contract from an approved list and that the cost-based method primarily is used for evaluation of suppliers and trends in the supplier base (Lysons and Farrington 2006, p.386-387).

10.6 Sources of data

One of the problems in the gathering of applicable data is to choose which source of information to use. Gordon (2005, p.23) has listed some of the most used sources and their associated challenges in figure 15 below.

Method	Challenges
Paper questionnaires	<ul style="list-style-type: none"> • Hard to construct sound information gathering instruments. • Require knowledge of what to measure. • Difficult to deploy. • Suppliers procrastinate filling out.
Web based questionnaires (either for internal company surveys of suppliers or for suppliers to complete)	<ul style="list-style-type: none"> • Require resources to develop. • Compliance issues (internal and external).
Extract from current systems	<ul style="list-style-type: none"> • Data integrity. • Require cleansing, messaging and formatting. • Data integrity disputes with suppliers.
Site visits	<ul style="list-style-type: none"> • Resource intensive for both customer and supplier. • Requires trained personnel. • Can be inconsistent.
Certification to third-party standards such as ISO 9001, ISO/TS 16949 and QS-9001	<ul style="list-style-type: none"> • Conformance to procedures does not guarantee best practice deployment. • Can move the focus away from performance to documentation of procedures. • Not specific to performance, processes and practices required by the customer.

Figure 15 Source: Gordon 2005, p.23

10.7 Conclusion

The main conclusion of this chapter is that it is definitive useful to have some kind of measurement system for measurement of your supplier`s performance. There is however some difficulties and things to be aware of in the process of implementing such a system, but the benefits seem to overrun these in time. The companies with such a system in place seem to have an improvement potential in how they use the gathered information, and can gain more value by expand the use of these.

When it comes to the different measurement systems there are a great number of different solutions to choose of, but there are not a method that covers it all, it is a process where each company needs to choose what the most important factors is for them. Simpson et al (2002, p.40) conclude their research with the statement: “Clearly, better methods for assessing suppliers must be developed, disseminated and implemented”.

Chapter 11 Supplier relations

As a consequence of the increasing competitiveness in the industrial environment the last thirty years, companies are developing closer relationships with their suppliers to be more competitive by utilize their supplier's capability to the maximum and to gain benefit of collaboration initiatives.

According to Petersen et al (2004, p.375) there are two fundamental objectives when it comes to building a functional relationship between companies, this is to align the capability and needs in both a technical and a social manner.

In this chapter we will focus on the cultural/social side and adapt the proposed method of Nahapiet and Ghoshal (1998, p.243) to split the expression "social capital" into three different parts, cognitive, structural and relational capital. In the following the chapter is divided into subchapters covering:

- 11.1 Cognitive capital: This part covers the importance of aligning the coadjutant company's goals and values.
- 11.2 Structural capital: This subchapter will describe the theoretical view of the importance of information sharing, supplier evaluation and supplier development.
- 11.3 Relational capital: This is an important part of the chapter covering the effect of trust in a relationship.
- 11.4 Conclusion: A brief summary of this chapter is done.

11.1 Cognitive capital

Nahapiet and Ghoshal (1998, p.244) define cognitive capital as: "Cognitive capital consists of the resources providing the parties with shared representations, interpretations and systems of meaning".

It is obvious that the alignment of the two companies systems will ease the collaboration between these and Krause et al (2007, p.532) emphasize the importance of that the companies should be aligned so that they can see areas for improvement and work out solutions working on the same level of understanding. They even state that their findings supported earlier studies in the fact that when this alignment is done in a successful way it provides value to the buying firm and even improve its own performance (p.540).

11.2 Structural capital

Structural capital is defined by the Business Dictionary (2009) as: "Competitive intelligence, formulas, information systems, patents, policies, processes, etc., that result from the products or systems the firm has created over time. It does not reside in the heads of the employees and remains with the organization even when they leave".

Information sharing is also a major part of the structural capital and has been defined as: "The degree to which each party discloses information that may facilitate the other party's activities (Krause et al 2006, p.533)". This activity is expected to increase the closer the collaboration becomes and will change degree according to the amount of trust between the companies. This will be further explained under the subchapter relational capital.

Krause et al (2006, p.528) divides the four traditional performance parameters into two branches, cost versus quality, flexibility and delivery. And in relation to the former they are of the opinion that sharing of easy transferred simple information, such as supplier evaluation results and other relevant information is the best method if you want to improve the company's cost performance. The underlying argument for this is that other supplier development activities require human resources or/and transferring of tacit knowledge, and the cost of this will often exceed the profit. They therefore state that these human demanding activities are more appropriate if the goal is to improve the company's quality, delivery and/or flexibility (p.533).

Supplier development is another part of this conception and has been defined as "...any activity initiated by a buying organization to improve the performance of its suppliers and the expression embrace activities as goal setting, supplier evaluation, performance measurement, sharing of knowledge, shared asset investments and other activities (Krause et al 2006, p.529)". And according to this Monczka et al (1998, p.342) suggest that there should be a minimum level of performance. They thereafter states that underperforming suppliers should be worked with to improve their performance.

This suggested supplier development on the other hand require good communication and information sharing from both sides, and leads to the statement of Uzzi (1997, p44) that a successful supplier evaluation with a consecutive development indicates a high degree of information and communication skills. Thus these activities are embedded in the structural capital.

In chapter 10 the measurement and assessment of suppliers was examined and these activities are often recommended and described as an important assumption for the building of successful relationships between the buyer and the seller by theorists. And according to Olsen and Ellram (1997 p.109) these activities will simplify the aligning of the company's strategic and operational goals. According to this the relationships should be built on the buyers premises, the buyer measure the supplier and tell him how to change and adapt. Cousins et al (2008 p.240) on the other hand presents a view that twists the former all around. They state that it is the communication/socialization between the companies rather than the measurement system that is important for the company's performance. This view aligns with the importance of the structural capital and leads us to the next chapter, relational capital.

11.3 Relational capital

The expression relational capital is among other things about the situation where a company make investments to develop their suppliers. The buying company initiate this process with the expectation of improvement in the supplier's performance, such as reduced costs, quality, delivery and flexibility. Other activities such as sharing of knowledge, training and shared asset investments are often required to make these initiatives successful (Krause et al 2006, p.523).

A study of Acergy's supplier database

When investing in supplier development, a company cannot expect instant return on investment and therefore the relational capital is dependent on an understanding between the buyer and supplier on the continuing of the relationship in the future. This is supported by Krause et al (2006, p.530-531) even though they turn it around when they write that a supplier rarely make relation specific investments with an unknown company with no intentions of a long term relationship.

Trust is also a key element in building of well functional relationships, and according to Handfield and Bechtel (2002, p.367) the next step in development of new forms of collaboration is to make systems that rely on trust between the companies. And they presented a tested model that proved that companies that made an effort in building trust with their suppliers are likely to improve their supplier responsiveness. This was the case even if the buying company had little control with their supplier base.

According to the former Sako and Helper (1998, p.406) found that trust tends to evolve in a positive relation with the length of the cooperation between companies. In the same survey they found three other conditions that build trust between companies and reduce expectation of opportunism, these are: Information exchange, technical assistance and customer reputation. These elements are also described by others, for example the mentioned study by Handfield and Bechtel (2002, p.377) had an outcome that an important element in the building of trust is to have meetings and share information on a regular basis.

Building of trust between companies starts with the interpersonal trust between individuals. Over time and with repeated transactions, this trust will transform into trust between the two companies (Zaheer et al 1998 p.142). One important consequence of this is that you should make an effort in getting objective data, and limiting the subjective involvement in this process (Barling 2007) and (Gordon 2005). This characteristic is visualized in figure 16.

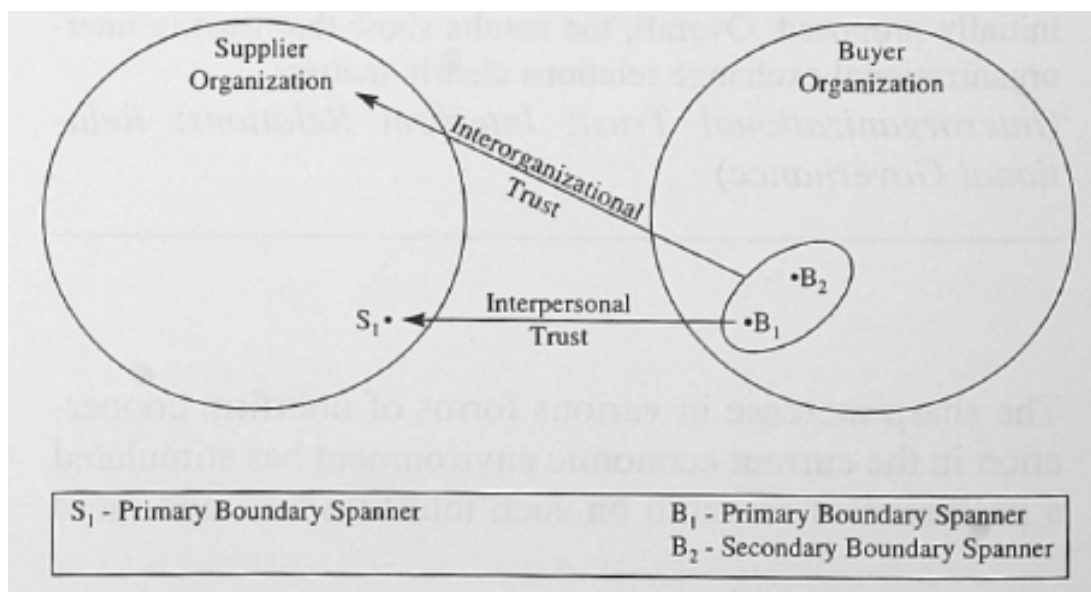


Figure 16

Source: Zaheer et al 1998 p.142

In former research the main benefits of building trust between companies are according to Stuart et al (1998 p.84) that the two parties develop a common understanding about technical and design issues and this will lead to cost reductions and increased problem solving capabilities. And according to Handfield and Bechtel (2002, p.367) another important benefit is that there will be a reduction of the total cycle time within the supply chain.

11.4 Conclusion

It is no doubt that the relations a company have with their suppliers are of great importance, and as we have seen these relationships can managed in many ways. It is also important to notice that the different kinds of relationships bring forward a different use of range. As an example on this Krause et al (2006, p.532) refer to a study performed by Moran (2005) where “he found that structural capital played a stronger role in explaining execution-oriented managerial tasks while relational capital played a stronger role in explaining innovation oriented tasks”.

By developing these relationships companies however can easily become very dependent of their suppliers, and this can create some difficulties (Kannan et al 1999, p.1037). However, the benefits of good relationships seem to theoretically exceed these risks of locked-in.

The area of accordance between creation of value and the relation a company has with their suppliers has been studied in a various point of views, but it is interesting to see and a proper way to end this conclusion with the statement from Krause et al (2006, p.529) and Handfield and Bechtel (2002) p.367) that they all conclude the same: “...when organizations invest in relation-specific assets, engage in knowledge exchange and combine resources through governance mechanisms, a supernormal profit can be derived on the part of both exchange parties (Handfield & Bechtel 2002, p.367).”

Chapter 12 Supplier communication and feedback

Simpson et al (2002, p.40) state that good communication between the buyer and supplier are of great importance if the supplier are to be expected to improve performance. So what is communication? According to Jacobsen and Thorsvik (2007, p.251) it is the process where a person or group exchange information, ideas, attitude and feelings with others How this is done is visualized with a model in figure 17 which this chapter is based on.

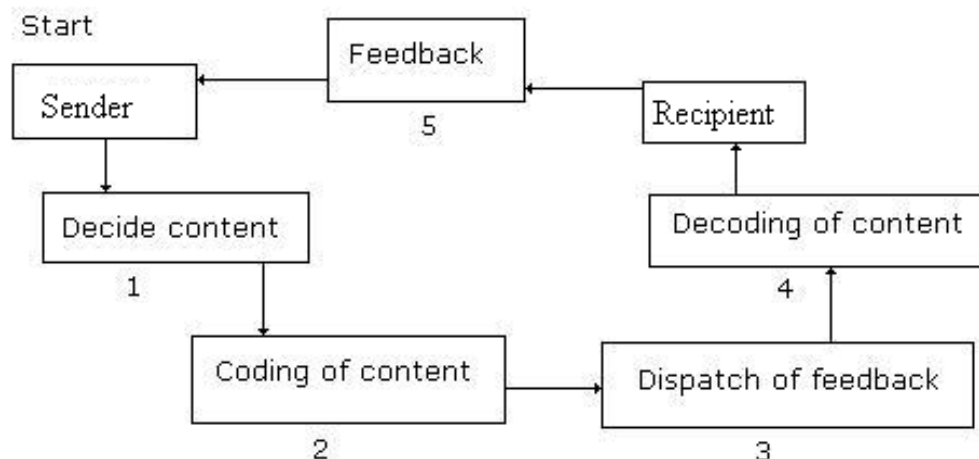


Figure 17 Source: Jacobsen and Thorsvik 2007, p.251

The first step in this model, decide content, shows that all communication starts with coding of information. In this context this is the formulation of the information that is going back to the supplier. Before the coding can begin the sender will have to decide what should be included in the feedback.

In some processes this decision as automated and according to Mickey North Rizza, research director at advisory firm AMR Research, assessment systems that permit a limited view access for the suppliers and automatically give the suppliers a warning if necessary are very good (Barling 2007).

In the second step, coding of content, it is accordingly to Jacobsen and Thorsvik (2007, p.256) important that the sender think about who should be the recipient of the information and use a language and signals that he think the recipient are familiar with.

The third step, dispatch of feedback, is to choose which communication channel to be used. The last decade's technological development has given rise to a lot of new elements in this area, and there are now a lot of options available. To simplify this discussion the focuses will here be on reports, email and face to face communication. The reason for this is that reports and face to face communication are in each end of the scale while email communication is somewhere in the middle. Other channels like letters, phone, video conference and web chatting etc are also located on this scale between the two extreme points.

A study of Acergy's supplier database

The mentioned scale is a measure on how well the communication channel used is managing to communicate a high degree of information. The criteria used to set the degree of information is how the channel can transfer various signals at the same time, support quick positive acknowledgement and support that the participants to be personal and adjust their communication to each other (Jacobsen & Thorsvik 2007). The scale is showed in figure 18 below.

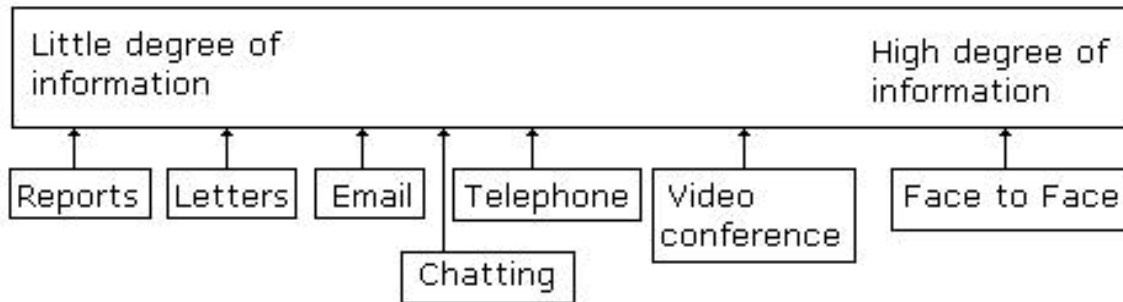


Figure 18 Source: Jacobsen and Thorsvik 2007, p.254 (Modified)

There are different properties connected to the different channels. Reports and email for instance have a high degree of storage, preparation, and parallelism possibilities. While the degree of information and quickness is low. For face to face communication this is exactly opposite. In addition to this there are researches of communication in organizations that has found that face to face communication are the most efficient and preferred way to communicate (Westmyer et al 1998, p.28).

The fourth step, decoding of content, is the suppliers decoding of the sent information. According to Jacobsen and Thorsvik (2007, p.257) research in this area have found that it is especially important that the recipient have a relationship of trust to the sender. This has proved to be of the utmost importance for how the recipient interprets the message and of the attention he ascribes to the message.

According to Gordon (2005), for companies to be able to use their effort in performance assessment of suppliers to gain value in the long run it is important to see the process as a continues loop. This calls for a two ways communication in the feedback process.

The fifth step, feedback from supplier is what makes this process into a two-way communication. The feedback suggested by Simpson et al (2002, p.40) to be done in regular meetings where the assessments are reviewed. In this way the buyer and supplier can communicate face to face and the possibilities for misunderstandings will decrease.

Chapter 13

Reduction of the supplier base

It seems like there are a widespread point of view in the theoretical literature from the last decades of the 19 century, that almost all companies have an oversized supplier base and that this should uncritically be reduced. This view has now been modified to a wider perspective, and now there seem to be consensus about that there are many factors affecting the optimal number of suppliers in the supplier base. This chapter is divided into the following subchapters:

- 13.1 Why optimize the supplier base: This subchapter will present a definition to the expression "optimization of the supply base" thereafter some of the theoretical benefit that promotes the optimization of the supplier base will be studied.
- 13.2 Potential risks of optimizing the supplier base: As mentioned the view on the area of reduction of the supplier base has now changed, but in some cases an optimization of the supplier base is the appropriate solution (Choi & Krause 2005, p.637). There is however some potential risks emerging from this process, and some of these are presented here.
- 13.3 General steps in the optimization process: There are many methods for optimization of the supply base, but there are however many factors to be taken into account to make an optimization successful. There is no general rule how this should be done, but there are some general principles to be followed. Some methods and general steps will be presented in this subchapter.
- 13.4 Discussion: There is not total consensus about how, when or if the optimization method should be implemented by the theorists, and the chapter present some of these various meanings.
- 13.5 Conclusion: A brief summary of the chapter is done.

13.1 Why optimize the supplier base?

An indisputable consequence of having a large supply base is that it will complicate the process of managing and the identification of the best suppliers. A large supply base also increases the possibility for duplication of purchasing activities and the containment of marginal performing suppliers. The process which a great part of the theory recommends to solve this problem is called "optimization". Monczka et al (1998, p.332) defines this process as: "Optimization is a continuous process that strives for the ideal number of suppliers capable of world-class performance".

Thereafter they further states that (p.332): "It became clear during the 1980s that the costs associated with having multiple suppliers for each purchased item outweighed any perceived reduction in supply risk."

The main goal of the optimization process is to improve the probability of dealing with the best suppliers according to performance. The main performance criteria for improvement in this relation are cost, quality, delivery time and information sharing between buyer and seller (Monczka et al 1998, p.334). In recent years there has in addition to these been a twist against more focus on relationships factors between the buyer and supplier company (Simpson et al

A study of Acergy's supplier database

2002, p.29). In relation to this there are a great number of subsequent benefits of the process. Lysons and Farrington (2006, p.392) have listed six of these advantages:

- Savings in administration costs
- Up to 80 per cent of suppliers met by selected vendors
- The development of long-term partnerships and supplier associations
- Improved standardization
- Elimination of or reduction in maverick purchases
- Lower total production costs

Monczka et al (1998, p.334-337) also list some advantages. These will to some degree overlap the pre mentioned:

- Buying from world-class suppliers
- Use of full-service suppliers
- Reduction of supply base risk
- Lower supply base maintenance costs

In addition to these Monczka et al (1998, p.334) states that another profit of optimization is supplier quality self-certification of incoming shipments made to the buying company. This will add an extra quality check, and so decrease risk of poor quality. Under follows a brief explanation to each of the above listings:

Savings in administration costs

The effort used to maintain and update a supplier base can be significant if the base includes a great number of suppliers. One of the main advantages by reducing this number accept from the decreased effort and thereby saved cost are that recourses used here can be relocated and produce even more value.

Up to 80 per cent of suppliers met by selected vendors

When suppliers communicate with a limited number of people in the company the relation between the two companies tend to improve (Jacobsen & Thorsvik 2007, p.257). A big advantage of this is that eventual problems are easier to solve on an early stage. There is also a decreasing possibility of miscommunication owing to the fact that there are fewer people communicating.

The development of long-term partnerships and supplier associations

By reducing the base to a manageable number of suppliers the possibility to cooperate with suppliers when it comes to supplier development, cost-based pricing and early design involvement increase. These elements are difficult to manage with a big supplier base since they require a consumption of both time and effort, and as earlier mentioned this is unfavourable (Monczka et al 1998, p.333).

Improved standardization

With fewer suppliers it is easier to standardize procedures and communication between the company and each supplier. This will ease cooperation and therefore gain value.

Elimination of or reduction in maverick purchases

It is much easier to control and manage purchases when the supplier base is restricted.

Lower total production costs

By offering few suppliers bigger and more long-term contracts they eventually have the opportunity to become more effective and competitive. They will gain value from higher production volumes and can make investments in both facilities and equipment that again will drive this process even further. In time this should hit back to the buyer in the shape of lower cost (Monczka et al 1998, p.336).

Buying from world-class suppliers

After a successful optimization of the supplier base, the remaining suppliers should be "best in class" in their area. By building close relationships with these suppliers the company can expect fewer problems when it comes to some of the main critical factors such as quality and delivery. The buyer can also trust the supplier's ability to perform well, and so they can put full focus on their own core businesses. Even in this area they can improve by use of the experts competence supplied by the supplier (Monczka et al 1998, p.334).

Use of full-service suppliers

A common consequence of the optimization is that the remaining suppliers are larger and so often more capable of performing multiple tasks. This means that the buyer have the possibility to use one supplier to do production work former done internally or by many suppliers. This can give lower costs, improved quality and most likely decrease product development time (Monczka et al 1998, p.334-335).

Reduction of supply base risk

It might seem weird that fewer suppliers should reduce the supply risk, especially if risk of supply disruption is the main factor. But actually this is not the case; there are other factors that should be equally weighted, such as risk of poor quality, late delivery and paying too high price. Improving these factors will exceed the gain from reducing risk of disruption. The means of improving these factors is to give larger and longer term contracts to fewer suppliers. At the end this will again reduce the risk of disruption, because of more competitive and stronger suppliers (Monczka et al 1998, p.335).

Lower supply base maintenance costs

As earlier mentioned the optimization is a continuous process. The process involves a lot of interaction between buyer and supplier such as communication of design, specifications, performance requirements, problems, improvement and changes. All of these activities require time and effort which at the end will be cost. By reducing the number of suppliers the number of these activities will be significantly decreased (Monczka et al 1998, p.336-337).

13.2 Potential risks of optimizing the supplier base

With all of these advantages by reducing/optimize the supplier base it might be hard to understand why not every company are doing this. Well, the expression "too good to be true" is to some extent true here. There are in fact some potential risks emerging from this process as well. Monczka et al (1998, p.338-339) lists some of them:

- Supplier dependency
- Absence of competition
- Supply disruption
- Overaggressive supply reduction

In addition to these Lysons and Farrington (2006, p.392) supplement this list by mention two potential risks:

- Failure to seek new or more competitive suppliers
- Loss of suppliers goodwill

There will now follow a brief explanation of each listed assertion:

Supplier dependency

This refers to the situation where a supplier becomes too dependent of the buying company. This can happen if a supplier loose other customers in the aim for improve performance to the company. This can give unhealthy relationships and make the supplier a poor competitor (Monczka et al 1998, p.338).

Absence of competition

By reducing the suppliers, the competition will also decrease. In the extreme case of a single source the absence of competition can make the supplier behave opportunistic. He can for example raise the price or ease on quality to gain more value (Monczka et al 1998, p.338).

Supply disruption

This is the main argument against the reduction of suppliers. There can be many reasons for supply disruption. Strike, fire, production or quality problems, supplier's supplier or natural disasters are some of them. There are however solutions to avoid these problems with very few suppliers. First of all the buyer can choose suppliers with multiple production facilities. Second he can use suppliers with multiple capabilities. Then others can take over if one of the suppliers experience problems (Monczka et al 1998, p.338-339).

Overaggressive supply reduction

The main problem by overaggressive supply reduction is if the market grows and the remaining suppliers fail to expand their production capacity (Monczka et al 1998, p.339).

Failure to seek new or more competitive suppliers

It is always a risk in the case where everything is working well. It is easy to lose focus on improvement, but the companies should always remember that the optimization is a continuous process and there should always be a focus on seeking even better suppliers.

Loss of supplier`s goodwill

This point rises as a consequence of absence of competition. In a competitive market the supplier often show a lot of goodwill to satisfy the buyer. This goodwill can for example take the shape of decreased costs, willingness to give more support if problem occurs or improved support in the design process. When the competition decrease the supplier has fewer reasons to show goodwill and this can mean increased costs for the buyer.

13.3 General steps in the optimization process

According to Monczka et al (1998, p.333) the first step in an optimization process should be to exclude poor performing suppliers and the suppliers who are not used. And pursuant to Bhote (1989, p.75) sited in Monczka et al (1998, p.339) the optimization process includes three phases. First of all is the reduction of suppliers in the base. This activity can be opposed in a number of different ways, but according to Bhote (1989, p.75) some general principles should be followed:

- The buying company must have a clear commitment to total quality or any other performance capability critical to the purchaser, and must “practice what it preaches.”
- The buying company must have quality professionals who are able to assess a suppliers quality control techniques and the potential to implement continuous quality improvement.
- Whenever possible, a potential supplier should be in close physical proximity to the buying company to allow frequent visits.
- A supplier`s management must be willing and able to develop a closer working relationship with the purchaser. A fit between the two firms must exist.
- A supplier must commit to continuous performance improvement regardless of its current quality performance.

Second is the selection of the finalist suppliers and the last phase is the selection of which suppliers the company should establish a closer collaboration with (Bhote 1989, p.75). How this collaboration should be done was described in chapter 11, supplier relations.

In relation to the first step in an optimization process Bhote (1989, p.75-80) has suggested four different approaches, these are:

- **Twenty / eighty rule**
Here you reduce the supplier base by 80% or 20%. The principle is for example to continue with the 20% of your most used supplier, or you can delete the 20% of the supplier with most quality problems. There are many other possibilities as well. This is a quick way of reducing the supply base, but however there is a risk of excluding well performing suppliers (Monczka et al 1998).
- **“Improve or else”**
By this method all of the suppliers get a possibility to be left in the base. Simplified the buyer give the suppliers a set of performance criteria. The suppliers then have to prove their achievement of these in a given timeframe (Monczka et al 1998, p.340).

- **Triage**
Each supplier is carefully evaluated and put into one of three categories, exclude from base, potential suppliers and preferred suppliers (Monczka et al 1998, p.340).
- **Competency staircase**
With this method the buyer request the suppliers to prove their abilities in a stepwise manner. The steps typically will increase in degree of difficulty and therefore the suppliers will get fewer and fewer (Monczka et al 1998, p.340).

Monczka et al (1998, p.341) call the attention to that this is only a small sample of methods available and it is also a possibility to mix different approaches.

Talluri and Narasimhan (2005, p.130) has develop an alternative methodology from the aggressive reduction of suppliers. Examination of the method will not be included in this paper, but a brief description will now follow.

The method is a continuing process which with certain time intervals evaluates the lowest performing suppliers in the supply base against a pool of potential suppliers. If the evaluation concludes in favour of the potential supplier, this supplier will be put into the base while the other is excluded.

The evaluation process consists of a supplier capability questionnaire where the questions are divided into 6 categories: Quality management practices and system, documentation and self-audit, process and manufacturing capability, management of the firm, design and development and cost reduction capability.

It also consists of a supplier performance assessment questionnaire where the questions are divided into 5 categories: Quality, price, delivery, cost reduction performance and other. Each question is given a quantified number and the results are then calculated and the output is compared against other suppliers. This will support the maintenance of a healthy number of suppliers, while the base is continuously improving by putting pressure on the existing suppliers (Talluri and Narasimhan 2005, p.130).

13.4 Discussion

As mentioned above there are many favourable effects and a number of risks by reducing the supplier base. The majority of the used theory have a clear opinion that the benefits of reducing the supplier base to some extent weights more than the potential risks, but there is however others who questions this view.

Brynhildsvoll and Abrahamsen (2002, p.57) even take this idea to another level and actually question the underlying principle of the process by asking the question: "Maybe it is better with as many suppliers as possible instead of a limited number of suppliers?"

However they don't take this discussion further, but they state that no matter what, it is more important to differentiate between different suppliers and define what the company wish to achieve, rather than care about the number of suppliers. This differentiation between different suppliers was studied in chapter 10, supplier assessment.

Stump and Sriram (1997, p.130) also contribute to this discussion by emphasize the point that the increase of development and use of sophisticated IT systems should support the possibility of managing a big supply base. On the other hand these systems support more accurate measurement and benchmarking of supplier's performance and herby render the possibility to exclude the suppliers which is not performing as good as others.

In the optimization process, the reduction in itself should no matter what be the goal (Brynhildsvoll & Abrahamsen 2002, p.56) and according to Hughes et al (1998, p.105-106) the number of suppliers for an item should be based on the decided purchasing strategy within the specific area. Some of the factors to be taken into account are pursuant to Hughes et al (1998, p.105-106):

- The power in relational terms between purchaser and suppliers, resulting from the chosen strategy.
- Information technology and other investment costs associated with single, dual and multiple sourcing.
- A market assessment of future supplier capacity.
- The staff resources required to implement purchaser-supplier improvement projects.
- The time and cost of exit strategies in the event of non-performance.
- Risk assessment of market place, technology and financial factors.
- The likelihood of the parties failing to commit appropriate investment to sustain technology performance and competitive advantage.
- Cost and price benefits from volume consolidation.
- The impact of diluting or losing competitive leverage.

Stump and Sriram (1997, p.130) also add a point to this list by claiming that the number of suppliers should be adjusted in relation to the capacity and maturity of the buyers IT systems.

13.5 Conclusion

Still there are many companies who use single sourcing or use a small limited number of suppliers opposed to many suppliers for each item (Choi & Krause 2005, p.640). In different circumstances both of these approaches have proven to be effective (Monczka et al 1998, p.338).

The main outcome of this chapter is that there are many favourable benefits evolving from the optimization process, but with these there are also some risks. There are many different views on how to weight these against each other, and therefore there exists many different methods for execution of this process.

The main conclusion is that the amount of optimization needed and method used should be carefully linked to the company's strategy, and will therefore vary in each single case. However there are always some general factors that need to be included and so, when planning an optimization process it would be really important to study the area so that you can combine the best of many methods. It also seems like that there is an increasing amount of research going on in this area, so new and better methods will probably be added to the existing assortment.

Part three - Interviews

Chapter 14

The interviews

14.1 Research approach and methods

The research techniques applied in this part of the thesis has primarily been 4 structured interviews and a numerous unstructured discussion sessions with different users of the supplier database. Three of the interviews are with internal users of the supplier database, a SCM, Engineering and QC representative, while the forth interview are whit external representative from Achilles who is a specialist in the area of supplier databases.

14.2 Content of the interviews

The main focus in these interviews and discussion sessions have been to bring forward gaps between what the procedures say, the existing use and the improvement potentials of the supplier database.

In the first three interviews five themes were highlighted, these were general about the supplier database, performance assessments, frame agreements, reduction of the supplier database and supplier relations.

In the last interview the focus was on how another supplier database is build up and experience advices according to this.

14.3 Interview with a SCM representative

The representative has been working in the SCM department in Acergy for a long time and should therefore have good knowledge about the supplier database and its belonging components.

General about the Supplier Database

What do you consider as the main purpose of the supplier database as it appears today?

Well I would say there are various purposes with the supplier database. It comprises many functions such as performance assessments, frame agreements, audits, audit reports, supplier alerts and scoring of suppliers, so it is a quite comprehensive database.

Personally I use the supplier database most of all to find track records on the previous work of the potential suppliers. This way I can read how they have performed in the past, what they have been honest about and how they have operated in cooperation with us. But it is also very easy to find frame agreements in the supplier database and check these, so it is difficult to mention one defined main purpose.

Do you see other possibilities for use of the supplier database then how it is today?

Yes, it is my opinion that the supplier database could have been used more as a general experience database than it is today.

Do you think other departments could benefit from more knowledge and use of the supplier database?

Yes especially Engineering and the QC departments. This is because I don't think the technical type of experience feedback is handled satisfactory with today's system.

Do you think other than the SCM personnel should get access to input data and make changes to the supplier database?

I would say that everybody in Acergy should have read access to the supplier database, but I don't think others than SCM representatives should have full access. Some of the other department should of course be able to put on scores in performance assessments.

If the supplier database is suppose to work as a general experience database, should not others than SCM personnel be able to put in their experience?

Yes, but this could be done through a SCM gatekeeper. Nobody buys anything without communication with a SCM representative, so SCM is always involved anyway.

If the engineers experience a technical problem outside the SCM department's responsibility with a supplier, say under the construction phase, should this experience be entered into this database?

Yes, this information should go into the same experience database. This way all information about suppliers will be gathered in one place and it will be much easier to do evaluations. If there are many experience databases it is very hard to find relevant information.

Is there any information that could have simplified the use of the supplier database by being displayed on the supplier list?

Yes, it would be really nice if the type of commodity had been displayed. Then you could have search on fabrication and found out what was available.

A study of Acergy's supplier database

Do you think the search option "region NEC" should be divided in smaller locations?

Yes, for instance with fabrication you need to have per city and with pre commissioning you need per country. So I think this should be divided into different cities, this is because that is what we use in other databases in Acergy.

Do you miss any other search options in the supplier database?

It would have been really nice to be able to search "per commodity".

Could the training and information about the supplier database have been better?

Absolutely! This should not only be done to the other departments, but also to the SCM personnel. I am a typical SCM representative and I do not use the supplier database actively. Maybe I should have been given better training in the use of the supplier database, this way we could increase the use of it. I think maybe we take it for granted that SCM personnel are familiar with the supplier database, but in reality most of us need better training.

How can Acergy increase the use of the supplier database in your department?

The most important thing is training and information. This information could be given in the various department meetings, and should be repeated every six months since there are always new people. It is also important to be sure that everybody has access to the supplier database.

Frame Agreements

How do you think the organization and information of which suppliers Acergy has frame agreements with is working today? And what is the main purpose of the frame agreements?

I think the way this is organized in the supplier database today is working very well. It is easy to click in and check if there is a frame agreement in place, in addition to this you can check the expire date and so on.

There are two main purposes of the frame agreements, first of all is that it is ease our daily work. We don't have to negotiate details in the contracts every time. And second, there is often a volume discount on the frame agreements so we actually make more profit with the use of the frame agreements.

The procedure GR-SCM-001, guidelines for framework agreements states: "Lessons learnt and suggestions for future improvements should be directed to the Acergy representatives for each Framework Agreement who will ensure that this information is communicated widely within Acergy." Do you think this is followed in practice?

No I don't, we are trying to use frame agreements and do performance assessments as much as possible but in practice this communication with the representatives for each Framework Agreement is not done.

Performance assessments

What do you consider to be the three most important benefits by performing performance assessments of the suppliers?

First of all the absolute most important benefit is that you can give the supplier feedback on the things that went well and what did not on the job they has performed. This gives us the possibility to find areas for improvement in the future in cooperation with the supplier.

Second there is a possibility to make scores on the different factors the supplier is being measured on. This give a possibility to emphasize what has been important in this exact case.

A study of Acergy's supplier database

What do you think is the three most important factors the suppliers should be measured in pursuant to your department?

First of all I would say that the quality of the product they deliver is what counts most for the SCM department. This is due to the fact that the SCM department is responsible for the total delivery, and included the quality of this.

Second I would say that it is an important issue for us to do business with commercially fair suppliers. By this I mean suppliers who play with open cards, and are actually trying to do a job as good as possible. The opposite is when suppliers are trying to cheat you, if they are hard to cooperate with if problems arise, if they are trying to deliver a product with lower quality than agreed on and in general act in an opportunistic manner.

The third factor we emphasize is that the suppliers have a high HSE profile and that this has been implemented and is functioning in an effective manner. This is important for the product delivery in itself and it is important that the suppliers launch the right HSE initiatives, measure these and put improvements in action. If a supplier start to shirk one's duty on area of HSE, this is will be taken seriously by both Acergy and our clients.

So quality, commercial fairness and HSE is the three most important factors for our department.

To what degree is the result of a performance assessment used in an evaluation process?

I hope it is being use by others SCM coordinators when they pick suppliers for the projects. But in addition to this it had been very nice if a team of SCM leads had been evaluated the various suppliers for instance on a six months basis. They could have discussed the scorings and checked for general improvement potentials and planed how to execute these.

At this moment the SCM personnel only look at the former project, what went wrong and what was successful. Thereafter they do their project specific adjustments, and then the former project is forgotten. To be clear, today there is no functioning system for making general improvements of the suppliers based on the scoring in the performance assessment.

What can be done to improve the usefulness of the performance assessments?

There should be some kind of general improvement system, and this should be followed up closely.

The procedure GR-SCM-007, work instruction for the supplier database state that: "After every use of a Supplier, a Performance Assessment shall be made." Is this done in practice?

No, this is not followed up in the daily work. I think the reason for this is that there are no consequences if you do a poor performance assessment or if you do no performance assessment at all. If I choose to not make the performance assessment after an interaction with a supplier this will neither affect my bonus possibilities or my conditions of employment, so I can truly say that this procedure is neglected all the time.

Do you know about any information that should have been put into the performance assessments, but is missing? If yes, which?

Yes, there are certain lines there that are being put in, but this is something we never think about. What actually had been very favorable is that before you deliver out the product, you check which type it is, which commodity it belongs to and which criteria you should evaluate performance on. This might not be the same for all.

A study of Acergy's supplier database

Should the suppliers have been divided into different categories and measured with different parameters? If yes, how should this have been done?

Yes, per commodity. Today there are 22 different commodities and I think the suppliers should have been divided into these.

So you mean that there should be 22 different performance assessments schemes?

Exactly, some of these will be quite different and many quite similar. To clarify what I mean we can say for instance that welding and pressure testing of pipeline which is done onboard the ship should have a totally different performance assessment than building a manifold on the suppliers own site, where we take over the product when we actually pick up the completed product.

Is it possible in today's system to manipulate the performance assessments in the direction you wish for?

I would say yes to a certain point, there is some degree of control in the fact that a performance assessment often includes more than one person. There are often reviewers from Engineering, QC and other department in addition to the SCM who is the creator of the performance assessment. If one of these gives an abnormally high or low score there is a possibility that the others will react. But there is no formal control function, so it is absolutely possible to perform a manipulation of a performance assessment.

To what degree do you think this opportunity is used?

It is of course hard to say, but the possibility that this is done is absolutely present.

What can be done to make the performance assessments more transparent and less vulnerable for subjectivity?

Well, this can be done if you operate in a team while doing the performance assessments, but this process should not be too regulated. This is because there are so many procedures on other tasks, and these tasks are therefore requires so much of our time. If there in addition to this is establish a control function on the performance assessments where the scoring needs approval, I think people will be reluctant to make performance assessments. Another implication of this is that our SCM lead who should be the approver will get much more work. So the conclusion is that I think it would be a good idea to make this function more transparent, but I think it would be difficult to accomplish.

If the procedure GR-SCM-007, work instruction for the supplier database is being followed the suppliers are getting a feedback after each performance assessments is done. How is this done, and could this have been done differently?

Today the majority of the suppliers are getting none or in best case very rarely feedback after a performance assessment. This gives them no possibility to know how to improve. We should give feedback after every finished job, and especially if there are potential areas of improvements the suppliers should get feedback from us.

In addition to this there should have been a team including the SCM lead who on a regular basis discussed potential improvements with the suppliers. The same team should be responsible to follow up the outcome of these discussions.

A study of Acergy's supplier database

As you know, this is done with the 24 most critical suppliers, but what about the rest?

These are not getting any feedback, so maybe the SCM should be the responsible department to see that this is done. But you will have to take into account the utility value of this against the employment of extra people. We need more people if this process should be strictly followed and successfully performed, but of course there will be great benefits of this also.

The SCM principle 6 rule 6.2 in GR-SCM-001 stats that: "Performance assessment is conducted on all suppliers of essential products/services by the project management team." Can you define what is meant by "essential"?

Well I would maybe not have used the word essential, but instead I would have used the expression "critical products". This is products that are critical for a project in form of very high value, but also products that lies on the critical line in a project execution. By this I mean products that can be of little value, but if this product fails the project will stop.

Savings and overruns reports

To what degree is savings and overruns reports used?

They are used pretty often.

Will you say that this reporting of savings and overruns affect the department's daily work?

No I don't think this affect the departments work because you act in accordance with preset parameters. These are the parameters you sold the project for in the tender face to Acergy's clients, for instance BP or Statoil. After a while when the project is executed, you may get a price from our supplier that are over, under or straight on the price you sold it for.

Ok, so the savings and overruns reports are not driving you to improve performance in your daily work?

No, it is hard to improve in any way when you have to act in accordance with bidding rounds in both the tendering phase and when you bid for the project at the client.

Reduction of the Supplier Database

Do you think it is too many suppliers in the supplier database today?

That is a hard question, on one side it is not preferable to have too many suppliers, but on the other side you need the one that are necessary.

Would a reduction of suppliers in the supplier database make this more manageable?

Not necessarily, but in any case you must be absolute positively sure that the data in the supplier database, for instance approved vendors or frame agreements are valid. With too many suppliers the possibility of incorrect data in the supplier database will increase, so pursuant to this it would be favorable with a reduction of suppliers.

If Acergy decide to go for a reduction of suppliers in the supplier database, how do you think this should this be done?

It should be done commodity per commodity. The commodity leaders should be making a list over the suppliers they see as necessary in the different locations.

Supplier relations

How do you perceive Acergy`s relation to your suppliers?

This relation is problematic and we often act in an unprofessional manner. A typical example is when engineers or QC staff act on behalf of Acergy with no authority to do this. We have single pointed contracts, and the gatekeeper is the SCM representative.

What can be done to improve in this area?

There exist procedures and routines that are working here, so the only thing missing here is instructions, guidance and good information to the other departments.

How does the SCM department contribute to build good relations with the suppliers?

First of all we are trying to give training to the other departments of how they should act in accordance with the suppliers, especially the Engineering and QC departments. This is important to avoid that the suppliers are feeling frustrated.

Second, the SCM department has established a two person supplier relations management team. The responsibility of this team is to visit suppliers, get feedback and arrange meetings. Participants on these meetings are different project leaders, representatives for the management in Acergy and the suppliers, and the meaning is to stimulate to better communication and understanding between the companies. This initiative has improved Acergy`s supplier relations the last years, but there is still a big improvement potential.

14.4 Interview with an Engineering representative

The representative has been working in the Engineering department in Acergy for 6 years and should therefore have good knowledge about the supplier database and its belonging components.

General about the Supplier Database

To what degree do you know about the supplier database?

Well I don't use it much, but I know it is important in that respect that it has an overview over the approved suppliers of services to us, from office supplies to very complex products.

What do you consider as the main purpose of the supplier database as it appears today?

It is to have a quality assurance of the suppliers. When you are about to award a contract, small or big, you are able to check if there are any special considerations that should be done with the particular supplier, for instance follow-up on QC, documentation or if there are things they are especially good or poor on. An example is that some of the suppliers are very good with welding of aluminum while others are really poor, but anyway they bid for the same job.

To what degree does your department use the supplier database?

Too little, we hardly use it at all. Except for being a reviewer on the performance assessments I don't think I have ever used the supplier database. We have an attitude that we expect that SCM is the ones with the knowledge about it, the ones who control it and maintain it and should therefore be the users of it.

So you only use it as a reviewer on the performance assessments?

Yes, maybe it has happen once or twice in six years that I have entered the supplier database to see if a supplier approved. On the whole when I am involved in bidding of jobs I focus on the technical qualifications and specifications, and expect that SCM to deal with the terms and conditions and the supplier database.

Do you see other possibilities for use of the supplier database then how it is today?

Maybe it could have been a bit more active, but I don't know how.

Does your department use other experience databases that could have been implemented in the supplier database?

Yes we have an experience database that is beginning to be good. I suppose there could have been a link between these, but I don't think it should have been implemented in the supplier database. This database is divided in different areas and anybody can input lessons learned.

What could have been useful was if the information in the lessons learned database about a certain supplier was linked to the supplier database. This way you would get first hand information from the users. Another example on this is eBay, where you have customer reviews and so you can get direct feedback from former customers. In addition to this, lessons learned database we often use document systems for best practice, but this is very static and one way communication.

A study of Acergy's supplier database

Do you think other than the SCM personnel should get access to input data and make changes to the supplier database?

If others than SCM should have write access it should be on a high level such as technical management and the design group, because if any engineer could do this it would have been a mess pretty fast. Especially the design group should have more to say in this process, they often have very good inputs. This is a group who design the whole projects, and I think they see SCM as some kind of lagging necessity.

But at the end I don't think other than SCM should have write access. I think the SCM department should have ownership over the supplier database, but they can with advantage be better in promoting it.

Is there any information that could have simplified the use of the supplier database by being displayed on the supplier list?

It would have been nice to have the possibility to search per commodity, but the engineers expect the SCM personnel to take care of this part. I don't know if SCM is of the same opinion, but if I go to the projects SCM representative and tell him that I want to fabricate something in aluminium, then I expect him to come up with an approved list and get a good offer on the job.

Could the training and information about the supplier database have been better?

Yes absolutely. This could have been done as one hour sessions in the Engineering site meetings once per month. Another possibility is that the SCM lead could take 20 minutes in the project meetings and put some focus on the supplier database, because people forget things that are not mentioned.

The information should not be focusing on the basic lotus based interface, this we know, but on how to use the supplier database in smart way so we could benefit from using it.

How can Acergy increase the use of the supplier database in your department?

Increased knowledge and awareness of its existence, what it is used for and who is the proprietor. In addition to this we need to know how it is used to take decisions, for that is what it is all about.

Frame Agreements

To what degree does your department use the frame agreements?

The frame agreements are very peripheral for us. Technical it is the same thing every time we do a call off on the frame agreement. This means that the SCMs terms and conditions are agreed upon so that it is easier to get things through the system.

Performance assessments

What do you consider to be the three most important benefits by performing performance assessments of the suppliers?

First of all it is to learn from mistakes. Second is the visibility for others to see how this supplier is performing the job, and this is a kind of quality assurance for the future. At last it is important to have the possibility to come up with some quantitative information the next time you shall use a supplier.

A study of Acergy's supplier database

What do you think is the three most important factors the suppliers should be measured in pursuant to your department?

First of all it is the technical competence. Thereafter it is the quality on the actual work. And last but also very important is the ability to communicate. By this I mean that if they bump into a problem they should not try to solve this on their own, but be open and honest about it. There are too many examples of suppliers trying to work it out on their own, ending with very bad and expensive outcomes.

Do you know about any information that should have been put into the performance assessments, but is missing? If yes, which?

Maybe there should have been a performance criterion on the ability to communicate. This would have been preferable, but of course a problem with this is that it will vary according to who you get as a contact person at the suppliers. Otherwise I think the performance assessment scheme is ok.

Should the suppliers have been divided into different categories and measured with different parameters? If yes, how should this have been done?

Yes I suppose this should be done. Maybe division could have been a combination of value and complexity. This could say something about the importance of the contract.

How many different categories would you say there should be?

I think there should be at least two. If you divide the suppliers into too many categories problems will occur and the system will be difficult to handle. I would recommend two categories, one regular and one for mere complex or expensive projects.

Is it possible in today's system to manipulate the performance assessments in the direction you wish for?

Yes it is very easy, and there is no quality check on the input. If I had a buddy working in a supplier and therefore wanted to score this supplier high, I could easily have done this.

To what degree do you think this opportunity is used?

I don't think there is much of this behavior. The reason is that I don't think the score is emphasized in the decision process, because there is a tradeoff between technical and SCM matters. So I don't think anybody is able to manipulate the score to such a degree that it will be decisive.

What can be done to make the performance assessments more transparent and less vulnerable for subjectivity?

It is very important with many reviewers on a performance assessment, and maybe there should be a constraint according to write why you have scored as you have. Especially if the score is in the top or lower band you should be forced to give this information.

If the procedure GR-SCM-007, work instruction for the supplier database is being followed the suppliers are getting a feedback after each performance assessments is done. How is this done, and could this have been done differently?

I have never seen a supplier that has got any feedback, so this is an area where we need to improve, but we have to be a bit careful. I don't think the suppliers should get a copy of the performance assessments including our comments, because then people will be more careful with the comments and the performance assessment till be rounded off and the usefulness will

A study of Acergy's supplier database

decrease. I suggest that there automatically is generated a filtrated report. And in addition to this every supplier should have a dedicated SCM person who could explain the scores and comments if the suppliers would like this.

Reduction of the Supplier Database

Do you think it is too many suppliers in the supplier database today?

No I think there are too few. I am fed up of being told that I cannot use the supplier because it is not in the supplier database. I think there is too little previous knowledge about which supplier does what, so there should have been some possibility to specify what type, size and volume of work the supplier are able to do.

If Acergy decide to go for a reduction of suppliers in the supplier database, how do you think this should this be done?

I think here are a lot of suppliers in the supplier database that are not used, so maybe there should be done some kind of reduction. This could be done according to the last time we used the supplier, for instance if we have not used them for two years they should be put on a list. This list should then be subjectively managed, so that suppliers that we want to maintain in the list even if we seldom use them is not deleted. But in addition to this I mean that the supplier database should be extended. To be honest I think that the SCM department has an overweight of knowledge on the legal part of the work, and too little competence of which suppliers that can do what.

Supplier relations

How do you perceive Acergy's relation to your suppliers?

I think we are pragmatic and arrogant, but it depends of what project face we talk about. The arrogance is in relation to the tender face, for instance we require a big load of paperwork to be done before the supplier is even considered. In the fabrication face I choose to believe that we have a good reputation. Here we have pretty good control and we are trying to treat our suppliers with respect and fairness.

How does the Engineering department contribute to build good relations with the suppliers?

We are always trying to build good relations to our clients because the deliveries are dependent of this. We are doing this by building personal relations and I believe it is important to have a good dialog and take the time to visit the clients even if you are short on time. The technical issues we take as it comes, if I cannot find a solution, there are always someone in the house who can.

How do you think Acergy emphasize development of their suppliers?

That is not much I believe. We have done some with respect to the HSE where the suppliers if offer courses etc to increase their HSE competence, so that is good.

Technically we have raised their competence by giving them drawings and design that they are about to fabricate for us. This information is supposed to be secret, but in several cases we have found our design on boats owned by our competitors. This of course makes the willingness to cooperate little. Now we try to balance the amount of information so that they can improve, but not by giving away too many secrets.

The development in the technical area is not in focus. We expect the technical level to be very high, if not we choose someone else.

A study of Acergy`s supplier database

Have you any other thoughts about the supplier database?

Well, most of all it is the expansion I will emphasize. I believe the most important about the supplier database is that it has confidence among the users. We need to know that it is updated, accurate and that we can trust the information in it.

So you don't feel that you can trust the information in the supplier database today?

Yes I do, but I feel that I have to filter too much. I also think that the SCM department could give more information about it, and I feel that in the end it is very subjective who gets the contract or not no matter what the supplier database says.

14.5 Interview with a QC representative

The representative has been working in the QC department in Acergy for a long time and should therefore have good knowledge about the supplier database and its belonging components.

General about the Supplier Database

To what degree do you know about the supplier database?

I know about it, but I will have to confess that I did not know that the frame agreements were in it.

What do you consider as the main purpose of the supplier database as it appears today?

It has to be the transfer of supplier experience between projects and people, and that everybody can easily check if the supplier is approved by the QC department and see in which part of the company we have done an audit.

To what degree does your department use the supplier database?

We use it as an information base, for instance if I want to check if a supplier is approved in the supplier database. This is not my task, but sometimes I do it anyway.

Do you see other possibilities for use of the supplier database then how it is today?

Maybe there could have been a link to our conformance database, so that if a supplier had misbehaved it would have been picked up. Of course they should have gotten a low score on the performance assessment, but it is not always these things are in connection.

So the QC has its own database?

Yes, it's called "quality event support", and is a database where we put a few words on a supplier if they have not done their job properly. So maybe these databases could be linked.

Do you think other than the SCM personnel should get access to input data and make changes to the supplier database?

Yes I do, but I also see that this can create some problems. For instance if someone has got a bad day and put in some poorly thought-through information. So I see that the information should be filtered in some way, but I would really like the possibility to put in some comments. If more departments had write access, we also might get more information.

There should at least be a possibility to comment the score you give as a reviewer, because I feel it is very random when I choose a score, and it is very dependent on the person doing this.

Is there any information that could have simplified the use of the supplier database by being displayed on the supplier list?

Maybe there could have been an area where there was a display of how many performance assessments there has been on the suppliers and when the last one was made. There should also have been a possibility to search per commodity from the list.

Could the training and information about the supplier database have been better?

Yes. I believe there is a need for more information about the supplier database.

How can Acergy increase the use of the supplier database in your department?

Maybe there should have been a requirement to check the supplier database before entering into a contract, but then again this is the responsibility of other departments.

A study of Acergy's supplier database

Frame Agreements

To what degree does your department use the frame agreements?

The main task for the QC department is to hire controllers who check things. And according to this we have three frame agreements and these we are familiar with. Without this we don't use the frame agreements.

Performance assessments

What do you consider to be the three most important benefits by performing performance assessments of the suppliers?

To our department it is the possibility to see how the supplier has performed earlier, and if necessary we carry out extra initiatives for follow-up. It is also good for us to check the performance assessments, this way we can see precisely which areas that needs follow-up.

What do you think is the three most important factors the suppliers should be measured in pursuant to your department?

Well, that is of course the criteria quality assurance and quality control, and then I would say documentation and how they treat their subcontractors.

But I think the criteria are too general. It is different to chose between the different scores. I know there is some text there, but it is too general and it is for instance difficult to know if you should put a five or six to the score.

Do you know about any information that should have been put into the performance assessment, but is missing? If yes, which?

As mentioned earlier there should have been an area for each reviewer too write comments, but the SCM representative should write a main comment. I think it is especially important to write comments if you give a low score, because then people can see why this score is put there. Maybe the reason why you put the score there does not affect the next job.

Should the suppliers have been divided into different categories and measured with different parameters? If yes, how should this have been done?

Yes I think so. They should have been divided per commodity and afterwards in regular and complex procurements.

Is it possible in today's system to manipulate the performance assessments in the direction you wish for?

Yes it is easy because it only depends on your honesty when scoring on the performance assessment. I guess that the SCM person check that it seems ok, but then again there the departments does different things and therefore they have different opinions.

To what degree do you think this opportunity is used?

I do not think this is done.

What can be done to make the performance assessments more transparent and less vulnerable for subjectivity?

This can be done by forcing reviewers to comment why they give a high or low score. Of course it is possible to just write something, but I think it would be a little harder. In addition to this the approver has to check that the scores are corresponding before approving them. I cannot see what the other reviewers score, but that is good because then I do not score under the influence by others.

A study of Acergy's supplier database

If the procedure GR-SCM-007, work instruction for the supplier database is being followed the suppliers are getting a feedback after each performance assessments is done. How is this done, and could this have been done differently?

I don't think this is ever done, and I cannot see that we can give all the suppliers feedback. I think the ones we use much should get feedback, but this would have to be something that said anything about what the score is based on. This way the suppliers can improve, and they know how we feel about them.

In relation to this I know that we are performing poorly when it comes to creating performance assessments. Once I scored a performance assessment two years after the job was done. And many of the suppliers in the supplier database that I know we have used a great number of times has got maybe one or two performance assessments.

Reduction of the Supplier Database

Do you think it is too many suppliers in the supplier database today?

Yes, and I believe the reason is that many of the companies have changed names and that there are duplicates. So I think the reason why there are too many is that it is messy.

If Acergy decide to go for a reduction of suppliers in the supplier database, how do you think this should this be done?

It requires enormous resources to do that, but first of all I would check and sorted out all duplicates because some companies change name very often. Then I would sort out the ones we never use.

Supplier relations

How do you perceive Acergy's relation to your suppliers?

I think we are fear with the big or important suppliers, which is delivering complex deliveries. The smaller ones might think that there are too high documentation demands, because we use the same procedure no matter what. Maybe there should been two different procedures in relation to this?

How does the QC department contribute to build good relations with the suppliers?

Well, we are the ones that check what the suppliers do, so we try to behave in a professional manner. If we are not happy with the work they have done or something else we tell them this in a decent way.

How do you think Acergy emphasize development of their suppliers?

The supplier relation part of SCM is doing this to some extent with some suppliers, but I think this should also be done with all the suppliers we have a frame agreement with. So I think Acergy show a positive will to help developing their suppliers. We are not better that our suppliers.

Have you any other thoughts about the supplier database?

I think the whole supplier database should have been erased and implemented all over again. This way the suppliers in the database would not be displayed in many forms.

14.6 Interview with an Achilles representative

The representative has been working with the development of the supplier database since the beginning in 1990, so he has lots of experience in the area.

What do you mean is the most important things if you want to make it easy to manage a supplier database?

Well first of all you need to control who is able to approve the suppliers and put them in the database. Can anybody does this or are this process governed by a center or a dedicated person? Second it is about how the suppliers are implemented. Are they implemented by name, the organization number and are the system sensitive for upper and lower cases?

The background for this is that most companies have very big supplier databases, but when we clean these they tend to get very much reduced. One question is who should be in the database, should the pizza or flower supplier be there or only the strategically ones?

We have precisely done such activity at a company in Bergen, equivalent to Acergy actually. This supplier had a great amount of suppliers in their supplier database, but after we had finished it was considerably reduced. The reason was duplications or companies who had integrated with others or gone bankrupt both small and big.

We strongly recommend that there are one or at least very few persons that are allowed to approve or eliminate suppliers from the database. As an example there are in StatoilHydro only one approved coordinator who is allowed to do this and this way it is much easier to manage and control the database.

Who are the users of Achilles?

In the beginning Achilles was made for the operators, then we opened for the main contractors and now every supplier approved by Achilles can be users of the system.

Which properties in the system do you think Acergy could have benefitted from?

The system is build to cover three primary claims, and that is Norwegian law, Danish law and the EC directive on procurement. The system is built as intuitive and easy as possible even if it contains a lot of information, as much as 80 pages on some suppliers. Today there are 2522 approved suppliers for the Oil industry, and by increasing the number of suppliers they can get better competition.

We use the suppliers organization number so that all suppliers have a unique id that follows the legal entity. This is because we have check points, so we can always be sure that this is right, and then we eliminate the possibility of having duplicates.

When Achilles was established, Statoil had 16 persons doing this job. By outsourcing the management of suppliers to us these resources could be used to other tasks. I guess Acergy could have gained the same advantage, but in a smaller scale of course, and the system is approved as a supplier system according to the ISO standard.

Another benefit if everybody uses Achilles is that you use the same system as your buyer or supplier. This way everybody is familiar with the system, something that can reduce misunderstandings and reduce the amount of used time.

We have also built in a great deal of risk management in the system. For instance a common scam in other industries it has been like this: You go into a contract with a company and start

A study of Acergy's supplier database

getting bills, these seem ok and this is going on for a while. Then the owners of your supplier suddenly change the organization number of the company, so this becomes another company than the one you have got a contract with. They then charge value added tax on you and take this for themselves. We have not seen this in the oil industry yet, but we think it is just a matter of time. So this is one of the things we can keep under surveillance with the system, and that is good because it is the customers who is stuck with the tax claims if this happens.

In addition to this they will gain benefits when the system is being further developed. As an example there are these days a working group from the operators that are developing a system for joint audits in the system, and this will be a great relief for the suppliers. This will be done by neutral people and we will administrate this. Another example is that we are currently working together with the OLF to implement a new type of approval to certain product and services.

What is the main content in the supplier database?

When I enter a supplier in the database I will find general contact information, information about who is in the management and possible comments from these, share capital, year of establishment, with bank and accountant they use and key numbers about their finances. In addition to this Dun & Bradstreet does verification on our suppliers twice per month, and if there are any changes the users will be noticed by mail. The status will show how old the information is, and how long it will last, the qualification last for one year, and if they do not update they will lose their approval. We do not require the suppliers to be certified, but that they have some kind of internal system according to an international standard, preferably ISO.

We also ask the suppliers to confirm some commercial statement. These are directly linked to the EC directive on procurement. An example on one of these questions is where the suppliers confirm that they pay their taxes.

Then there is some practical information such as number of employees, where they have their offices and the size of these and if they stand alone or if they operate in a group division. This is because sometimes it is desirable with a guarantee from the parent company. It is important to notice that all of this information except the Dun & Bradstreet information is put in there by the suppliers themselves.

You can find information about how many internally and/or external audits they have had see eventual comments on these. This can be used in the way that if I see that someone else recently has done an audit of the supplier, I can call the contact person and get this audit. This will save both me and the supplier a great amount of time and recourses.

When it comes to the product and services the supplier can deliver there are thorough descriptions of this and additional comments. I can also see if this particular product is sold to anybody else, if the QA certificate covers this product and who is contact person for this product group.

The HSE information is very important, and here we have a questionnaire build on the NORSOK standard that every supplier has to answer. There is also a corporate responsibility section, where we ask the about the ethical basic questions, so that the buyers can show to this if there are problems in the future.

A study of Acergy's supplier database

Another thing you can do if you want to know more about a certain company is to put them under surveillance. Then Dun & Bradstreet will check this supplier once per day, and you get noticed if there are any changes in contact details, finances or in the product and service assortment. In addition to this you have the possibility to check the company's change history.

What about the performance assessments?

When it comes to performance assessments some of our users have chosen to use us, but then it is a separated tailor-made module. This way everyone can get it as they want and the possibilities are enormous. You can for instance put in all sorts of documents or build your own experience section.

But it is important to emphasize that we recommend to also making this part as easy as possible. If it gets too big or complicated, people will not use it. The differentiation is an internal matter, but we recommend to put the performance assessments in a excel sheet, because these things tend to get really big.

So in the process of building a successful performance assessment we have many tips, we certainly have a great deal of experience after many years in the area so there is no need to start from scratch every time.

How does it work if you want to find a certain product or service?

If I want to find a supplier for a certain product or service I search for this in the product or service categories. We have build up a system of 680 different categories tailor made for the oil industry. EU has an analogous system, but here there are 22000 different categories, so ours does of course have to comprise over large areas. This means that you usually don't get the right fitted supplier at the first search.

Let us take an example; if I want to find a supplier who can weld a valve, I search in the appropriate category and get a list with 112 suppliers. This is too much, but I can shrink this by setting different kind of search criteria, for instance that they shall be certified and that 90% of the business shall be in the oil industry. This will give me a new list with 16 remaining suppliers.

To eliminate even more suppliers I can now order a comparison list of these. Here is a precise description of the products or services each supplier provides, and so I can pick out the most interesting ones.

To find out if the suppliers has available capacity I can by one single click send a common e-mail to all of these. This way I fulfill the demand about full traceability, and I can have open communication while I am in mindset.

How about the training and information about Achilles for the users?

That is part of my job, I travel around and have courses and give information about the system to everybody who wishes this.

What do you think could be the reason why Acergy do not use Achilles today?

Well I was in contact with Acergy about three years ago and then the problem was that we could not help them out in every destination of the world. This system is made for Norwegian and the Danish areas, but in addition to this we have 28 corresponding systems around the world, for instance South America, Australia, China, England and Netherland.

14.7 Comments on the interviews

It is interesting to see that in some areas the different department`s representatives have varying opinions and improvement suggestions to the same problems, while in others there is consensus. These opinions will be used in the discussion in part four of this thesis.

**Part four – Discussion, Conclusion and
Recommendations**

Chapter 15

Discussion and conclusions

Below the different elements, problems and improvement potentials of the supplier database will be discussed. This will be done on the basis of the procedures, theory, interviews and the different informal conversations with the employees in Acergy referred to previous in this thesis. It is important to emphasize that the opinions in this chapter is subjective and is based on my understanding of the gathered information.

15.1 Supplier communication and feedback

As mentioned in chapter 8, Acergy has chosen 24 of the most critical suppliers to be part of the "Supplier Relations Management Programme". These suppliers get face to face feedback in a yearly meeting where the main people involved are invited. This is a good form of communication as we saw in chapter 12, but I question the intervals between these meetings. According to the theory this communication should be a continuous process and this can hardly be the case with one meeting per year. And according to the supplier relation unit they actually have problems to even carry through the 24 arranged meetings every year. So it is my opinion that this communication should be increased. However to do this they need to find another way as it currently seems too heavy to hold and maintain. The initialisation of this program indicates that the management in Acergy are aware of the great importance of good feedback and mutual understanding with the key suppliers. But what about all the other suppliers not included in this programme?

As mentioned in chapter 7.2 there is a requirement to give the supplier feedback subsequent to the performance assessment for all suppliers, this is also how it should be done according to the opinion of the SCM personnel I have been talking to. However according to the emerged information this is almost never done. The reason for this could be that it is forgotten, but the most probable explanation is that this part is ignored due to no consequence for the responsible. Maybe there should have been some kind of consequence for the responsible, if the procedures are not followed? Some of the persons I have been talking to say that they did not know about this requirement, but according to the familiarization scheme mentioned in chapter 2.6 they have a responsibility to be familiar with the procedures and systems that they are working with.

How this feedback should be done, how comprehensive it should be and which channel of communication should be used on the other hand, the procedures say nothing about. The amount of time and resources exclude the face to face communication to all suppliers and provokes a choice for other channels to be used. According to figure 18 in chapter 12, formal reports is preferable when it comes to storage of information and would therefore be a good solution if this is important, but the recourses and time for preparation is a major drawback for the use of this channel in Acergy.

The interviewed Engineering representative suggests that an automatically generated report should be made and the supplier can contact a dedicated SCM person if there are any questions. This solution will cut away the preparation time and should therefore be a usable solution. However this can be questioned based on the difficulties in deciding what to automatically include in the report. Often there is a need for explanations and additional comments to such information, and even though the supplier can call SCM to get this information, I think this opens for great number of misunderstandings.

A better solution would possibly be to use one of the communication channels in the middle of the figure 18, such as e-mail or telephone. Use of the telephone support quick transfer of the information, and the need for preparation is minimal. However this can probably also create some problems in relation to a "slip of the tongue" or forgotten information. E-mail on the other hand requires a limited time for preparation, have great possibilities for storage, support attachments and a two way communication. On the basis of this discussion I think the solution for Acergy is to send an e-mail to the suppliers after every execution of a performance assessment.

In addition to this, the content of the feedback should also count in the choice of communication channel. If the feedback is undivided positive and there is no need or expectation for extensive further communication, the e-mail is a good choice. But what about if the feedback contains a lot of complains and are of critical importance to the future collaboration with the supplier? The theory then calls for face to face communication, since this is the best way to communicate complex and challenging information. This rise the question about if there should be some kind of threshold for when to use email and when to call for a meeting with the supplier. This threshold could maybe be linked to the scoring in the performance assessments. For instance, if the average score is under a certain number the feedback should be done in a meeting. Of course there are a lot of other possibilities for the setting of this threshold such as standard versus non-standard products, critical versus non-critical products, number of procurements with the supplier or maybe there should be a consideration of communication channel for each single commodity?

The interviewed SCM representative emphasise that it is important to consider the value of the feedback against the used resources, especially if Acergy needs to hire more people to do this work. I agree with this, but in relation to the theoretical benefits of execution of the feedback I think there should be some weighty justifications not to do this. In addition to this I think the suggested use of e-mail as the main communication channel the process should be within the expected workload of the existing personnel.

15.2 Purpose and use of the supplier database

As we have seen in chapter 10 there are a lot of possibilities when it comes to the use of the gathered information in supplier database, so the main factor of how this information is used is defined by the management in the company when they set the purpose of the database.

In Acergy's procedure it says that the main purpose for the supplier database is to capture, share and maintain information of the suppliers. I think this purpose seem to be well communicated through the departments since all of the interviewed representatives had the gathering of information as a main purpose of the supplier database. In addition to this the representatives mentioned quality assurance and the possibility to see if the supplier is approved as some of the other purposes.

However I find it strange that even though both the Engineering and the QC representatives was of the opinion that the main purpose of the supplier database was to gather experience, the output from the interviews actually showed that both these departments have their own experience databases. When they were confronted with this they both suggested that there could be a link to the supplier database, but they did not seem to think that it would be a good idea to include the whole databases into the supplier database.

A study of Acergy`s supplier database

In my opinion these databases should be melted into the SCM supplier database and this should be the only one used. This way all information and experience of the supplier had been gathered in one place and it would have been much easier to find the information you were looking for. After all the experience gathering seem to be one of the main purposes of supplier database according to principle seven of the “SCM principles and rules” where the supplier database actually is referred to as “the database of lessons learned”.

As it is today I think the supplier database is of very limited use when it comes to the capturing, sharing and maintaining of information in relation to the suppliers. If the database is suppose to function as an experience and lessons learned database, it is important that as many contributors as possible have access and interest to use the database, and there should be done some improvements in respect to this. If the supplier database should be the main experience database in relation to suppliers in Acergy, SCM personnel cannot be the only ones with access. Other departments will have to be able to at least put inn experience data and make supplier alerts. Another implication of this will be as we all have experienced in other situations in life, that if you are able to participate in something the interest for this will increase. The possibility for other departments to participate in the supplier database will probably make them see the database as a common tool instead of the possession of SCM, and therefore be more willing to increase the use of the supplier database.

In the supplier categorization section there are a section to put additional comments and notes in relation to the approval process of the supplier. If there was an additional section in the performance assessments were all could put in relevant documents and comments to the use of the supplier, this would possibly increase the content and the use of the supplier database as an experience database.

In the performed interviews and the informal conversations it seems like SCM is the only department using the supplier database to some degree, and they mainly use it to check if the supplier is approved. It is therefore my opinion that if the supplier database is not extended to work as a main supplier experience database and thereby increase its use in other departments as well, I think the supplier database should be put to sleep and that Acergy should consider the use of Achilles instead.

15.3 Performance assessments

The interviewed representatives mean that one of the main benefits of the performance assessments is the possibility to check former experience with the supplier to learn from mistakes. This view supports that the supplier database should be the only one, and works as the main experience database in Acergy. In addition to this the SCM person actually emphasize that the possibility to give supplier feedback is the most important benefit. I agree with this, but in relation to the former discussion, we have seen that this possible benefit is unused.

15.3.1 The scoring process

One of the improvements that can be done to the performance assessment is to give the reviewers access to comment their scores. Today this has to go through a SCM gatekeeper and I believe this is reducing the amount of comments on the background of the time consumable communication with the SCM representative. The QC representative emphasize that it is especially important to write comments if you give a low score. But in addition to this I also think it is important to comment high scores, in respect to the control and transparency of the

system, and the fact that it gives others a possibility to see how the supplier has managed to deserve this score and so learn from best practice.

In relation to this discussion about the reviewer's possibility to comment their scores in the performance assessments it is my opinion that the reviewers should be able to comment on their scores. In addition to this possibility there should not only be a request for comments on high or low scores, but there should be a threshold in both end of the scale, and the reviewer should not be able to finish the scoring before he has commented on these scores.

15.3.2 Viewing of the Performance assessment

If the procedures are not improved but the management in Acergy can make the personnel follow these in the future, there will be a problem with the great amount of performance assessments produced. As we have seen the procedure state that after each use of a supplier, a performance assessment shall be made. It is obvious that the information put into these assessments will be disappearing in the chaos this will make.

Today the last performance assessment is displayed in the supplier categorization screen, but if you need to find more information there is a possibility to find all on the performance assessments made of the supplier by entering into the performance assessment part of the supplier database and search for the supplier. However according to the interviewed SCM representative and informal conversations in the SCM department this is hardly never done. In practice the last performance assessment is used in the search for experience data and then this is replaced with a new one and forgotten.

These properties definitively support the opinion that Acergy should review their system, and improve this by use of techniques from known successful methods or actually think about outscoring of this area.

15.3.3 Manipulation of the performance assessments

In Acergy there seem to be a consensus in the opinion that the possibility to manipulate the performance assessments in a wanted direction is quite easy. The scoring is highly subjective and there is as we have seen no demands to give comments on the scoring.

There is however an informal control mechanism in place by the fact that there as often are many reviewers on the performance assessment. This can make the approver react if there are some scores totally out of the same road as the others, but this can of course sometimes be the right picture in the situation, so this control mechanism is reliable of an experienced and observant approver.

Luckily the general feeling is that the possibility of this manipulation is used in no or in very little degree. This is of course uncertain and the possibility for abuse of such systems to personal gain is as we all know from the media a well known problem. To have a good score in the supplier database is of the utmost importance for some of the suppliers and can be the extra weight in an evaluation needed to tip the contract in their direction. Especially for small and middle sized companies this sometimes can be of great importance and the value of these contracts can often be considerable.

In the light of this I feel that the naive attitude in Acergy in relation to this area should be taken seriously and maybe the management could initiate some kind of process to improve the

personnel's awareness. This could be regular spot checks, initiation of an attitude campaign or just a regular information lecture in the department meetings.

15.3.4 Performance criteria

According to theory the choice of performance criteria is one of the most important factors in the design phase of a measurement system. As we have seen in chapter 10 there are a great number of such criteria to choose from, so it can be hard to pick out the best ones for each measurement.

If we take the five most measured properties in both of the two surveys reviewed in chapter 10.4 we see that quality and process control, continuous improvement, facility environment, customer relationship, delivery, service performance, price and compliance with the contract terms is the most used criteria. Personally I find it strange that the HSE is not mentioned in this "top ten listing" since my impression is that this is a really big issue in the industry, but I will not discuss this any further.

In chapter 10 the differences between the quantitative and qualitative elements was described and we saw that the traditionally quantitative elements has now been accompanied by new quantitative ones in addition to qualitative elements. We saw that one of the main benefits of these new measurement elements is that they support improvement of the relationship between the companies and thereby increase the possibility of success. The six qualitative elements problem resolution ability/technical ability, ongoing progress reporting, corrective action response, supplier cost reduction ideas, supplier new product support and buyer / seller capability was then recommended to be used in this context.

If we compare the above mentioned criteria against the ones used in Acergy's performance assessments, we see that continuous improvement, facility environment, service performance, price, corrective action response, supplier cost reduction ideas and suppliers new product support is not comprised by these. This should of course not come as a surprise after we have gone through the theory in chapter 10, where it was emphasized that there are a great number of criteria and that the selection of these should be tailored to each single company. However I was surprised to see that price was not included when I first read trough the criteria used in Acergy's performance assessments, but after a conversation with the SCM lead where he told me that product quality was priority number one, then it was delivery performance and then price I can understand that it is not included.

In relation to this it is interesting to see that the interviewed representatives mentioned quality of the delivered product, commercially behavior, HSE, technical competence, quality of work, ability to communicate, documentation and treatment of subcontractors to be the most important factors to measure. We see that this is a combination of the qualitative and quantitative elements and support the theory in the assumption of that the traditionally view is changing in the right direction.

Out of the mentioned criteria of the representatives the only one not covered by the existing criteria used in Acergy is the supplier's ability to communicate. This part was also actually emphasized in the interviews to be of great importance, and when you take into the account all of the theoretical benefits by improved communication mentioned in chapter 11 it seems rather sensible to me as well.

A study of Acergy`s supplier database

In addition to the selection of measurement criteria it is my opinion that the description of the used criteria in Acergy is too general and each criterion comprises too many situations. This is also supported of the interviewed QC representative, and she also think that it is quite random which score the supplier get because it is difficult to place the situation in one specific area. A solution to this is to differentiate the performance assessments.

In Acergy the same performance assessment is used no matter what kind of work, service or product the supplier delivers. This is in my opinion absolutely not recommended and could have been improved by the use of different performance assessments for the different situations. How this differentiation should be done is however an area with different thoughts and opinions. Some of the suggestions in the interviews are that the differentiation should be done with respect to:

1. The importance of the contract
2. Per commodity
3. Between regular and complex
4. Per commodity and thereafter again into regular and complex.

In my opinion the last suggestion will generate too many different forms, and the first one I think can be very difficult to manage with respect to putting the suppliers into different performance assessments on the basis of the importance of the contract. However I think both of the remaining suggestions can work and will improve the use of the performance assessments, but of course there are some drawbacks as well.

If there is made a tailored performance assessment for each of the 22 commodities, this performance assessment can be much less general that it is today. Each commodity leader can pick out the measurement criteria that are sensible, spot on and adapted to each single commodity. This way it would be easy to make the scoring of the supplier more accurate and so the usefulness of the performance assessment will improve. The drawback of this is that you will get 22 different performance assessments and maybe some will think this is too many and be reluctant to use the system. Another problem is that the need for many reviewers can decrease since the performance assessment is more specified on one area, and this can again decrease the transparency of the system with respect to the former mentioned informal control of the scoring.

If the performance assessment on the other hand only is divided in two, regular and complex the amount of different performance assessments should not be a problem, but the criteria will still has to be pretty general to be able to comprise a great number of varieties among the suppliers. However it will absolutely be an improvement of the existing system.

15.3.5 Search alternatives for the performance assessments

The search alternatives for the performance assessments have a possibility to improve. For instance if you need to find a supplier for a welding job in Stavanger and do a search in the supplier database over suppliers who are capable to do this kind of job, there is per today no possibility to exclude suppliers in the north of Norway. So after the search you need to manually find out where the supplier is located and this way pick out the relevant suppliers. This is a property that should be improved, and I don't think it should be hard to do this either.

I think there should have been at least one more search alternative under NEC, for instance per province, region or city. This is also the emerged opinions of the interviews and the informal conversations, and the interviewed SCM representative suggest to use per city on the background that this is used in other databases in Acergy.

15.4 Supplier list

In the interviews we saw that there was a request for the possibility to search for a supplier per commodity from the supplier list. If you don't know the name of the suppliers you wish to have on the competitive list, this possibility will ease the search for additional suppliers, so I think this is a good idea and will absolutely recommend this improvement of the supplier database.

There was also a request for displaying of the amounts of performance assessments done with each supplier, but personally I cannot see why this information needs to be displayed here. The number of former performance assessments should have no influence on the selection of suppliers to the bidding list. The content of the performance assessments and the scoring of this however can be of importance to this selection, but then you anyway need to take a closer look at the performance assessments.

15.5 Choice of measurement system

As we saw in chapter 10.5 there are a great number of different systems for measuring the suppliers in use today, and we saw that some systems are better suitable for certain companies and situations than others. If we were to place the system used in Acergy into one of the mentioned measurement systems I would say that it falls under the subjective measurement system. This system have the advantages of easy development and administration and that it could be completed by an unlimited number of reviewers, but also the disadvantages that it loses its impact after the first survey, it has no objective basis and ratings and that there are too many data entry points.

The categorical and the subjective methods described are as the observant reader has noticed very alike. What differentiates them are that the subjective method support an average score opposed to the categorical who gives one rating on each category. It is likely to believe that the subjective is a developed version of the categorical method. Monczka et al (1998, p.344) agree with Lysons and Farrington (2006, p.386) that this method is of limited value and justifies this by the low reliability coming from the subjectivity of each evaluator.

In addition to the above disadvantages, the fact that this system usually is a company's first attempt in the design of such a system and that the theory recommend this system for small companies with small supplier bases I would say that Acergy should consider improvement of the existing or changing to another measurement system. The improvement of the existing system can be done in many ways, but one of the easiest changes that can be done to get a better system is in my opinion to weight the measurement criteria.

The system will then be a weighted-point and a set of advantages will be added as we saw in chapter 10.5.2.

If Acergy decide to take the measurement to another level and we can assume that Acergy can be mentioned to be a big company with a big supplier base, the theory in chapter 10 recommends the use of the survey method. An alternative is then to use for instance Achilles as described in chapter 9.

15.6 Supplier development and improvement

The interview SCM representative states that: "Today there is no functioning system for making general improvements of the suppliers based on the scoring in the performance assessment", and he think there should be made some kind of supplier improvement system because this does not exist today.

In chapter 10.3.1 it was argued that measurement of the supplier will have a positive effect on the supplier's performance. This improvement can come from the pinpointing of problem areas and as an outcome of the mentioned "Hawthorne effect". When it comes to improvement of supplier performance it was argued in the same chapter that the sort of measurement system was not a prevailing factor respect to the improvement of supplier performance. This is possibly a consequence of that the "Hawthorne effect" is a major factor in performance improvement, so the supplier don't need to know which system is used, but that there is one in place at all.

This implies that Acergy can actually benefit from their measurement system in relation to supplier improvement even if the system is not working well internally in the company. This conclusion is built on the fact that one of the mentioned benefits from having a measurement system was according to chapter 10.2 that it could facilitate supplier performance improvement, and the fact that the "Hawthorne effect" undermines the importance of a well functioning measurement system.

This however requires that the suppliers are well informed that they are measured. The amount of information about how this measurement is done is another issue of discussion. We will not go into this here, but it is reasonable to send a reminder to the decision makers in relation to the proverb saying "you get what you measure". This could maybe support the idea that if you want a general performance improvement the suppliers should have as little information as possible of which criteria they are measured on.

In the interviews the main opinion is that today Acergy is not laying much effort in the improvement of their suppliers. Something is however done to some extent in relation to HSE and the Engineering representative say that they used to help the suppliers to raise their technical competence, but after a number of incidents where this help was misused they are now being much more reluctant to do this. Anyway there seem to be an agreement about that Acergy should raise their effort in the area of supplier performance improvement. This also makes sense in relation with the QC representative's statement "We are not better than our suppliers".

How this supplier performance improvement should be done and which suppliers that should be the target of this is an issue for discussion. Today this is the responsibility of the supplier relation unit and to some extent they are doing a systematic process in relation to this with the 24 most critical suppliers. According to the SCM representative the supplier improvement should be done in a systematic way and be lead of a team including the SCM lead. Personally I think the SCM lead should concentrate on other things and leave this work to the supplier relation unit. In relation to this it is my opinion that this unit is undermanned since they struggle to find time with the existing work tasks, so a recommendation is to consider an expansion of this unit.

As mentioned they are now struggling to manage the 24 most critical suppliers, so a decision to make an effort in the improvement of other suppliers is not an option at the moment. The interviewed QC representative thinks that the focus also should be set on all suppliers with frame agreements and I agree with that. The more the better they say, and this is applicable in this

context, but this calls for an expansion of the supplier relation unit or a transmission to a totally different system.

15.7 Savings an overrun reports

According to the procedures the savings an overrun reports have four main purposes as we saw in chapter 3, but in my view on the basis of the gathered information these reports does not affect the SCM departments daily work and so I would say that at least two of the stated purposes is not being successfully used. These two are:

1. "Create a focus in procurement activities which could lead to achieving benefits to the profitability of Projects".
2. "Support the SCM goal of driving performance improvement and delivering an increased contribution to the Group's business results".

According to the interviewed SCM representative there is not much to do in relation to create a bigger focus or drive the improvement of internal improvement. The reason for this is that the SCM personnel has to act in accordance to a set of bidding round rules both in the tendering phase and in the bidding phase. Personally I can see the use for these reports for the use of the management, but I don't believe it affect the executing personnel to any significant way.

15.8 Frame agreements

The procedure GR-SCM-001, guidelines for framework agreements states: "Lessons learnt and suggestions for future improvements should be directed to the Acergy representatives for each Framework Agreement who will ensure that this information is communicated widely within Acergy."

This is however never done in practice according to the interviewed SCM representative. The great potential of gathered information if the procedure were followed calls for something to be done in relation to this. Maybe the frame agreement holder should be automatically noticed when the supplier is used and be responsible for a follow up afterwards. This will of course put some extra workload to this person, but I would think the long term gain should overrule this. There are possibly many other methods to make this work, so I don't think Acergy should let this ignoring of the procedure continue.

Today the frame agreement holders is only from the SCM department, but in relation to the above I think it could have been a possibility to change this so that the main users of the frame agreement could be the holders. In practice this would mainly be the SCM department, but in some cases other departments. According to the interviewed QC representative the QC department use three frame agreements. I think according to this that it would be natural if these frame agreement had a holder from the QC department, but the main argument against this is probably that it would be better if one department is the owner of the supplier database and thereby also all of the frame agreements.

15.9 Reduction of the supplier database

Acergy's total supplier database counts in June 2009 over 3364 suppliers while 1121 of these are under NEC and this will therefore be the counting number in this discussion. As we saw in chapter 13 there are many factors affecting the optimal number of suppliers in a database and the decision of reducing the base.

A study of Acergy`s supplier database

When this is said, the supplier database probably consists of a decreased number of actual suppliers since the possibility for duplications of suppliers is striking. When it comes to the question if the supplier database should be reduced the view is divided among the interviewed representatives. While the Engineering representative wanted more suppliers in the supplier database the others see the benefit of a cleanup and reduction of the supplier database.

In chapter 13 the expression optimization was defined and from my point of view this is a very recommendable process for Acergy to do with their supplier database. Out of the ten mentioned advantages that can be the outcome of such a process, I think savings in administration costs, development of long-term partnerships and supplier associations and the fact that the remaining suppliers possibly are the best in class is the main reasons why Acergy should do this.

In a process like this it is also very important to take into account the potential risks. Some of these were described in chapter 13.2 and in my opinion the potential supplier dependency and the absence of competition is the ones to have most focus on.

If Acergy decide to optimize/reduce the supplier database they should follow some general steps as mentioned in chapter 13.3 where the first and most important one is the decision of how to exclude suppliers from the supplier database. Four methods were described, but in my opinion none of these will fit the needs of Acergy in relation to a reduction of the supplier database. The described method of Talluri and Narasimhan (2005, p.130) however I think is a great method to implement for Acergy, but not before the main reduction is finished.

If Acergy should go for a reduction of suppliers, the recommended methods in the interviews is that:

1. The commodity leaders should make a list of the suppliers they want to exist
2. A manual reduction based on the time since the last use of the supplier
3. A manual cleaning of the duplicated suppliers

In my opinion these suggestions is good, but not usable if they stay alone, but a method where we combine these three could be a good starting point for a development of a tailor made reduction strategy for Acergy. For all I know it could prove to be enough with removal of the duplicates because I have no opinion of the amount of this, but most likely the supplier database will benefit from a use of many different methods.

15.10 Supplier relations

According to the theorists and Acergy themselves it is really important to maintain a good relationship with their suppliers. But in the interviews the relationship between Acergy and their suppliers was described in words like unprofessional, pragmatic and arrogant. The reason for this was stated to be that there are too high documentation demands for certain suppliers and that personnel act with the suppliers with no authority to do this, it seems like there are some room for improvement in this area.

If we disregard the suppliers in the supplier management program, Acergy`s supplier database is today not used in the purpose of improving the relationship with the suppliers. The potential of the structural capital is not exploited, we saw for instance that there is hardly ever feedback from the performance assessments, there hardly seem to be any effort in supplier development, and the sharing of information is limited.

In addition to this there seem to be very little focus on the cognitive capital in relation to aligning of Acergy`s and the supplier`s goals and values.

All of this will eventually lead to a very low relational capital such as trust and confidence, and the outcome of this could be that Acergy loose the possible value and benefits of these areas. This should be taken seriously since the theory emphasize that this value can consist of considerable amounts, and without this the company will be impaired in the competition with other companies. In chapter 12 we saw that resource miserly activities such as sharing of simple information are all it takes to improve the suppliers cost performance. This should absolutely make the decision makers in Acergy to set a goal to at least improve the system to make this part successful. Other supplier development activities can then be made to improve the suppliers further, but I think it will be smart to take one step at the time.

In chapter 11.3 we see that some of the experts in the area of supplier relations think that the next step is to make systems that rely on trust. This seems sensible when you look at all the benefits of a theoretical example, but in my opinion I cannot see how this can be done in the business culture existing today. However it is not difficult to see that trust in a relationship between two companies would be preferable and I think Acergy should put more effort in activities which can increase the trust with their suppliers.

According to Sako and Helper (1998, p.406) the main activities should be increased exchange of information and technical assistance, in addition to other activities to build Acergy`s reputation among their suppliers.

15.11 Training and communication of the supplier database

A very important part of improving the use of the supplier database in Acergy deals with the training and communication of the supplier database within the various departments internally. According to the interviews there is an absolute need for improvement in this area, since all of the representatives answered that there was too little information and training in the use of the supplier database.

The SCM representative even said that in addition to focusing on other departments there should be a focus on training in the use of the supplier database within the SCM department. In his opinion it is taken for granted that the SCM personnel are familiar with the supplier database, but in reality this is far from the truth and most of the personnel could need some training in use of the supplier database.

This statement supports my feeling after various informal conversations in the department, and I have to say I was a bit surprised by this. The supplier database is after all one of the key tools for the SCM personnel, and according to the familiarization scheme described in chapter 2.6, they have to confirm on a form that they are familiar with the supplier database. Beyond this the use of the supplier database is treated in full detail in the process navigator described in chapter 2.5.

When it comes to the communication of the supplier database the same figure used in description of the supplier feedback in figure 17 with some minor adjustments is used to support the discussion of this chapter. The figure is shown on the next page.

A study of Acergy's supplier database

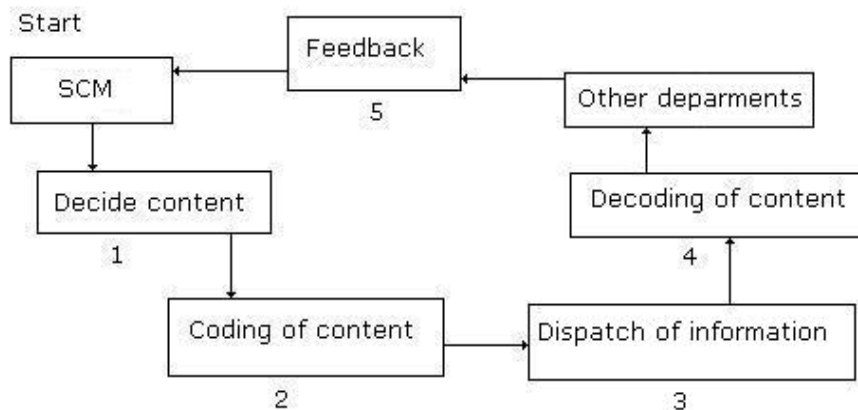


Figure 19 Source: Source: Jacobsen and Thorsvik 2007, p.251 (Modified)

In step one and two, deciding and coding of content, the SCM department representative/representatives will have to compose and prepare the information of the supplier database that they want to spread out to the other departments. There are however many various elements that should be taken into consideration when doing this.

Employees in other departments have different education and can have problems understanding specific technical terms. Different experience and insight with the company processes will probably contribute to that they also will have a different point of view on numerous elements than the SCM personnel. Another issue to bear in mind is that it seems like the other departments see the supplier database an SCM property. This is also to some extent true, but the transferred information should be of such nature that it succeeds in a way of not making the other departments to be reluctant for the use of it.

In step three, dispatch of information, the SCM representatives need to decide how this information should be transferred to the receivers. Should there be information meetings with each department or is it enough with a message on the bulletin to all staff? In addition to this there are many other communication possibilities that should be considered by the SCM representatives. The interviewed representative's opinion is that this information could be given in the various department meetings or in the project meetings and should be repeated with given intervals.

In step four, decoding of content, the overload problem appears. It is a well known problem that there is too much information in certain communication channels. The natural treatment of this problem is to become selective and focus on the most important information (Jacobsen & Thorsvik 2007, p.257). This implies that other department's attitude to and confidence in the SCM department is of great importance to the success of this information transfer, so I will again emphasize the importance of step two where the coding of the information is done.

Step five, internal feedback, indicates the importance of feedback and that this should be a continuous process. Feedback is important to get some kind of confirmation that the information is received, and it gives the receivers a possibility to give constructive acknowledgement so that the process can be continuously optimized. This feedback is being natural ensured in Acergy with the fact that it is a project based organisation, so the SCM personnel work side by side with the other departments and therefore have a good possibility to gather this sort of feedback.

Chapter 16 Recommendations

In this thesis we have seen that Acergy`s procedures is not being followed in relation to the supplier database and in some cases the procedures actually contradict itself. As an example, if the supplier status “do not use” is set, procedure GR-SCM-007 page 8 state to initiate contact with the supplier and the initiation of an improvement plan, while in page 13 it is stated that this status should be set if such an improvement plan fails.

The procedures should be updated because if the personnel should increase the use of the procedures, the least they can expect is that the procedures is up to date and can be trusted. This is supported by the interviewed Engineering representative who feels that today he has to filter much of the information in the supplier database. This frustration is also brought into light with the final conclusion of the interviewed QC representative: “The supplier database should have been erased and implemented all over again”.

Below is a list of the recommended improvements for the supplier database that has evolved through the process of my work with it. It is important to emphasize that this is my subjective findings and opinions, as I have no practical experience working for a company like Acergy. It is also important to mention that it is not in my opinion that Acergy`s management should uncritically implement all of my recommendations, but to consider them. The recommendations are:

- Extend the supplier relation unit and increase the communication with the chosen 24 most critical suppliers, in addition to include all major frame agreement suppliers into this program.
- Set a threshold in relation to the scoring in the performance assessments, and use a face to face communication as the communication channel for feedback to suppliers under this threshold. Use e-mail as the main communication channel for the feedback to the suppliers that are over this threshold that is not covered by the supplier management program.
- Put in an additional criterion to measure the ability to communicate.
- Include the experience databases of the Engineering and QC departments into the supplier database.
- Give other departments access to include experience data into the supplier database.
- Put in a section in the performance assessments where it is possible to attach documents and additional information.
- Update the procedures used in relation to this thesis, and let there be some kind of consequence if the employees don`t act according to the procedure.
- Give the reviewers a possibility to comment their scores directly without involvement of the SCM representative.

A study of Acergy`s supplier database

- Set an upper and lower threshold in the scoring of the performance assessments where you need to make comments before you are allowed to finish the scoring.
- Incorporate a process to increase the awareness of the possibility to misuse of the scoring system of the suppliers, on the basis of that this will increase the informal control of this.
- Differentiate the performance assessments per commodity, or at least between regular and complex procurements.
- Add a search option for the performance assessments where it is possible to search suppliers per city.
- Add a search option to the supplier list where it is possible to search supplier per commodity.
- Put a weight to each of the measurement criteria in the performance assessments in relation to the importance of the criterion.
- Inform the suppliers that they are measured according to a performance assessment system.
- Add a function that automatically gives a notice to the frame agreement holder when the supplier is used, and make the frame agreement holder responsible for follow up on the information gathering.
- Reduce the supplier database according to the discussion in chapter 15.9, and then implement the method of Talluri and Narasimhan described in chapter 13.3 to maintain a healthy supplier database.
- Increase the training and communication of the supplier database both internally and externally in the SCM department according to the discussion in chapter 15.11.
- Increase the exchange of information and feedback to the suppliers.
- Nominate a single person with access to include new suppliers into the supplier database to ensure quality.

Should the supplier database remain in its current form it can be questioned if it can exist. One option could then be to use the Achilles system, something which I personally would recommend.

By using this system Acergy will increase their cognitive capital mentioned in chapter 11. They will get the benefits of using the same system as their own customers and suppliers and have the possibility to align with other companies on another level than today.

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Appendix 1
List of the useful assessment criteria found by
Simpson et al (2002)

A study of Acergy's supplier database

Evaluation Item	Category	Number of Forms Containing the Item	Percentage of All Forms Containing the Item
Customer/PO Requirements Met	Quality	66	78.6
Delivery Timeliness	Delivery	52	61.9
Corrective/Preventative Measures	Quality	46	54.8
Quality Management	Quality	46	54.8
In-Processing Quality	Quality	41	48.8
Outgoing Quality	Quality	41	48.8
Quality Documentation	Quality	41	48.8
Quality Planning	Quality	40	47.6
Segregation of Nonconforming Products	Quality	39	46.4
Incoming Quality	Quality	38	45.2
Timely Communication of Problems/Changes	Customer Relationship	38	45.2
Quality Records	Quality	37	44.1
Cause Defect Analysis	Quality	36	42.9
Adequate Capacity	Facility/Environment	32	38.1
Industry Standards	Certification	32	38.1
Statistical Process	Quality	32	38.1
Employee Training	Education/Training	32	38.1
Management Quality Commitment	Leadership/Management	31	36.9
Adequate Equipment	Facility/Environment	30	35.7
Inventory Mgmt System	Inventory	30	35.7
Inventory Tracking	Inventory	30	35.7
ISO	Certification	29	34.5
Complaint Handling Process	Customer Relationship	28	33.3
Customer Focus	Customer Relationship	28	33.3
Size of Organization	Financial Condition	28	33.3
Accurate Delivery	Delivery	27	32.1
Share Information	Customer Relationship	27	32.1
Technical Assistance	Technology	27	32.1
Cost Reduction Acts	Price	26	31.0
CI Design Review Procedures	Continuous Improvement	25	29.8
Open, Receptive, Responsive	Customer Relationship	25	29.8
Performance/Financial Measures	Financial Condition	25	29.8
Policies/Procedures	Leadership/Management	25	29.8
Preventative Maintenance Plan	Facility/Environment	25	29.8
Ordering Review Procedures	Ordering	25	29.8
CI Quality	Continuous Improvement	24	28.6
Prompt Ordering Process	Ordering	24	28.6
Commitment to Improvement	Continuous Improvement	23	27.4
Inspection Prior to Ship	Ordering	23	27.4
Quality Adequate Equipment	Quality	23	27.4
CI Manufacturing Process/Equipment	Continuous Improvement	22	26.2
Environmental Mgmt Plan	Facility/Environment	22	26.2
Financial—Other	Financial Condition	22	26.2

A study of Acergy's supplier database

Evaluation Item	Category	Number of Forms Containing the Item	Percentage of All Forms Containing the Item
Housekeeping Procedures	Facility/Environment	22	26.2
Competitive Pricing	Price	21	25.0
Optimizes/Improves Process	Continuous Improvement	21	25.0
Consistency of Product	Quality	19	22.6
Inventory Accountability	Inventory	18	21.4
Adequate Documentation	Delivery	18	21.4
Cost Controls Tracking	Price	18	21.4
Fully Protective Packaging	Packaging	18	21.4
Inventory Warehouse Adequacy	Inventory	18	21.4
Optimizes/Improves Products	Continuous Improvement	18	21.4
Stock Rotation	Inventory	18	21.4
Staff Responsive	Staff	18	21.4
Accurate Documentation	Delivery	17	20.2
Staff Expertise	Staff	17	20.2
Notification Evaluation Process	Delivery	17	20.2
Regulatory Requirements Met	Facility/Environment	17	20.2
Return Procedures	Ordering	17	20.2
Credit Standing	Financial Condition	16	19.1
Accurate Invoicing	Invoice	16	19.1
Proactively Innovative	Continuous Improvement	16	19.1
Long-Term Stability	Financial Condition	15	17.9
Measures of Consumer Satisfaction	Customer Relationship	15	17.9
Ordering Control System	Ordering	15	17.9
Safe Procedures and Equipment	Facility/Environment	15	17.9
Neat, Safe Inventory	Inventory	14	16.7
Sufficient Documentation	Customer Relationship	14	16.7
Timely Ordering	Ordering	14	16.7
Facility Control Process	Facility/Environment	13	15.5
Fill Rate	Delivery	13	15.5
Inventory Accuracy	Inventory	13	15.5
Quality—Other	Quality	13	15.5
CI Administrative Process	Continuous Improvement	12	14.3
CI Distribution/Delivery	Continuous Improvement	12	14.3
EDI Capability	Technology	12	14.3
Facility Environment—Other	Facility/Environment	12	14.3
Other Packaging	Packaging	12	14.3
QS-9000	Certification	12	14.3
CI Costs/Profit	Continuous Improvement	11	13.1
CI Other	Continuous Improvement	11	13.1
Leading-Edge Tech	Technology	11	13.1
Shipping Controls/Inspect	Delivery	11	13.1
Constant/Stable Workforce	Financial Condition	11	13.1
Staff Problem Solver	Staff	10	11.9
Delivery—Other	Delivery	9	10.7

A study of Acergy's supplier database

Evaluation Item	Category	Number of Forms Containing the Item	Percentage of All Forms Containing the Item
Staff Flexible/Cooperative	Staff	9	10.7
Health/Safety Program	Education/Training	9	10.7
Payment Process	Invoicing	9	10.7
Responsive to Discrepancies in Invoices	Invoicing	9	10.7
Employees—Other	Employees	8	9.5
Production Schedules	Quality	8	9.5
Certification—Other	Certification	8	9.5
Staff—Other	Staff	8	9.5
Aware of Industry Trends	Continuous Improvement	7	8.3
Bar Coding	Inventory	7	8.3
Condition of Product	Delivery	7	8.3
Cost Variance	Price	7	8.3
Notification of Short/Over	Delivery	7	8.3
Staff Follow-Up	Staff	7	8.3
Strategic Business Plan	Leadership/Management	7	8.3
Open Idea Generation Process	Continuous Improvement	6	7.1
Ordering—Other	Ordering	6	7.1
Employee Recognition/Reward	Employee	6	7.1
Safe Work Habits	Employee	6	7.1
Communication Technologies	Technology	6	7.1
Inventory Computer Reports	Inventory	5	6.0
Customer Relations—Other	Customer Relationship	5	6.0
Direct Shipment	Delivery	5	6.0
EDI Integration	Technology	5	6.0
Inventory—Other	Inventory	5	6.0
Pricing—Other	Price	5	6.0
Professional Staff	Staff	5	6.0
Professional Management	Leadership/Management	5	6.0
Automated Reordering System	Ordering	4	4.8
Use of Consumer Data	Customer Relationship	4	4.8
Cross-Functional/Team Orientation	Employee	4	4.8
Good Value	Price	4	4.8
Leadership—Other	Leadership/Management	4	4.8
Order Follow-Up	Ordering	4	4.8
Staff Seeks Feedback	Staff	4	4.8
Timely Invoicing	Invoicing	4	4.8
Warranty—Other	Warranty	4	4.8
Diverse Markets	Financial Condition	3	3.6
Mission	Leadership/Management	3	3.6
Stable/Constant Staff	Staff	3	3.6
Training Customers	Education	3	3.6
Warranty Cost Expectations Met	Warranty	3	3.6
DOT Requirements	Delivery	2	2.4
Education—Other	Education	2	2.4
Location—Other	Location	2	2.4
Technology—Other	Technology	2	2.4
Win/Win Perspective	Customer Relationship	2	2.4
CI Environmental	Continuous Improvement	1	1.2
Confidentiality	Customer Relationship	1	1.2
Drive Time	Location	1	1.2
Market Share	Financial Condition	1	1.2
Opportunity ID Process	Continuous Improvement	1	1.2
Stock Distance	Location	1	1.2
Warranty Cost Reduction	Warranty	1	1.2

Appendix 2
The scoring forms for the performance assessments

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Post-award Health Safety & Environmental Activities

Subcontractors' and Suppliers' compliance with their own published H.S.E. procedures, Group H.S.E. requirements and with statutory procedures/requirements.

Unacceptable		Undesirable		Acceptable		Excellent		
Poor safety record during execution		Acceptable safety record during execution		Good safety record during execution		Excellent safety record during execution		
Failed to comply with their own H.S.E. policy, training program, audits or with Statutory requirements.		Compliance with their own HSE policy, training program, audits generated non-conformances.		Compliant with their own HSE Policies, training program and audits		Highest compliance at all levels to HSE with High level commitment to HSE policy and training.		
Failed to meet Group H.S.E. requirements		Met Group safety requirements after Group intervention		Met Group safety requirements		Actively pursued Group safety requirements		
Inadequate personnel safety equipment available. No issued guidelines or safety meetings		Adequate personnel safety equipment available. Guidelines incomplete and limited use of safety meetings.		All personnel provided with safety equipment and issued with guidelines. Some safety meetings implemented		All personnel provided with highest standard safety equipment and written HSE instructions/guidelines. Safety meetings fully implemented		
L.T.I.'s incurred. Safety Alerts exceeded industry norms		Safety Alerts incurred but not investigated		Safety Alerts incurred and investigated		Safety Alerts incurred fully investigated and corrective action implemented		
1	2	3	4	5	6	7	8	9

Pre-award Commercial

Assessment in support of Tendering requirements. Subcontractors' and Suppliers' responsiveness to requests for Budget or Firm quotations.

Unacceptable		Undesirable		Acceptable		Excellent		
Incomplete response		Full but poor response		Full adequate response		Good response		
Late untimely response in spite of expediting by us.		Timely response achieved only after expediting by us.		Timely response without Group expediting		Proactive in supplying timely response without expediting by us		
Rebid required with extensive clarification and negotiation to achieve useable content		Bid only acceptable after clarification and negotiations		Good quality bid requiring limited pre-award clarification & some negotiations.		High quality bid requiring little clarification and pre-award negotiations		
Formal bid requested but Budget price submitted. Limited validity offered. Numerous unpriced exceptions. High peripheral risk.		Formal bid requested but Budget price submitted. Minimal validity offered. Medium peripheral risk		Bid firm price, Limited Validity. Low peripheral risk		Bid Firm price & Validity for full Tender period with zero risk		
Lacked understanding of T & C's with many objections and variations required		Many exceptions and variations to T & C's.		Minor exceptions and variations to T & C's		Accepted T & C's without qualification		
Refused to negotiate delivery		Provided delivery Lead time but failed to demonstrate milestones		Offered compliant delivery Lead time and submitted milestone schedule		Offered improved delivery Lead Time and submitted integrated milestone schedule		
1	2	3	4	5	6	7	8	9

A study of Acergy's supplier database

Subcontractors' & Suppliers' Management Of The Work And Schedule

Suppliers' and Subcontractors' performance in completing the scope of supply in accordance with the contractual delivery date.

Unacceptable		Undesirable		Acceptable		Excellent		
Failed to preplan their work activities and resources to meet the contractual delivery program		Preplanned their work activities and resources to meet the contractual delivery program but failed to monitor and recognize delay.		Preplanned their work activities and resources to meet the contractual delivery program and monitored progress		Preplanned their work activities and resources to meet the contractual delivery date with regular monitoring and proactive efforts to improve.		
Lacked meaningful scheduling and progress reporting systems		Scheduling and progress reporting systems in place but not used successfully to measure progress.		Scheduling and progress reporting systems in place and used successfully to monitor and maintain progress		Comprehensive program and progress reporting systems in place used proactively to improve the contractual delivery		
Failed to implement a recovery program when delays identified against key activities.		Implemented a recovery program only after intervention by us.		Implemented a recovery program following discussions with us		Maintained or improved the program supported by comprehensive reports published throughout the production period.		
Excessive intervention by us required to recover delivery and programming delays		Regular monitoring by us required to recover delivery and program delays.		Minimal intervention by us required throughout the production period.		No intervention by us required		
Late completion of deliverables by the contractual delivery date		Delays incurred but mostly recovered to meet delivery date		Met contractual completion dates with majority of deliverables		Improved on contractual delivery program with all deliverables		
1	2	3	4	5	6	7	8	9

Post-award Commercial

Subcontractors' and Suppliers' performance in dealing with us, in respect of scope changes, related claims, variations and backcharges.

Unacceptable		Undesirable		Acceptable		Excellent		
Unresponsive to scope change. Failed to quantify cost and schedule impact until work completed		Responsive to scope change. Reluctant to quantify cost and schedule impact		Responsive to scope change. Quantified cost and schedule impact within the required period.		Responsive to scope change. Quantified cost and schedule impact within the required period and offered options to minimise schedule impact.		
Failed to adequately document and present a comprehensive and auditable claim for extra works. Refused negotiation		Poorly presented claims requiring extensive clarification and negotiation		Presented comprehensive claim requiring little clarification and negotiation by us		Presented comprehensive claims with priced options to minimise schedule impact.		
Exploited cost and schedule impact to enhance profit margins and extend production program		All claims exploited cost and schedule impact which was only reduced after extensive negotiation by us.		All claims adequately presented requiring minimal negotiation by us		Full transparency in claim costing and schedule impacts. No negotiation required by us.		
Refused negotiation		Significant commercial penalties imposed by us.		Minor commercial penalties imposed by us .		No commercial penalties imposed by us.		
Full commercial penalties imposed by us.		Our commercial penalties and backcharges partially accepted after extended negotiation.		Our commercial penalties and backcharges accepted after some negotiation.		Invoicing and other commercial transactions, fully detailed, well presented, timely and fully in accordance with our instructions.		
Our penalties and Backcharges contested or refused		Invoicing and other commercial transactions untimely and poorly presented to meet with our instructions		Invoicing and commercial transactions generally accurate and timely to meet with our instructions.		In comparing original Bid price with Final price there is a cost saving		
Invoicing and other commercial transactions untimely, inaccurate and poorly presented to meet with our instructions		In comparing original budget price with Final price there is an increase in cost		In comparing original Bid price with Final price there is no increase in price				
1	2	3	4	5	6	7	8	9

A study of Acergy's supplier database

Management And Control Of Sub-subcontractors & Sub-suppliers

Subcontractors' and Suppliers' ability to control significant sub-subcontractors & sub-suppliers in their supply chain that impact or affect the prime subcontractors/suppliers' performance.

Unacceptable		Undesirable		Acceptable		Excellent		
Failed to meet the contractual date through failure to control their sub-subcontractors/ sub-suppliers.		Ineffective control of their sub-subcontractors/ sub-suppliers without prompting by us.		Demonstrated an effective level of control of their sub-subcontractors/ sub-suppliers.		Demonstrated a high level of integration with sub-subcontractors/sub-suppliers.		
Inappropriate selection process leading to delays and quality problems.		Selection process failed to address issues that ultimately caused delays and quality problems.		Selection process identified elements of risk and potential mitigation		Selection process detailed in procedures, supported by regular audits and risk analysis.		
Sub-subcontractors/ sub-suppliers failed to perform effectively following constant intervention by us.		Sub-subcontractors/ sub-suppliers failed to perform effectively after intervention.		Effectively expedited sub-subcontractors/ sub-suppliers to meet delivery and program requirements.		Integrated processes with sub-subcontractors/ sub-suppliers identified delays early. Interactive process addressed and resolved problems jointly.		
Failed to recognise the necessity to intervene without prompting by us		Intervention not consistent without prompting by us.		Requested our assistance with intervention when required.		No intervention required by us.		
Intervention was not effective delivery delays not recovered		Inconsistent intervention only partially recovered delays		Consistent intervention once problem identified		Continuous performance process assessments made		
1	2	3	4	5	6	7	8	9

Subcontractors' & Suppliers' Engineering, Technical Execution And Competence

Subcontractors' and Suppliers' engineering systems, comprehension of the scope of work and development of the scope of work.

Unacceptable		Undesirable		Acceptable		Excellent		
No control processes or systems in place to control the design work		Inadequate processes or systems in place to control the design work		Adequate processes and systems in place to control the design work		Full, well developed and comprehensive processes and systems in place to control the design work.		
Design data poorly presented. Did not reflect the scope of work requiring major comment and intervention or full rejection of the initial data provided by us.		Design data provided missed significant aspects of the scope of work requiring intervention and abnormal recycle of data by us.		Good design data submitted with minor omissions. Required minor comment from and normal recycle of data by us.		Good design data submitted requiring normal processing only with no significant comment from minimum recycle of data by us.		
Lacked adequate technical support to respond to deficiencies raised by us. Reluctant to offer us access to technical documentation.		Low level of technical support offered to respond to deficiencies raised by us. Gave us Limited access to technical documentation		Provided good technical support in response to deficiencies raised by us. Gave us full access to technical documentation		No intervention by us required but proactively offered and available.		
Poor and untimely response to comments from us		Untimely and incomplete response to comments from us		Timely and complete response to comments from us		All data submitted accurately and in a timely manor		
1	2	3	4	5	6	7	8	9

A study of Acergy's supplier database

Quality Assurance & Control

Subcontractors' and Suppliers' conformance to their own Quality procedures and systems, and conformance to Group Quality requirements.

Unacceptable	Undesirable	Acceptable	Excellent					
<p>Significant non-conformances or non-compliance to specifications & scope</p> <p>High level of intervention required by us over and above Quality Plan requirements.</p> <p>Poor, ineffective and untimely inspection notification procedure</p> <p>High number of material and testing concession requests</p> <p>Low standard of Quality records and documentation</p>	<p>Many cases of non-conformance or non compliance to specifications and materials.</p> <p>Some intervention required by us to maintain conformance to Quality Plan</p> <p>Untimely inspection notification procedure outside of Quality plan</p> <p>Many material and testing concession requests</p> <p>Basic Quality records and documentation</p>	<p>Some minor exceptions and non-compliance's to specifications and materials.</p> <p>Minor intervention by us to maintain conformance to Quality plan</p> <p>Timely inspection notification procedure partially related to Quality plan</p> <p>Some material and testing concession requests</p> <p>Adequate Quality records and documentation</p>	<p>No non-compliances to specifications or materials</p> <p>No intervention by us above Quality plan requirement</p> <p>Timely inspection notification procedure related to Quality plan</p> <p>No material and testing concession requests</p> <p>Fully effective Quality records and documentation</p>					
1	2	3	4	5	6	7	8	9

Documentation

Subcontractors' and Suppliers' performance in management & control of the production and submittal of contractual documentation and data.

Unacceptable	Undesirable	Acceptable	Excellent					
<p>Consistently failed to provide documentation and data in the required format</p> <p>Consistently failed to submit documentation and data on the due dates</p> <p>Consistently failed to report status on documentation and data</p> <p>Significant expediting required by us.</p> <p>Late final documentation</p>	<p>Partially provided documentation and data in the required format</p> <p>Some delays in submission of data</p> <p>Reported documentation status only when requested by us.</p> <p>Documentation provided after some expediting by us.</p> <p>Some final documentation and data supplied late</p>	<p>Generally provided documentation and data in the required format.</p> <p>Timely submission of documentation.</p> <p>Satisfactory system to report and control documentation.</p> <p>Little expediting required by us.</p> <p>Final documentation and data submitted on time</p>	<p>Always submitted documents and data in the required format.</p> <p>Timely delivery and close out of all documentation</p> <p>Demonstrated ability to control and report document status</p> <p>No expediting required by us.</p> <p>Final documentation and data submitted on time</p>					
1	2	3	4	5	6	7	8	9

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Installation & Commissioning

Subcontractors' and Suppliers' performance in supporting installation & commissioning activities.

Unacceptable		Undesirable		Acceptable		Excellent		
Quality and clarity of installation and commissioning manuals was poor and affected activities to be performed by us.		Installation and commissioning manuals were sparse and provided in sufficient detail to effect the required work without additional data.		Provided adequate installation and commissioning manuals.		Provided fully detailed installation and commissioning manuals		
Personnel provided lacked competence & experience to undertake the required work		Personnel provided required home office technical support in completing the work required		Personnel provided were efficient and familiar with the equipment		Personnel provided were efficient and familiar with the equipment having been present/assisted during works manufacture.		
Mobilisation of personnel was late & delayed the start of the required work.		Mobilisation of personnel was un co-ordinated resulting in in-efficient working and delay.		Mobilisation arrangements in line with requirements,		Excellent Mobilisation arrangements, Pre planning and full support provided easily meeting agreed schedules.		
Availability of appropriate tools and materials delayed the start of the required work		Personnel poorly supplied with tooling and spares		Adequate tooling and spares provided for the work required		Provided access to sufficient tools spares and installation materials.		
Significant installation and commissioning problems incurred resulting in schedule delay.		Some installation and commissioning problems incurred Slight schedule impact incurred.		Some minor installation problems but good technical support quickly provided to resolve problems. No schedule impact incurred.		No installation problems.		
Appropriate home office support not provided		Some home office support provided		Home office support readily available		Proactive home office support		
1	2	3	4	5	6	7	8	9

Start-Up /Initial Operations And Warranty

Subcontractors' and Suppliers' equipment as purchased and observed by Group during initial operations.

Unacceptable		Undesirable		Acceptable		Excellent		
Start-up was not on time due to equipment performance problems		Start-up was not delayed but equipment performance problems were encountered		Start-up on time		Early start-up facilitated by absence of problems		
Performance requirements not met over initial operational period		Performance requirements not met in minor cases during initial operational period		Performance requirements as expected		Performance surpassed		
Inadequate start up support		Limited start up support		Adequate start up support		Good start up support		
No service support		Limited service support		Service support available		High level of service support available		
1	2	3	4	5	6	7	8	9

Appendix 3

Procedure GR-SCM-001

**Introduction to
Supply Chain Management**

Supply Chain Management

Introduction to Supply Chain Management

GR-SCM-001

Prepared by:	Gordon Humble	SCM Process & System Manager
Approved by:	Philippe Hoffmann	Chief Purchasing Officer
7.0	Approved for Implementation	Dec.16.08
Ver.	Reason for Issue	Issue Date

Acergy	Supply Chain Management	Dec.16.08
GR-SCM-001	Ver 7.0	Introduction to Supply Chain Management
		Page 107 of 161

TABLE OF CONTENTS

1.	INTRODUCTION	108
2.	SCM PRINCIPLES AND RULES	110
3.	SCM PROCESSES	113
3.1	SUPPLIER MANAGEMENT PROCESS	113
3.2	PROCUREMENT OF STANDARD PRODUCTS AND SERVICES	114
3.3	PROCUREMENT OF NON-STANDARD PRODUCTS AND SERVICES.....	114
3.4	PROCUREMENT OF THIRD PARTY VESSEL SERVICES.....	114
3.5	GENERAL.....	114
3.6	FAMILIARISATION	116
3.7	CONTINUOUS IMPROVEMENT	116
3.8	SCM FUNCTIONAL APPROVAL OF AWARDS	116
3.9	INTERNAL COMMUNICATION	117
4.	ACERGY STANDARD TERMS AND CONDITIONS	118
4.1	INSTRUCTIONS FOR SELECTION OF ACERGY TERMS AND CONDITIONS	118
5.	GUIDELINES FOR FRAMEWORK AGREEMENTS	122

introduction

The purpose of this document is to describe the Supply Chain Management Processes which must be used throughout Acergy.

The SCM Processes are accessed via the 'Process Navigator for SCM' and are presented in activity based flow-chart format, supported by Work Instructions and Tools. The tools are forms, templates and IM-systems, all forming part of the Acergy Management System.

The SCM Processes are based on the SCM Principles and Rules which consist of seven principles and twenty-nine rules.

The four main SCM Processes are: -

- Supplier Management Process
- Procurement of Standard Products
- Procurement of Non-standard Products
- Procurement of Third Party Vessel Services

The SCM organisation comprises a Corporate team, plus Regional SCM Organisations.

The Corporate SCM team is responsible for developing and implementing the Group's Supply Chain strategy, processes and tools, and for co-ordinating SCM activities within the Group.

SCM support for Marine Assets is managed by the SCM Manager Marine Assets using dedicated SCM resources or SCM resources allocated by the Region where the work takes place or the Project Team is based.

The Regional SCM Organisations are responsible for the local deployment of the Group's strategy and its implementation within projects. In this regard, the Regional SCM Organisations liaise locally with suppliers and are responsible for the negotiations with suppliers at projects level; the corporate SCM team may assist SCM Regional Organisation when appropriate.

SCM support for other Group Departments, e.g. IM, is provided by SCM personnel allocated by the Region where the work takes place or where the Project Team is based.

Key commodities have been split in 3 categories:

- Group commodities.
- Network commodities.
- Regional commodities.

Each level is described below. In addition, the Group and Network commodities are described in GR-SCMW-001.

For Group Commodities, the corporate SCM team is responsible for developing and implementing a global strategy through the Group Purchasing Managers (GPM), in-line with SCM Principle #1 and associated Rules.

The strategy will be expressed by the GPM for each tender/project via the appropriate input given throughout the process from the tender kick off meeting until recommendation to award (see section 3.8.1)

Where global strategy and global business vision are concerned, the interface between Acergy and the supplier is managed either by the relevant Group Purchasing Manager (GPM) or the Chief Purchasing Officer (CPO). The Group Purchasing Managers are responsible for:

- Managing, at the right level of management, the business relationship with suppliers.
- Communicating to suppliers Acergy's business vision.
- Gathering and distributing internally market information, such as production capacities, competitor orders and supplier cost base and new technology developments.
- Communicating to the Regional SCM organisations information to optimise sourcing opportunities for our projects.
- Proposing, implementing and updating SCM strategies.

For Network Commodities, a networked team is set up, comprising the GPM and Regional SCM specialists or Regional Commodity Leader (RCL). This network team will propose a strategy and action plan for the efficient management of these commodities. The activities of the network team will be coordinated by the relevant Group Purchasing Manager.

Regional Commodities will be managed at regional level with regular internal communication. Development of sourcing strategy will be proposed by Regional Commodity Leaders (RCL) to Regional management. The Regional Commodity Leaders are responsible for the coordination of the interface with Suppliers in their region, they ensure the relationship between Acergy and the Suppliers are managed at the appropriate level.

SCM principles and rules

SCM activities are governed by a set of Principles and associated Rules.

The list of Principles and Rules are as follows:

Principle 1	Rule No.	Rule
Acergy will develop an SCM strategy at Group and Regional levels	1.1	The SCM function is responsible for developing, implementing and improving an SCM strategy.
	1.2	The SCM function is responsible for assessing market information and internally available data and for the dissemination of information relating to strategic products.
	1.3	The product/services sourcing strategy is developed at Regional and Group levels.
	1.4	The SCM function will actively support the projects in the management of risks and opportunities within the supply chain.
	1.5	Every project will have an updated procurement plan. The procurement plans will be consolidated.
	1.6	The SCM process is an integral and integrated part of Acergy's project process.
Principle 2	Rule No.	Rule
The SCM function is responsible for managing and developing the relationship with Acergy's suppliers	2.1	Suppliers are pre-qualified in compliance with defined and documented processes.
	2.2	Supplier relationships are managed in a professional, structured and planned manner.
	2.3	Selected suppliers are developed on a continuous basis using the Supplier performance assessment process.
Principle 3	Rule No.	Rule
The SCM function will ensure that personnel are qualified, have the right competencies and are provided with the appropriate business tools.	3.1	The SCM function is responsible for defining roles and responsibilities of SCM personnel.
	3.2	The SCM function is responsible for hiring, training and development of SCM personnel.
	3.3	The SCM function is responsible for assigning qualified resources to the projects.
	3.4	Performance management Reviews are conducted jointly with Project Management for SCM people allocated to projects.
	3.5	The SCM function sets best practice and standard tools across the Group.
	3.6	SCM processes, as an integral part of Project delivery, shall be efficient and supported by functional tools.
	3.7	The SCM performance is measured by a specified set of key performance indicators.

Principle 4	Rule No.	Rule
People in the SCM process shall always behave in an ethical and professional manner.	4.1	All participants in the SCM process shall adhere to the “code of business conduct” GR-MGT-003.
	4.2	SCM personnel should not put themselves in a position where conflicts of interest with suppliers could exist.
Principle 5	Rule No.	Rule
SCM is responsible for managing the RFQ activity and making Awards under the authority of the Project Manager / Budget Holder.	5.1	The buying process is based on competitive principles.
	5.2	Single sourcing is allowed as a documented exception.
	5.3	Bidders shall be given equal opportunities in the bidding process.
	5.4	SCM will manage – on behalf of the budget holder, the bid evaluation, recommendation and award process interfacing with all relevant stakeholders.
	5.5	The Project Manager/Budget Holder will approve contract awards with due regard to the award recommendation. In the event of strong disagreement the matter will be elevated to the relevant management.
	5.6	The SCM process will ensure that Acergy always gets the best deal by considering technical, commercial, operational, quality and safety aspects.

Principle 6	Rule No.	Rule
All Awards will be managed in accordance with the SCM process with the appropriate follow-up on cost, delivery, quality & HSE until the product/services are delivered to the agreed site.	6.1	<p>Post Award Management of Non-standard Products is normally (i.e. default case) the responsibility of the nominated project SCM personnel, reporting to the Project or Package Manager, supported by appropriate allocated resources, carried out within the Project and working in an integrated project environment.</p> <p>In some cases SCM personnel will not be responsible for Post Award Management. These must be specifically agreed as part of the Project team formation process.</p> <p>As a minimum, project SCM personnel will be responsible for commercial follow up and for providing SCM system and process expertise.</p>
	6.2	Performance assessment is conducted on all suppliers of essential products/services by the project management team.
	6.3	Award close-out and warranty follow-up is an SCM responsibility.
Principle 7	Rule No.	Rule
The SCM function ensures continuous enhancement through the capture and capitalization of lessons learnt.	7.1	The SCM function maintains the database of lessons learned.
	7.2	The SCM function ensures that effective use is made of best practices and available knowledge.

SCM processes

The four main SCM Processes are presented in an activity based flowchart format, supported by Work Instructions and Tools. These are accessed via the Process Navigator for SCM which is available to all Acergy Personnel through the Applications Portal.

All the documents Forms, Templates, Work instructions etc... are also available through lotus notes / Acergy world / Documents / Management system/ Group / SCM / Process navigator

3.1 Supplier Management Process

The Supplier Management Process is a support function to the buying processes. It addresses;

- Development and Deployment of a Sourcing Strategy
- Process and Systems for Approving Suppliers for use by Acergy
- Process and Systems for collecting and sharing information about our Suppliers

The approval process for a supplier is determined by the criticality of the product to be delivered. In order to select the correct approval process level, please see to GR-SCMW-001.

The Supplier Database is the key tool for the Supplier Management Process. The approval process level is coded and automatically selected by the database when selecting the Product code.

Below rules apply to the management of the supplier as well as the pertaining record in the Acergy Supplier Database.

It is important that we maintain up-to-date information on suppliers and actively manage their qualification status using the Acergy Supplier Management database, as the common tool across the Group.

General (non-project specific) supplier visits, reviews and qualification are co-ordinated as follows:

- For the Group Commodities, by the Global Purchasing Manager (GPM) with input from the Regional Commodity Leaders.
- For all other commodities, by the Regional SCM organisations. For network commodities regional organisations take input from the Group Purchasing Manager in charge of network commodities.

All records will be stored in the Acergy Supplier Database.

Acergy has implemented common Group-wide procedures and forms for the qualification and performance assessment of suppliers. All suppliers, irrespective of location, will go through the same approval and performance testing process and meet the same acceptance criteria. Thus all regions will be able to share this information, tested to a common standard and stored on a common supplier database.

This Supplier qualification review is a SCM process for assessing suppliers and approving them in the Database it is not a substitute for other audits such as QA, QC and Project audits.

3.2 Procurement of Standard Products and Services

Standard Products or Services are defined as:

- Simple, off the shelf, catalogue items
- Products with low to medium risk and complexity
- Products requiring no or little engineering
- Spare parts and consumables
- Minor fabrications

The procurement of Standard Products is normally undertaken within the Regional SCM Departments (Purchasing Departments), with appropriate reporting links to the Requisitioner.

3.3 Procurement of Non-standard Products and Services

Non-standard Products or Services are defined as:

- Complex and/or high value products
- Products containing some degree of engineering and/or design
- Products requiring some degree of customised manufacturing and/or fabrication
- Products/Services which need technical and commercial follow up during contract execution
- Products to be incorporated into Client permanent equipment or an Acergy asset
- Products critical to the project

The procurement of Non-standard Products or Services commences at Tendering Stage. Is normally undertaken using allocated SCM personnel working with the Support of a Contract Manager in an integrated Project environment. Please see GR-PRJ-001, Introduction to Group Project Management.

3.4 PROCUREMENT OF THIRD PARTY VESSEL SERVICES

Third Party Vessel services may be sourced by either the placement of a charter or by a vessel purchase. In either event this process (GR-SCMP-014) shall be followed. Third Party Vessels are any ships or barges which are to be obtained from an entity which is not part of the Acergy group of companies.

The requirement for Third Party Vessel Services may be identified, by a Project Team within a region or a Project Team within Marine Assets. Within this process Project Team shall apply to either scenario.

The procurement of Third Party Vessel Services is to be undertaken using the SCM Chartering specialist within the relevant Region with assistance from the Project SCM resource. The process commences at Tender Stage. Refer to GR-COM-001, Group Tendering Instruction.

3.5 GENERAL

The SCM Principles, Rules and Processes shall apply to Dry-docking and CAPEX projects and shall be managed as Projects.

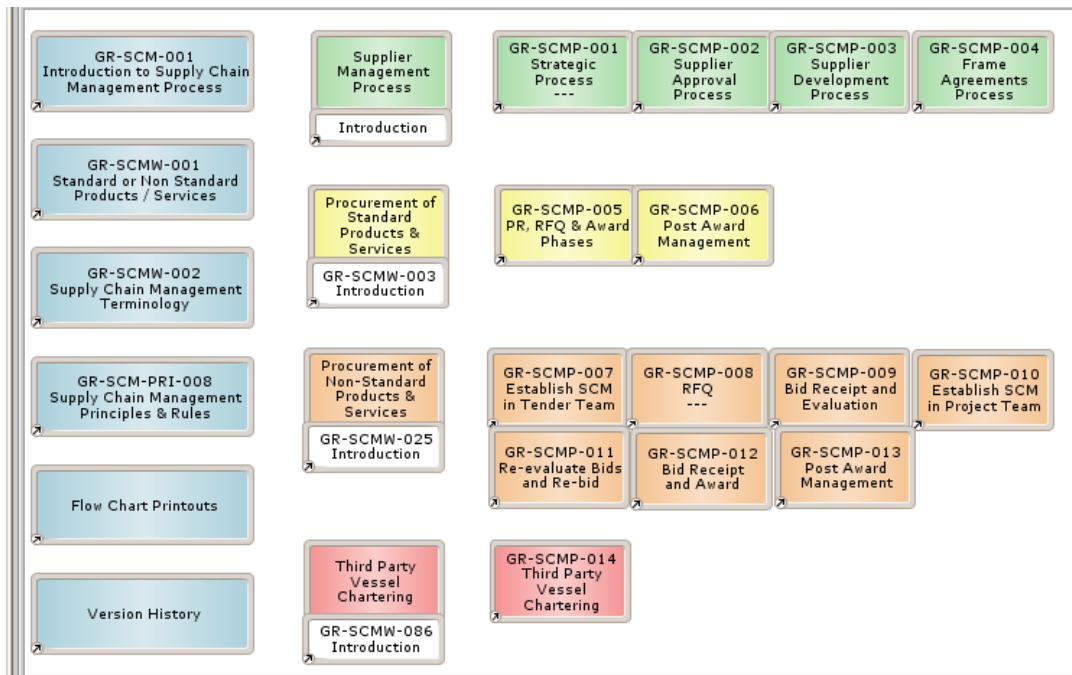
The allocated senior SCM personnel is responsible for the decision as to which Process shall be used and should consult with the SCM Regional Department Manager in case of doubt.

For Department procurement, or where no Project structure exists, the appropriate elements of the SCM processes are to be used. The allocated SCM support will provide guidance as required.

Table for selection of product code, approval- and buying process
 GR-SCMW-001, describes in detail the recommended process and T&C to be used for each product/services.

SCM support for Group activities is normally provided by the Regional SCM Department, in the region that the activity is taking place. SCM support must be agreed with the appropriate SCM Regional Manager. Process Navigator.

The processes are presented in the Process Navigator. Each process is divided into sub-processes. A total of fourteen sub-processes are presented in the Process Navigator for SCM as follows:



3.6 Familiarisation

All SCM personnel are required to be familiar with the SCM processes, in accordance with the requirements of their functional description.

The SCM Induction and Familiarisation Form GR-SCMF-003 are to be completed for each SCM person.

3.7 continuous improvement

All Acergy personnel, and in particular SCM personnel, are encouraged to make suggestions for improvements to the SCM Processes, Work Instructions and Forms.

The responsibility of the Chief Purchasing Officer, with assistance of Group SCM process and systems manager, is to access the suggestions, engage in discussion with the originator to discuss with Peers and to decide what action, if any, is required.

Suggestions should be submitted on form GR-SCMF-070.

3.8 scm FUNCTIONAL APPROVAL OF AWARDS

In order to ensure appropriate functional control and respect of processes the following approval system is in place:

At tender stage, SCM functional approval is ensured by reviewing and endorsing the Bid Comparison as per table below.

Bid comparison	For Regional commodity	For Group commodity
Total Award value < 150KUSD	Functional approval within project	Functional approval within project
Total Award value >150 KUSD	Regional commodity leader	Group purchasing manager
Bid Comparison	Non Strategic Charter	Strategic Charter
Total award value < 150k USD and < 6 months duration	Functional approval within project	Group Purchasing Manager
Total award value < 150k USD and > 6 months duration	Group Purchasing Manager	Group Purchasing Manager
Total award value > 150k USD and < 6 months duration	Regional Commodity Leader	Group Purchasing Manager
Total award value > 150k USD and > 6 months duration	Group Purchasing Manager	Group Purchasing Manager

In case of a significant change between tender stage and project stage in the bidder recommendation, the RCL or the GPM shall be consulted according to the above table.

Before tender submission to tender board SCM functional approval is ensured by endorsing table 5.3 of the Tender Summary document (GR-COMF-021).

This endorsement is evidenced by signature by the SCM Regional Manager or Chief Purchasing Officer as defined in the table below.

Award > 500 KUSD and < 5 M USD	SCM Regional Manager
	Chief Purchasing Officer

3.9 INTERNAL COMMUNICATION

3.9.1 Project Procurement Plan

Every month, each Regional SCM Manager will provide the CPO with the status of regional tendering SCM activity in advance of the monthly SCM conference call. The consolidated tendering SCM activity will be discussed (trans-regional synergies, strategies, etc ...) during the monthly conference call.

Each regional SCM manager will ensure, in accordance with our published SCM processes that for each project (either at tender phase or execution phase) takes recognition of the following requirements:

- A SCM strategy and procurement plan will be developed and Kick Off Meeting (KOM) organised.
- Corporate SCM, in particular the CPO, will be invited to participate in the KOM and copied all relevant documents for all EPIC projects.
- Bidder lists will be established based on the Acergy Supplier Database and the Client's Approved Vendors List. For Group Commodities, the relevant GPM will be informed and involved in establishing the bidders list.
- Bid comparison summaries will be established. For Group Commodities the GPM will receive a copy of these bid comparison summaries and will compile comparative data for use in Manta.

3.9.2 SCM Monthly Conference Call

A monthly conference call will be organised to follow up the 5 weekly S&M conference call where Regional SCM Managers and SCM Corporate members attend. The attendees to the monthly conference call are the Regional SCM Manager and any members of his team that he will nominate, and members of the Corporate SCM team.

3.9.3 Group SCM Monthly Report

The Group SCM Monthly Report will remain one the pillars of our internal communication and reporting system. For simplification, and to avoid double reporting, the Regional SCM manager will forward to the CPO a copy of the SCM section of the standard Regional Monthly Report (chap. 5.2 and table) in accordance with a pre-agreed reporting schedule. In addition, a concise commentary will be added regarding high-lights and main concerns of the previous and coming months. These reports will be consolidated into one 3-page Group SCM Report which will be circulated by the CPO.

3.9.4 SCM Managers meeting

SCM Manager Meetings will remain on a basis of 2 to 3 per year. These events will be organised by the CPO.

acergy standard terms and conditions

Acergy's Standard Contracting Principles for procurement of goods, services and supplies are expressed through Acergy's Standard Terms and Conditions.

Document GR-SCM-011 presents Acergy's Contracting Principles, describes the Standard Terms and Conditions and includes the associated Authorisation Matrix and Check List.

instructions FOR SELECTION OF ACERGY Terms and Conditions

The following instructions are for the use of Acergy's Standard Terms & Conditions:

Standard Terms and conditions are "fixed" and CAN NOT be modified for any reason. All deviations arising from negotiation with supplier and/or coming from main Contract flow down must be included separately as "Special Terms & Conditions"

Table for selection of product code, approval and buying process, GR-SCMW-001, describes which set of standard Terms and Conditions to use for a given product.

GR-SCMF-027 Terms and Conditions for Procurement of Standard Products

GR-SCMF-027 is designed for purchase of minimum contractual level for simple ex stock or manufactured goods, consumables and minor fabrication when low risk, low item value, little or no engineering design, no personnel attendance at Acergy facilities. Suitable applications are for non-complex requirements such as paint, fuel, spare parts, welding rods and hiring of tools and equipment.

GR-SCMF-029 Terms and Conditions for Procurement of Non-standard Products

GR-SCMF-029 is designed for fabrication/manufacture contracts and delivery of other products with more complex requirements, may be high risk and may have design content. Intended area of application is fixed price contract and when the work is carried out at the Supplier's premises, not offshore or onshore at Acergy's/Client's premises. The standard assumes delivery according to INCOTERMS.

Example area of application is procurement of line pipe (including coating, double jointing as long as these operations are not completed in Acergy Yard or vessel), umbilical and manufacturing of other permanent incorporable items.

These Terms and Conditions can be the basis for Frame Agreements.

GR-SCMF-031 Terms and Conditions for Standard Services

GR-SCMF-031 is designed for provision of personnel to Acergy Worksite/facility/vessel for less complex Services, lower risk installation activities and commissioning of equipment purchased under GR-SCMF-027 and -029 (this protects the original Warranty provisions).

Applications include: Engineering services, Consultancy, certification, tendering other than NDT painting, blasting.

These Terms and Conditions:

- Are not for the provision of Products.
- Could be fixed cost contract or against approved timesheets.
- Contains wording to protect Acergy's HSE interests. Applicable for supervision services or maintenance of equipment.
- Could be used to provide technicians to operate equipment on behalf of Acergy.

GR-SCMF-033 Terms and Conditions for Non-Standard Services

GR-SCMF-033 is designed for provision of services with or without supply of materials and where work at Acergy or Client's sites offshore or onshore, with or without own vessel, is included. No limit to value can be complex, can be high risk. By adding GR-SCMF-040 it can also include hiring of equipment. Can be used for Frame Agreements.

Applications include fabrication, provision of NDT services, Engineering services, Welding services, Testing and Pre-commissioning, Trenching as well as Diving services.

The standard does not specifically address specific issues related to items or equipment on hire to Acergy (i.e. when Acergy, and not Subcontractor, carries the risk for operating the hired item). If hire of an item constitutes a part of the scope, GR-SCMF-040 should be used.

It is important to distinguish between "Hire" Contracts, where Acergy is in control of and operates the equipment and situations where Subcontractor is operating the equipment. In the latter case, Subcontractor is responsible for the results of the work associated with the equipment and GR-SCMF-033 should be used without any additional clauses.

Please note that even though the Supplier provides an Operator for example for a winch, then the overall responsibility may still be with Acergy, and the specific Hire Contract Terms and Conditions may be appropriate.

GR-SCMF-001 Back to Back Form of Agreement

To be used only where we contract out as a stand alone Scope of Work/supply major portions of Acergy Main Contract responsibilities where a high volume of the Main Contract requirements from the Client need to be imposed to protect our position. Use will entail reworking the base Agreement to suit the Main Contract contractual position. Not to be used for supply of manufactured goods or materials or general services. Applications generally involve significant installation/construction or major fabrication work scopes, which in themselves may be small projects. Use of GR-SCMF-011 should be signed off by Contract Manager.

Hire of Vessels

BIMCO – Supply time. Barecon.

These specialist BIMCO based terms for Hire in of ships are only to be used with Acergy's pre-agreed exceptions/modifications. Any deviation from Acergy standard exceptions requires approval by Contract Manager.

GR-SCMF-072, Terms and conditions for hiring of tools and equipment at worksite

To be used for stand-alone hire contracts. See also comments in section 5.1.4 above.

GR-SCMF-078, Terms and conditions for Acquisition of Software & Associated Services

To be used for the purchase of standard programs inclusive of installation and certain adaptations, consultancy services and maintenance. Not intended to be used for Software Development.

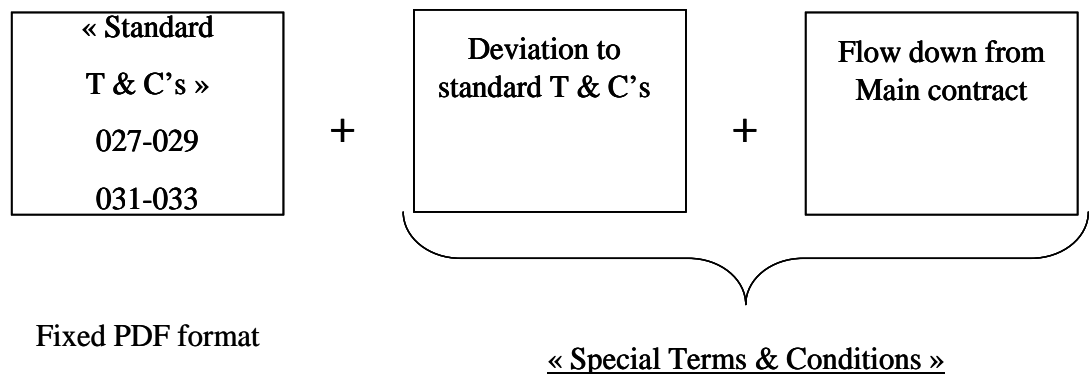
Frame Agreements

If a Frame Agreement of pre-agreed Terms and Conditions are in place with a Supplier then this Agreement should be used. Please refer to Suppliers Database for an overview of existing Frame Agreements and pre-agreed Terms and Conditions. Guidelines for Group Frame Agreement are listed in paragraph 5 below.

Terms & Conditions

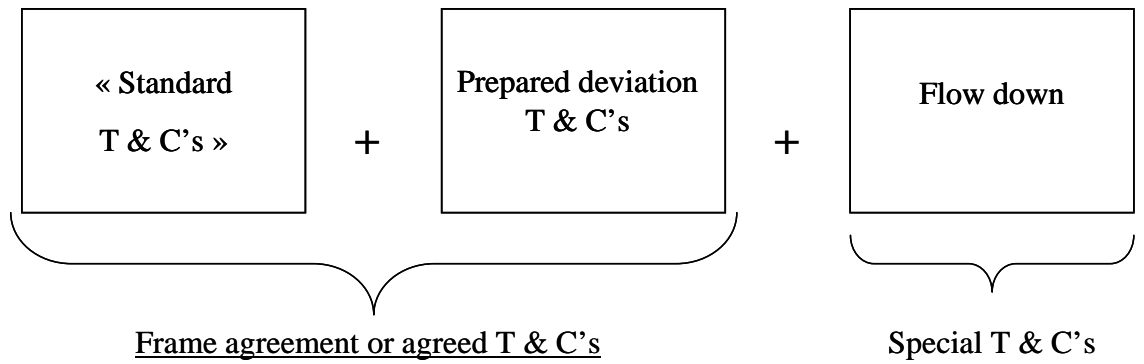
How to use them:

Without frame agreement / prepared T& Cs in place:



Deviations to standard T & C are negotiated and agreed with supplier together agreed flow down. They form the « special T & C's ».

When frame agreements are in place or agreed Terms & Conditions:



« Special T & C's » comes only from Flow down from main contract.

Guidelines for framework agreements

When Pre agreed T & C's are envisaged by any regional organisation, it is mandatory to assess if these can be beneficial and applicable group wide. Communication with Group SCM is recommended for this evaluation.

When Regional frame agreements are developed, they must follow the same principles as the Group frame agreement.

Group Framework Agreements shall always be developed and negotiated by Group SCM and a Contracts Manager with engagement of the Regional SCM Offices, Operations, Engineering and where appropriate Legal.

The process shall be clearly visible and Regional participation actively encouraged.

The Framework Agreement shall be on a non-exclusive basis, unless previously agreed in writing by CPO / VP Projects and Operations, and shall comply with all principles of GR-SCM-011. The approved Framework Agreement, any usage instructions, QA certification and Subcontractor capability information shall be stored in the Framework Agreement database. Each Framework Agreement shall have a commercial representative (SCM under direction of GPM) and a technical representative selected from the appropriate Engineering discipline. Executive management of all Group Framework Agreements shall be under the CPO who will engage the relevant executive officers as appropriate. Each Call Off Contract shall have appointed representatives from the Project team who will administer the day to day project activities.

Subcontractors under Frame Agreements (Frame Agreement holders) shall be treated as preferred first choice sources and must always be given the opportunity to bid for the appropriate services/supply on a worldwide basis. This does not prevent the use of competitive bidding if appropriate for a particular project, on a case by case basis. The Agreement holder shall be fully evaluated along with any other bids and given every opportunity to present their most advantageous options.

It is important that each Project Team and Operations provide performance feedback on Framework Agreement holders and this feedback shall be entered into the Supplier and Subcontractor Assessment System. Lessons learnt and suggestions for future improvements should be directed to the Acergy representatives for each Framework Agreement who will ensure that this information is communicated widely within Acergy.

Appendix 4

Procedure GR-SCM-007

Work Instruction for the Supplier Database

Supply Chain Management

Work Instruction for the Supplier Database

GR-SCM-007

Prepared by: Nirceu de Castro Group Purchasing Manager
Approved by: Philippe Hoffman Chief Purchasing Officer

3.0	Approved for Implementation	Feb.13.08		
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GR-SCM-007 Ver. 3.0	Work instruction for the Supplier Database	Page 125 of 25

TABLE OF CONTENTS

1.	INTRODUCTION	126
1.1	SCOPE AND OBJECTIVES	126
1.2	RESPONSIBILITIES	126
1.3	DEFINITIONS	126
1.4	REFERENCES	127
2.	DATABASE OVERVIEW	128
2.1	USE OF THE SUPPLIER DATABASE	129
3.	SUBCONTRACTOR/SUPPLIER CATEGORISATION SECTION	131
3.1	COMPANY DETAILS	131
3.2	PRODUCTS AND SERVICES SUPPLIED	134
3.3	COMMENTS AND NOTES	134
3.4	CATEGORISATION CRITERIA	135
3.5	SUPPORTING DOCUMENTS	136
3.6	SUPPLIER STATUS AUDIT TRAIL	137
3.7	FRAME AGREEMENTS	137
3.8	PERFORMANCE ASSESSMENTS	137
3.9	SAVING & VALUE CAPTURE	138
3.10	PROCUREMENT OVERRUN CAPTURE	138
4.	WORKING WITH THE DATABASE	138
4.1	SUBCONTRACTOR/SUPPLIER CATEGORISATION	139
4.2	FRAME AGREEMENTS	147

Introduction

scope and objectives

Acergy have a great number of suppliers with whom we do business. The Supplier database is used for the capturing, maintaining and sharing of information pertaining to each of the suppliers.

The Supplier database is a supporting tool for the SCM processes:

- Buying process for standard products
- Buying process for non-standard products
- Supplier management process

This work instruction describes how the Supplier database is used.

responsibilities

Group SCM Management has the responsibility to issue and maintain the document.

Group SCM Managers and Regional managers, depending on the supplier in question – are responsible for populating and maintaining the database with supplier information, and for using the information available to support the decision processes when buying.

For Group Commodities, the corporate SCM team is responsible for developing and implementing a global strategy through the Group Purchasing Managers (GPM), in-line with SCM Principle #1 and associated rules.

For Network Commodities, a network team is set up, comprising the GPM and Regional SCM specialists. This network team will propose a strategy and action plan for the efficient management of these commodities. The activities of the network team will be coordinated by the relevant Group Purchasing Manager.

Regional Commodities will be managed at regional level with regular internal communication through the Quarterly Commodity reports to be distributed throughout the Group.

Definitions

Product	Products or Services to be delivered by the Supplier/Subcontractor
Supplier	A Supplier or a Subcontractor delivering a Product or Service
T & Cs	Terms and Conditions

Supplier Database approval groups:

All Users All Acergy's contingent with access to the Database, read only access to Supplier Catalogue and performance assessment.

Authors Users allowed to create performance assessments (edit/delete before approval), Savings and Value capture reports (edit/delete own records only before approval). View own reports only. Read only access to Suppliers catalogue and frame agreements.

Approvers Users allowed to create frame agreements, performance assessment and supplier catalogue and having full access to savings and value captured. (Edit only after approval – No delete option in all above instances)

Group Administrators Users with full access to frame agreements, performance assessment, supplier catalogue, saving and value captured (edit/delete after approval – in all instances above)

References

GR-SCM-012	Savings and Value Capture Reporting (SVCR) Guideline
GR-SCM-013	Work Instruction for Supplier Performance Assessment
GR-SCMF-002	Supplier Market Questionnaire
GR-SCMF-044	Supplier Pre-qualification Questionnaire
GR-SCM-001	Introduction to Supply chain Management
GR-SCMF-075	Supplier Evaluation Tool (SET)
GR-SCMF-073	Agenda on site review
GR-SCMF-074	Report on site review
GR-SCMW-077	Supplier Management Approval Criteria Level 1 Approval
GR-SCMW-078	Supplier Management Approval Criteria Level 2 Approval

Database overview

Information about Acergy's Suppliers is kept in the Supplier database.

The database comprises of the following elements:

Supplier and Subcontractor Listing

This is the backbone of the database. Here all relevant information about the Supplier shall be listed, such as contact details, contact persons names, affiliation, Products that the Supplier is approved for, status and if we have a Frame Agreement or other Pre-agreed Terms and Conditions with them. Further there are links to the latest Performance Assessment, a space for additional notes and comments, and there is an audit trail, such that changes to the status can be tracked and that the people having done the input and changes can be consulted.

Frame Agreements

The purpose of Frame Agreements and Pre-agreed Terms and Conditions is to obtain savings for the Group and/or to save time in the RFQ and Award process. The database shows where agreements are in place.

Performance Assessments

After every use of a Supplier, a Performance Assessment shall be made. The result of an Assessment is a figure between 1 and 9, where 5 is the minimum acceptable figure. The results of these Assessments shall be used in the bid Evaluation Process.

Purchasers, SCM Leads and Subcontract Administrators are responsible for initiating the Assessment while reviewers, as chosen by the originator, are responsible for giving input.

Savings and Value Capture Reports

Significant savings and Value Captures shall be reported. The savings are accumulated regionally and for the Group, and held up against predetermined performance criteria set every year by the SCM Management. There is no formal threshold for when to make a report, but please consider the time it takes to make it, and please consider that the basic task of the SCM function is to always get the best deal, as per Rule 5.6.

Procurement Overrun Reports

Like for savings, overruns shall be reported. The purpose is to capture lessons learned in order to avoid repetition.

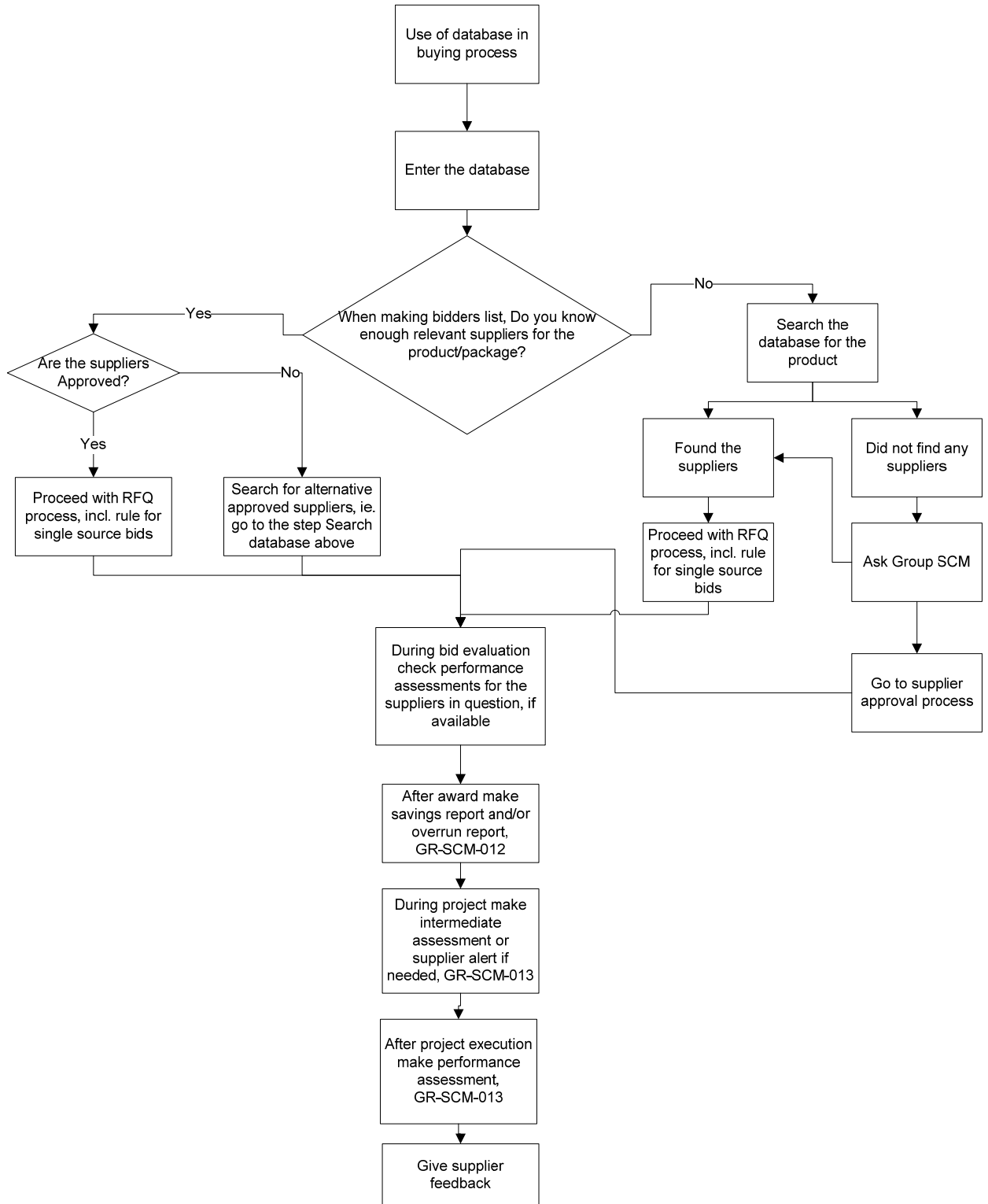
Work in progress

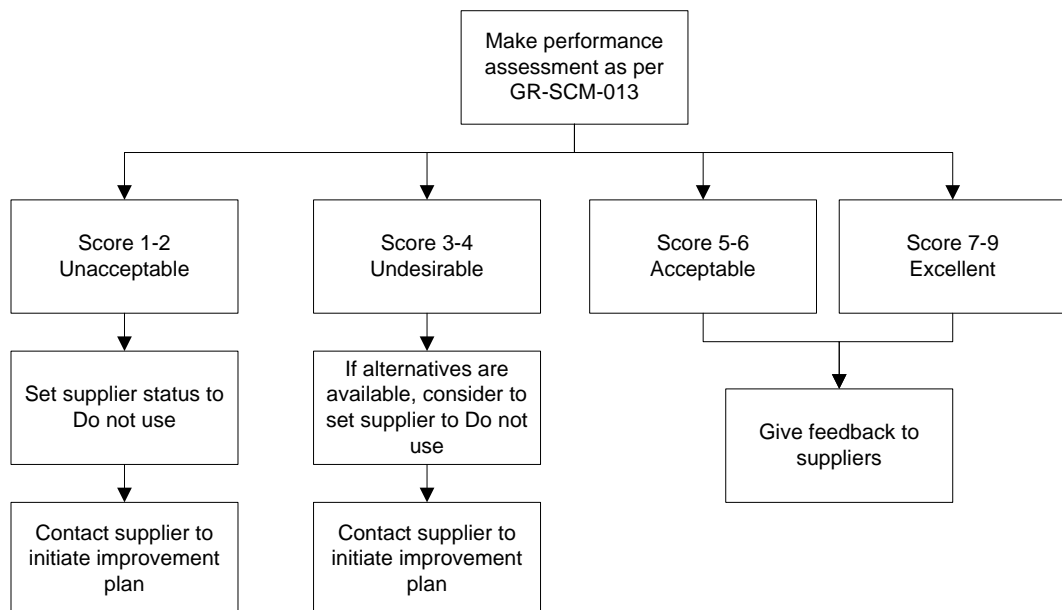
This is a listing of ongoing performance assessments. Please check whether someone is waiting for your input.

Use of the supplier database

The database shall be used at all stages of projects: Tenders and at execution phases.

- Selection of bidders
- When approving suppliers
- When selecting Suppliers in a buying process
- After using a supplier





subcontractor/Supplier Categorisation section

Company Details

Name

Name of Company. When creating a new Company please do not make double entries, i.e. check that the company is not already registered. Beware of entries such as "Company Limited" and "Company Ltd", the company name must be entered with the first letter of each word in capitals. Denominations such as SA, LTDA, GMBH, etc... shall be inserted all in capitals without dots. Abbreviations such as C.R.P.; D'C.C.; E-OO and punctuation shall be avoided whenever it is possible, also dots, hyphens and symbols shall be not used. If the company is already listed in another Region it must just be updated with relevant details for your Region.

Correct Examples:

- CRP Group Limited
- CRP Group LTD

- Tenaris Dalmine France
- Tenaris Group Headquarter Europe

- ABB Turbocharger

Wrong Examples:

- C.R.P. group limited
- Tech-trade
- Con-dive llc
- ABB TURBOCHARGER
- Bellsouth Acct. #606-464-3771-325-3171

Status

The categories are: **Preferred, Approved, Potential, Under Scrutiny, Do Not Use**. Further explanation can be found in the Categorisation Criteria Section. (§ 3.4)

The status section also contains the criticality level. There are three levels for the approval process, depending on the criticality and complexity of the product to be delivered:

0	Simple non-critical products
1	Products with medium criticality
2	Complex and critical products

The level is determined automatically when entering the product code. The criticality level governs the approval process, such that suppliers of Complex critical products shall be more carefully investigated than suppliers of non-critical products.

Latest Performance Assessment

Here is a link to the latest Performance Assessment if such Assessment exists (if the Supplier has been used it must exist!). If the score is below 4 it will be shown in red.

If the approval date of the latest Assessment (qualification review or performance assessment) is more than two years old, it indicates that the Supplier has not been used for two years, therefore it is necessary, to perform a supplier's reassessment according to the Supplier qualification requirement. (See section 1.4 references)

Company Code

Not used. The Company Code is a number from the JD Edwards system, but it has no functionality in the Supplier database at the moment.

Region

The Region is selected from a drop down box. Data for Companies referred to as "Group commodity" and "Network commodity" will be maintained by Group SCM (except for performance assessments), whereas data for companies listed as "Regional commodity" shall be maintained by the Regions.

The system can only handle one Regional affiliation, but a Supplier can be used by other Regions than the one making the input. So please do not make your own Region's input if the Supplier already exists (refer to 3.1 when company already exists in other Region). If a supplier is already listed and you are about to enter data referring to it, you shall use the existing entry and just add the data in the same dossier. This situation can happen systematically when the supplier has several different facilities, addresses or diverse business (commodity codes). The idea is that all Regions shall benefit from one Region's approval work, and that all Regions shall access and use the other Regions' Performance Assessments.

In general Suppliers used by more than two Regions should be listed as Corporate.

For regional commodities when a supplier is used by 2 or more regions, unless otherwise agreed between the regions, the region where the supplier is located will have responsibility to manage and administrate the supplier - i.e.: up-date the data base, perform the qualification review and status change.

For Group and network commodities all the suppliers will be managed in the database by the Group purchasing manager in charge of the commodity thus in good communication with the regions

Address

Supplier's address; please note whether this is office or manufacturing location.

Parent

If the Supplier has a Parent Company, it is listed here. Check if Parent Company is listed as Corporate, and make sure reference is correct.

Frame Agreement

If Acergy have established a Frame Agreement or Pre-agreed Terms and Conditions with a Supplier it shall be listed/linked here.

Products and Services Supplied

In this section the Products the Supplier is approved for shall be selected. The codes are also known as "commodity" codes.

After selecting the Product Code one or more keywords – as relevant, shall be selected from a drop down menu. The keywords describe the Supplier Product in more detail.

In cases where suppliers can provide completely different products, a main commodity code shall be elected reflecting the supplier's core business. The others commodity codes shall therefore be entered in importance order as subsequent in the 'Products and services supplied' section.

The Supplier's status refers to the core commodity code. Whether the supplier has other subsequent status referring to the second, third or x commodity codes, they must be entered in the comments and notes section.

It is important to select only the Products that were covered by the approval process.

Comments and Notes

Free text or documents can be inserted here. Reports from visits or conversations with the Supplier regarding the market situation shall be collected. Information such as price and delivery time trends, the Supplier's present workload, new products or technology development shall be captured.

Categorisation Criteria

The Suppliers are categorised as per following matrix:

Applicable to category		Criteria	Potential	Approved	Preferred
0 - 1 - 2	Supplier Evaluation Tool	Supplier Questionnaire received and evaluated	√	√	√
2	On site Review	ISO 9001 Quality Management System or equivalent	–	√	√
		HSE Management System and Performance	–	√	√
		Acceptable Technical and Project Management Capabilities	–	√	√
2	Business Relationship criteria	Pre-agreed Terms and Conditions	–	Facultative	√
		Frame Agreement	–	–	√

Definitions:

Potential: First supplier status when entering the Supplier database.

Approved: Status for approval of product level 0 criticality after pre-qualification questionnaire has been received and evaluated, using SET (Supplier Evaluation Tool). For approval of product level 1 criticality further verification shall be put in place (GR-SCMW-077). For approval of product level 2 criticality on site review must be carried out (GR- SCMW-078, GR-SCMF 073, GR-SCMF-074).

Preferred: Status where suppliers must automatically be present at the bidders list, typically suppliers with whom we have Pre-agreed T&C's or signed Frame Agreements.

Under Scrutiny: Status where supplier has badly performed with insufficient assessment result, whether HSE, QA, QC, commercial, expediting issues, etc..... Provide action plan to overcome difficulties.

Do not use: Action plan failure.

For each of the criteria, Yes or No shall be entered. The status is then automatically selected, but can be overruled by the author if required and justified.

In addition to Potential, Approved, Preferred and Under Scrutiny there is the Do Not Use category. This should be used:

1. if a Supplier fails during the approval process,
2. if a Supplier has been used, but not performed well.

There is no formal 'Do Not Use' period. The important thing is that the Supplier presents satisfactory documentation that the issues they failed on have been rectified/improved. The decision for regaining the previous status is to be taken by the Group Purchasing Managers for the 'Group' and 'Network' commodities, and by the Regional SCM Managers for the regional commodities.

Supporting Documents

All relevant documents used in the Approval Process, such as the Pre-qualification Questionnaire, SET (Supplier Evaluation Tool) and possible on site review reports shall be pasted into this section, such that it is easy to verify why a Supplier was approved/not approved.

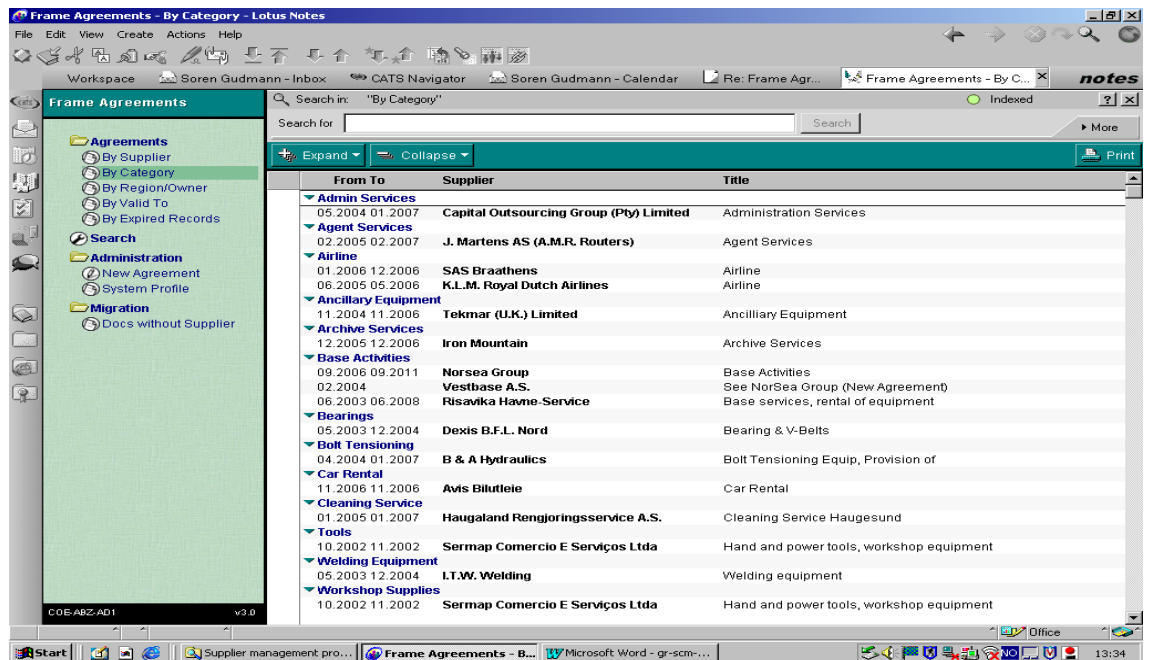
Once approved and used Non-conformance and Audit Reports made afterwards shall be filed here.

Supplier Status Audit Trail

In order to audit the system changes in status are logged. It is possible to see who approved the Supplier, who made a change and why.

Frame agreements

This section lists existing Frame Agreements, either sorted by Supplier or by category.



From To	Supplier	Title
Admin Services		
05.2004 01.2007	Capital Outsourcing Group (Pty) Limited	Administration Services
Agent Services		
02.2005 02.2007	J. Martens AS (A.M.R. Routers)	Agent Services
Airline		
01.2006 12.2006	SAS Braathens	Airline
06.2005 05.2006	K.L.M. Royal Dutch Airlines	Airline
Ancillary Equipment		
11.2004 11.2006	Tekmar (U.K.) Limited	Ancillary Equipment
Archive Services		
12.2005 12.2006	Iron Mountain	Archive Services
Base Activities		
09.2006 09.2011	Norsea Group	Base Activities
02.2004	Vestbase A.S.	See NorSea Group (New Agreement)
06.2003 06.2008	Risavika Havne-Service	Base services, rental of equipment
Bearings		
05.2003 12.2004	Dexis B.F.L. Nord	Bearing & V-Belts
Bolt Tensioning		
04.2004 01.2007	B & A Hydraulics	Bolt Tensioning Equip, Provision of
Car Rental		
11.2006 11.2006	Avis Bilutleie	Car Rental
Cleaning Service		
01.2005 01.2007	Haugaland Rengjøringservice A.S.	Cleaning Service Haugesund
Tools		
10.2002 11.2002	Sermap Comercio E Serviços Ltda	Hand and power tools, workshop equipment
Welding Equipment		
05.2003 12.2004	L.T.W. Welding	Welding equipment
Workshop Supplies		
10.2002 11.2002	Sermap Comercio E Serviços Ltda	Hand and power tools, workshop equipment

The Frame Agreements, where they exist for a Supplier, can also be accessed from the Supplier Categorisation Screen, through the View related documents button.

The Frame Agreement screen informs in which Regions the Agreement is valid for and the validity dates enabling the owner to renew the Agreement in due time.

Performance assessments

After all kinds of awards or commitments passed to a supplier a Supplier Performance Assessment shall be made and reported in the Supplier Database. It is the responsibility of each SCM regional organisation to ensure that Supplier Performance Assessments are properly performed and filled into the Supplier Data Base. The Performance Assessment itself belongs to each project.

The author of the Assessment (SCM personnel) shall select reviewers from different functions to score the performance. The score is out of 9, on 9 criteria. Once scored by all reviewers, the assessment shall be approved. The score of the last Assessment of a Supplier is shown in the Supplier's Information Sheet with the date. It is in red if the Assessment is more than 2 years old.

Saving / OVERUN & value capture

The savings, overruns reports are documents that enable you to report a saving or an overrun associated with a contract. It is associated to a particular Supplier, a Scope of Work and a Project. It presents information about the Scope of Work and about the amount on cost savings or cost overrun, and on manpower savings or overruns.

For further instructions please see GR-SCM-012, Savings and Value Capture Reporting (SVCR) Guideline.

Procurement overrun capture

GR-SCM-014, Work Instruction for Procurement Overruns – to come.

working with the database

Access

The Supplier database is accessed from the Lotus Notes workspace. In your workspace, click on the following icon to access the application. If the icon is not there ask a colleague or IMS to send you a link.



Different users have different access privileges:

Users

All Acergy staff are members of this group.

Users have read-only access to the database, except the Frame Agreements, savings and overrun reports. They can be Reviewers in Performance Assessments when assigned by the author.

Authors

SCM people are typically authors and in addition to full read access they can raise Assessments and make saving/overrun reports. They can score when assigned as reviewers. The Regions administrate who is in this Group.

Approvers

SCM Managers and their delegates are approvers. In addition to above they can approve documents. The Regions administrate who is in this Group.

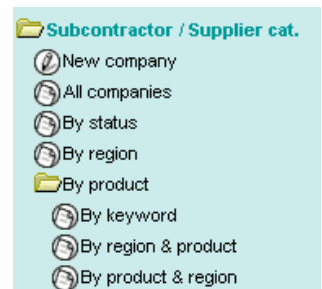
Administrators

The members are Group SCM people and people designated by Regional SCM Managers. They have general access and can change people in the various groups. All regions have members of this Group.

Subcontractor/Supplier categorisation

In this part, you can access to the Supplier’s Information Sheet or create one, so you have the following possibilities:

- New company: Enter a new Supplier
- All companies: View all Suppliers no matter the Region or the status.
- By status: View the Suppliers sorted by status, then by Region.
- By region: View the Suppliers sorted by Region, then by status.
- By Product:
- By keyword: View all Suppliers sorted by Product Code then by keyword
- By region and keyword: View the Suppliers sorted by Region, then by Product Code and then keyword.
- By product and region: View the Suppliers classified by Product Code, by Region and then by keyword.



New Suppliers

The process is the following:

- Create a new Supplier
- Check if Supplier does not already exists
- Complete the information
- Save

To create a new Supplier, in the “Subcontractor/Supplier Cat.” menu, click on “New Company”.



An empty Supplier’s Information Sheet opens.

- Enter the Supplier’s name.
- Then when you enter in another field, the following window appears, enabling you to check if the Supplier is not already created.



Verify the Supplier you enter isn’t already entered.

Then, complete the following information:


Company Details:

- Status To select from the list and confirm

Remark: the first status of a Supplier, unless we already have work with it and your Manager approves him, must be "Potential".


- Region To select in accordance with the list.
- Address To type
- Email Address To type
- Parent (group) To type
- Contact Name To type
- Telephone To type
- Fax To type
- Website To type

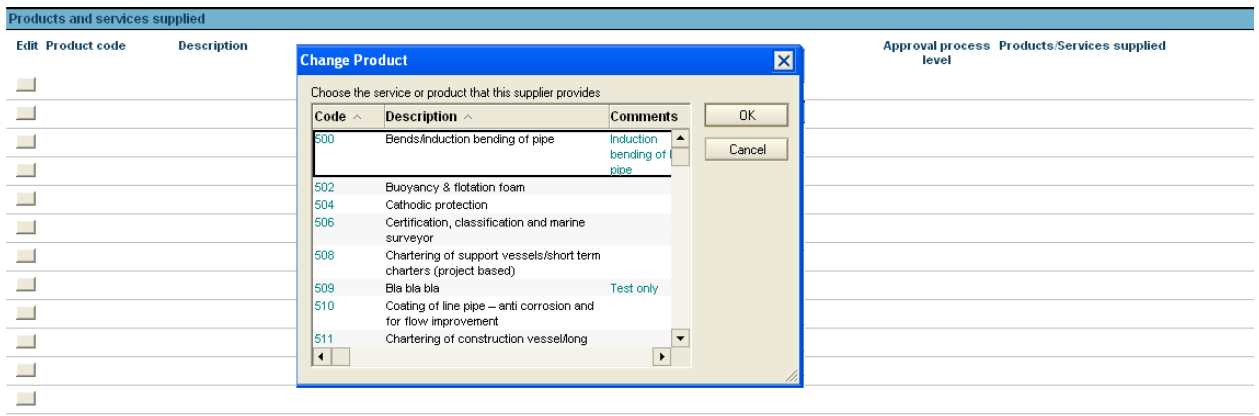
Subcontractor/Supplier categorisation	
Company details	
Name : <input type="text" value="Tenaris Confab"/>	Parent : <input type="text" value="Tenaris"/>
Status : <input type="text" value="Potential"/> <input type="checkbox"/> - change status <input checked="" type="radio"/> Region <input type="radio"/> Group	Frame agreement (s) : <input type="text" value=""/>
Approval process level : <input checked="" type="radio"/> 0 - Non-critical <input type="radio"/> 1 - Additional Verification <input type="radio"/> 2 - Full Audit & Inspection	Contact name : <input type="text" value="Edmond Wallace"/>
Last assessment :	
Approved :	
Company code : <input type="text" value="51224"/>	
Region : <input type="text" value="AFMED"/>	Telephone : <input type="text" value="01 45 78 12 29"/>
Address : <input type="text" value="45 Place Montmicourt
La Defense, Paris La Defense Cedex
92040, FRANCE"/>	Fax : <input type="text" value="01 45 78 12 00"/>
Email address : <input type="text" value="info@tenaris.com"/>	Website : <input type="text" value="www.tenaris.com"/>

 Open Link

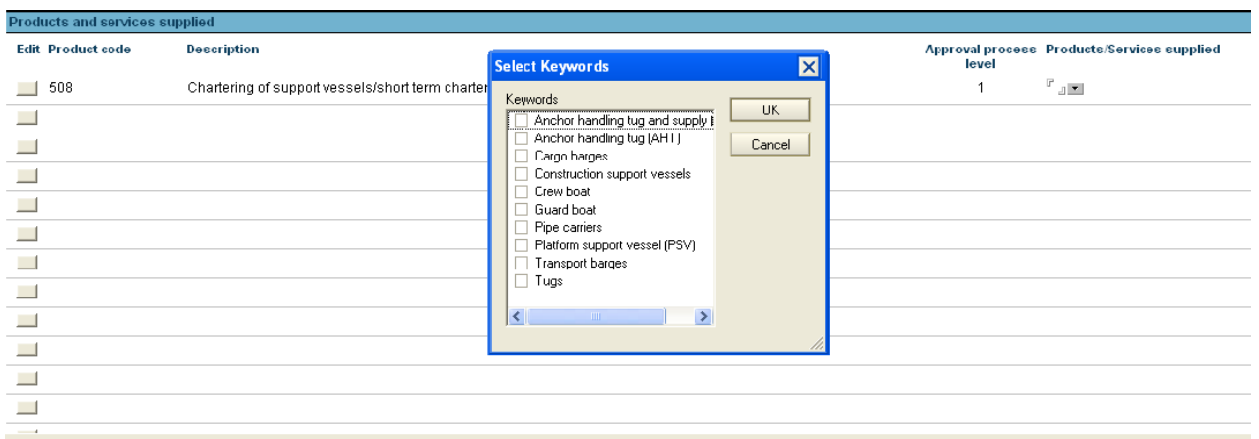
Remark: Be sure that the company code must be kept blank. (JDE Usage only)

Once all the Company details entered, you can complete the "Products and Services Supplied" part in which you will enter the Commodity Code (mandatory selection) describing the activity (The 1st commodity code is the 'core' as mentioned on section 3.2).

- Click on the button  to select a Commodity Code from the list, you can ask the SCM Systems Deployment Manager to help in choosing the right one.
- The following window appears:



- Select and click on "OK".
- Then you need to enter a keyword to precise the commodity code, in the column "Products/Services supplied" click on the button to view the list.
- Select the best keyword and click on "OK". You can eventually add a new keyword. You can select more than one keyword.



- You can enter several commodity codes with their keywords associated.
- Then you can complete the part "Comment and notes" if you have any comments about your experience or knowledge of the supplier.

Comments and notes



- Then you must complete the Categorisation Criteria Questionnaire about that Supplier.


Remark: Be aware these criteria automatically set up the Supplier's status.

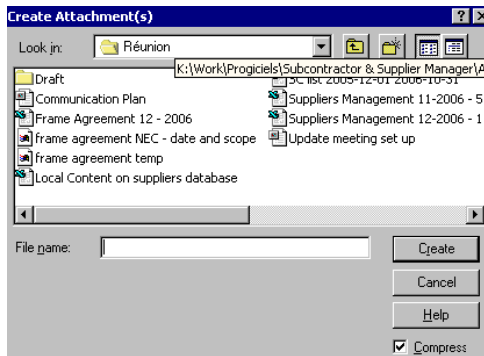
Categorization criteria		
Criteria	Meets criteria	Description
<ul style="list-style-type: none"> Supplier questionnaire received and evaluated 	<input type="radio"/> Yes <input checked="" type="radio"/> No	<p>The company is registered and is running a legal operation. Relevant contact information is obtained. We are able to communicate electronically with this supplier to issue RFQs, receive bids and perform clarifications. The information provided in the Supplier questionnaire is evaluated as satisfactory, and subject to further verification we expect that the supplier will be approved.</p>
<ul style="list-style-type: none"> ISO 9001 quality management system or equivalent 	<input type="radio"/> Yes <input checked="" type="radio"/> No	<p>The supplier has provided evidence that they operate an appropriate quality management system in accordance with ISO 9001 related to their scope of services or goods.</p>
<ul style="list-style-type: none"> HSE management system and performance 	<input type="radio"/> Yes <input checked="" type="radio"/> No	<p>The supplier has provided evidence that they operate an appropriate HSE management system accredited to ISO or equivalent related to their scope of services or goods, and that their HSE performance is acceptable.</p>
<ul style="list-style-type: none"> Acceptable technical and project management capabilities 	<input type="radio"/> Yes <input checked="" type="radio"/> No	<p>An assessment of the supplier's technical, manufacturing and project management capabilities has been made and it is expected that the supplier will perform to an acceptable level.</p> <p>After each project/purchase order a performance assessment shall be made. Should the score be below 5 it shall be brought to the supplier's attention. The supplier must explain how they will improve the areas of concern, and agree an improvement plan with Acergy. Consistent and continued failure to address poor performance could cause the supplier to be suspended from undertaking business with us and moved to the category "Do not use". When they demonstrate that the areas of poor performance have been addressed the status can be upgraded to "Approved" again. This will be dealt with as appropriate at Regional or Group level.</p>
<ul style="list-style-type: none"> Pre-agreed terms and conditions or frame agreement 	<input type="radio"/> Yes <input checked="" type="radio"/> No	<p>We have established a frame agreement or pre-agreed terms and conditions with the supplier, which shall be used when making RFQs and commitments with the supplier. The frame agreement can be exclusive or non-exclusive.</p>
<ul style="list-style-type: none"> Market intelligence contribution 	<input type="radio"/> Yes <input checked="" type="radio"/> No	<p>This supplier provides Acergy with market intelligence related to their services or goods, i.e. information about their production capacities, prices, lead times and the trends in same.</p>

- Finally, you can attach documents if necessary in the "Supporting Documents" part.

Supporting documents



- To attach a document, do as with a mail, when you are in the field where to attach the document, use the button 
- Use the following window that appears to select the documents in your session.

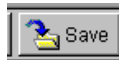


- Select the document and click on "OK", the document is attached.

Supporting documents



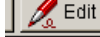
- Finally you can save using the following button; the Supplier is recorded in the database.



Status Change

Only approvers and administrators have access to change status of a Supplier. Supplier status is automatically set based on the Categorisation Criteria answers, but the status can be changed even if the Categorisation Criteria doesn't correspond to it. A comment must be given.

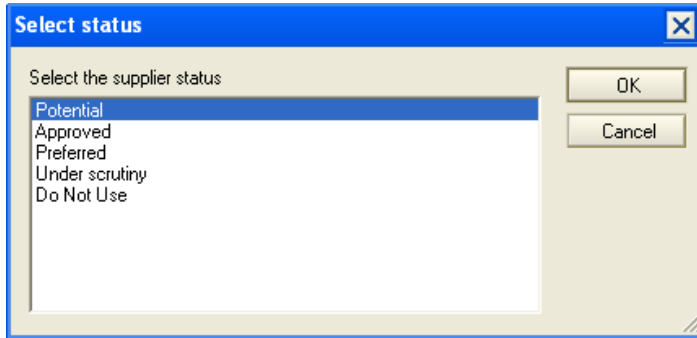
Access the Supplier Information Sheet from a view of the "Subcontractor/Supplier Cat." menu. Once opened, double click or click on the "Edit" buttons to edit the sheet and to be able to modify it.

The sheet is opened in edit mode: 

Subcontractor/Supplier categorisation

Company details

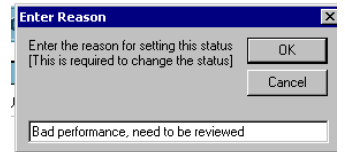
Name :	<input type="text" value="ACIERIES HACHETTE ET DRIOUT"/>	Parent :	<input type="text" value="NA"/>
Status :	<input type="radio"/> Preferred <input checked="" type="radio"/> - change status	Frame agreement (s) :	<input type="text" value=""/>
	<input checked="" type="radio"/> Region <input type="radio"/> Group		



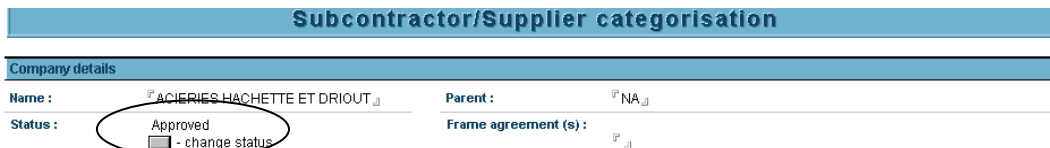
- The following window appears, enabling you to choose a new status:
- Select the new status

Then the following window appears, asking you to enter the reason for changing the status:

- Enter the reason for changing status



Then you can see the status is changed:



- Then save to record the changes, use the "Save" button:



The classification of the Supplier will be updated. If you open the Supplier's information sheet, you will see the status change in the status historical at the end of the sheet.

Status History

At the end of a Supplier's Information Sheet, you can view both the last three status changes and the full Supplier Audit Trail.

Open a Supplier's Information Sheet using one of the views in the "Subcontractor/Supplier Cat." menu.

You will see at the end of the sheet as below:

The screenshot shows a window with a title bar containing 'Close', 'Edit', 'View Related Documents', and 'Delete'. Below the title bar are several sections:

- HSE management system and performance:** Radio buttons for 'Yes' (selected) and 'No'. Description: 'The supplier has provided evidence that they operate an appropriate HSE management system accredited to ISO or equivalent related to their scope of services or goods, and that their HSE performance is acceptable.'
- Acceptable technical and project management capabilities:** Radio buttons for 'Yes' (selected) and 'No'. Description: 'An assessment of the supplier's technical, manufacturing and project management capabilities has been made and it is expected that the supplier will perform to an acceptable level. After each project/purchase order a performance assessment shall be made. Should the score be below 5 it shall be brought to the supplier's attention. The supplier must explain how they will improve the areas of concern, and agree an improvement plan with Acergy. Consistent and continued failure to address poor performance could cause the supplier to be suspended from undertaking business with us and moved to the category "Do not use". When they demonstrate that the areas of poor performance have been addressed the status can be upgraded to "Approved" again. This will be dealt with as appropriate at Regional or Group level.'
- Pre-agreed terms and conditions or frame agreement:** Radio buttons for 'Yes' (selected) and 'No'. Description: 'We have established a frame agreement or pre-agreed terms and conditions with the supplier, which shall be used when making RFQs and commitments with the supplier. The frame agreement can be exclusive or non-exclusive.'
- Market intelligence contribution:** Radio buttons for 'Yes' (selected) and 'No'. Description: 'This supplier provides Acergy with market intelligence related to their services or goods, i.e. information about their production capacities, prices, lead times and the trends in some.'

Below these sections is a section titled 'Supporting documents'.

Next is the 'Supplier status audit trail' table:

Date	Actioner	From status	To status	Reason
18/12/2006	Benjamin Alby	Preferred	Approved	Bad performance, need to be reviewed (TEST)
27/11/2006	Benjamin Alby	Potential	Preferred	test author
27/11/2006	Benjamin Alby	Approved	Potential	test author

Below the table is the 'Full supplier status audit trail' section, which lists the same data as the table above.

Search Bar

You can access the search bar by clicking in the header menu on "View/Search Bar".

This enables you to search within the documents that appear on your view for a word you typed.

Example: In the view "Subcontractor and Supplier Cat. / by Region and keyword", select a Commodity Code for a Region and type in the search bar "Nigerian Content". You will see all the Suppliers for the region and the Commodity Code selected that has the words "Nigerian Content" in its Supplier's Information Sheet. You can also search for dates or any information.

The screenshot shows a search interface with a search bar containing 'October 2006' and a 'Search' button. Below the search bar are expand and collapse buttons. The search results are displayed in a table:

Prepared	SCM	Project	Scope
325	AFMED		
1	A-Gulv Contracting AS		

Frame Agreement View

In all the views from the menu "Subcontractor/Supplier Cat." except the "All Companies" view, you can see for each Supplier is a Frame Agreement attached or not.

An icon appears in the column "FA/Pre Agreed T & C" if there is a Frame Agreement, as below:

Expand		Collapse		Status	Supplier	FA/Pre-agreed T & C	Products
419	▼	AFMED					
53	▶	Potential					
265	▶	Approved					
89	▼	Preferred					
					Abc Maritime	☹	508 - Chartering of support vessels/short term charters (project based)
					Addax Bunkering Services	☹	806 - Fuel
					Adnan Mansoor Nigeria	☹	508 - Chartering of support vessels/short term charters (project based)

View Related Documents

When you are in a Supplier's Information Sheet, you can access to its associated documents, whether it is an Assessment, a Frame Agreement, or a saving or overrun capture report. You can only access the savings or overrun capture report you created.

Access the Supplier's Information Sheet from a view in the menu "Subcontractor/Supplier Cat."

Use the button "View Related Documents":



It opens the following list where you can choose between assessments and savings or procurement capture report, and Frame Agreements.

Supplier categorisation

Company details

Name :	ACIERIES HACHETTE ET DRIOUT	Parent :	NA
Status :	Approved	Frame agreement (s) :	

Depending on what you have selected, you have one of the following windows that appear.

Choose related document

Please select the document to view from the list below.

Created	By	Project	Status	Scope
▼ Performance Assessment				
21/06/2004	Serge ARANYOSSY	SHELL BONGA	Approved	
24/06/2004	Serge ARANYOSSY	SHELL BONGA	Approved	

Choose related document

Please select the document to view from the list below.

From To	Reference	Title
06/2006	SC 21418-000	MOHO BILONDO DEVELOPMENT FIELD Pipelr

Frame Agreements

After establishing a Frame Agreement, it shall be published by listing it in the database. The Frame Agreement application on your Lotus Notes workspace is accessed, depending on your access privileges, using the following icon:



Once in the Frame Agreement application, click on "New Agreement" to enter a new Frame Agreement for a Supplier.



Complete the different information you are asked to.

- Frame Agreement Number To Type
- Brief Description To Type
- Owner To Select from the list
- Contact To Type or to select from the list
- Supplier To select from the list
- Supplier reference To Type
- Valid from To select from the calendar
- Valid to To select from the calendar
- Can be used by To select from the list
- Keywords To select from the list

A screenshot of the "Frame Agreement" application form. The form has a title bar with "Close" and "Save" buttons. The form fields are as follows:
- Frame Agreement Number: SC 21458 000
- Brief description: Packing
- Readers: All Acergy staff
- Owner: Benjamin AlbyNANSCS
- Contact: Bob J. Agreement
- Supplier: Ceidex
- Supplier ref: 40512
- Valid from: 01/06/2006
- Valid to: 01/06/2007
- Can be used by: AFMED
- Keywords: Packing
At the bottom, there is a section for "Frame Agreement documents and comments" with a small icon for attaching files.

Once this information is completed, you need to attach the Frame Agreement documents (word and/pdf).

Click in the field where you are supposed to attach the document.

Appendix 5

Procedure GR-SCM-013

Work instruction for Supplier performance assessment

Acergy	Supply Chain Management	Apr.11.07
GR-SCM-013 Ver. 4.0	Work instruction for Supplier performance assessment	Page 150 of 14

TABLE OF CONTENTS

1.	INTRODUCTION	151
2.	MAKING ASSESSMENTS.....	151
3.	USING THE ASSESSMENT DATABASE.....	153
3.1	PROCESS SUMMARY	155
3.2	CREATE A NEW ASSESSMENT.....	156
3.3	MANAGE REVIEWERS AND SUBMIT FOR REVIEW.....	157
3.4	ENTERING SCORES.....	157
3.5	OUTSTANDING ASSESSMENTS	159
3.6	AMENDING AND SUBMITTING THE ASSESSMENT FOR APPROVAL	160
3.7	APPROVING A PERFORMANCE ASSESSMENT.....	160

Acergy	Supply Chain Management	Apr.11.07
GR-SCM-013 Ver. 4.0	Work instruction for Supplier performance assessment	Page 151 of 14

Introduction

Acergy's performance is heavily depending on the performance of our suppliers and subcontractors. It is therefore important to systematically assess and share information about the suppliers' performance, and to use this information when we make bidders list and during bid evaluations.

Further the results of our assessments shall be communicated to the suppliers in order to drive a continuous effort towards improved performance.

Reference is made to Principles 2 and 6, Rules 2-3 and 6-2 found in GR-SCM-001.

Group SCM has the responsibility to issue and maintain the document.

The Regional SCM Managers are responsible for the implementation of the process, timely generation of assessments and their approval.

General

There are three ways of communicating the supplier performance information:

- Performance assessments in the supplier database, these are made post contract or during execution of longer contracts.
- Any other information and supporting documents, which can be pasted into the supplier database
- By issuing a supplier alert, in case there is a need for immediate communication.

Making a supplier performance assessment

Upon delivery of a product or completion of the scope of work, the person or team who followed up the purchase order/subcontract shall complete the Supplier performance assessment report.

For standard products the Buyer, the Expeditor and/or QC as well as Logistics are typically Reviewers.

For non-standard products the project team including SCM, Engineering, QA, Expediting / QC, HSE and Project Management should be participating.

For multiple small purchases from the same supplier, for Frame Agreements and for long ongoing subcontracts the assessment can be made on a yearly basis, or with other appropriate frequency.

Scores are allocated on a scale of 1 to 9 using the following principle:

Unacceptable Many weaknesses - can perform work but cannot meet the desired standards of performance without excessive company intervention / support.		Undesirable Some weaknesses and considerable company intervention / support		Acceptable Few weaknesses and some company intervention / support.		Excellent Generally meets desired standard of performance or exceed the desired standards of performance. Very few weaknesses.		
1	2	3	4	5	6	7	8	9

Acergy	Supply Chain Management	Apr.11.07
GR-SCM-013 Ver. 4.0	Work instruction for Supplier performance assessment	Page 152 of 14

Only allocate whole numbers (do not use decimal points).

Each reviewer should only enter scores for the areas where he/she has been involved.

The reviewers should be particularly careful when reviewing such aspects as document management and schedule compliance. Other disciplines such as Document control or Expediting may be actively intervening and resolving problems. This may create a false sense of performance to other project team members and such groups must be consulted before completing the performance evaluation.

Supporting comments

The generic descriptions for each scoring category will not cover specific circumstances so it is important to record the context for scores in particular those in the high and low range, as it helps others understand better what drove the scoring. In addition each individual should include comments as follows:

- Where there are circumstances that influenced the suppliers performance that were outside the suppliers control a note should be added to this effect.
- Notes or comments must be factual with no personal opinion or interpretation of events. For example 'The Project Manager Mrwas useless' is not an acceptable comment even if it were true in the reviewers opinion. In contrast a note to record the fact that 'the supplier did not have up to-date information about sub- supplier production status' focuses on the real issue that affected the project.
- When recording delivery performance please note the following:
- Delivery is defined as the contractual commitment date including any change orders that impacted delivery and created a formal revisions to the original contractual delivery date.
- Where accelerated delivery has been agreed and paid for, the revised (earlier) date shall be the contractual delivery date that the performance is measured against.
- Any cause of late delivery should be concisely noted in the comments section of the assessment.
- Consider "If you were to place a commitment again with this supplier, what would you do differently?" Record views in the comment section for future projects to benefit from.
- Where the Regional office participates in an external industry performance reporting system such as First Point Assessment Ltd, the internal Acergy assessment should be used as the basis for the input to the external system.

Approval of the assessments

The SCM person responsible for the Subcontract / Purchase order is responsible for obtaining the various inputs, facilitating agreement to the score and entering information into the database. Assessments shall be approved by the Regional manager, or a delegate.

If the group of reviewers cannot reach consensus then the team should defer to the Regional SCM Manager for resolution based on the principle that the function who has the most expertise in the element being scored should be favoured.

Acergy	Supply Chain Management	Apr.11.07
GR-SCM-013 Ver. 4.0	Work instruction for Supplier performance assessment	Page 153 of 14

making a Supplier Alert

In case of serious lack of performance, or if a supplier is going bankrupt, or in the case of any other event that influences their ability to perform and deliver, a Supplier alert shall be made on the Bulletin board, regional or for the whole group, as relevant.

This way the problems are communicated quickly to all relevant personnel.

Prior to entering a new Bulletin, the originator should discuss the occurrence with the Regional SCM Manager to confirm that there is sufficient evidence to justify the issuing of the alert.

Following can justify a Supplier alert:

- Consistently failing to meet delivery dates/contractual commitments
- Supplier in financial difficulties
- Failing to meet HSE and/or quality requirements
- Overload in manufacturing or supply capacity

Avoid personal opinions and adhere strictly to facts.

In the alert enter names of SCM people who can be contacted for further information.

Acergy	Supply Chain Management	Apr.11.07
GR-SCM-013 Ver. 4.0	Work instruction for Supplier performance assessment	Page 154 of 14

Using the Assessment Database

The assessment system is a part of the supplier database which can be accessed from your Notes workspace. You may receive a link to the database on your local Notes server via e-mail. Clicking on the link will open the database, and also create an icon on your workspace so that you can access the database in the future. If you have any difficulties accessing the database, please contact your local IM Service Desk.



Icon in the workspace

When you first access the database, the following screen will be displayed. You may not see all of the options shown here, depending on your security level.

The screenshot shows the Lotus Notes interface for the 'DEV Subcontractor & supplier management - Suppliers\Region' database. The left-hand pane displays a hierarchical tree view. The 'Performance assessment' folder is expanded, revealing several sub-items. Callout boxes on the right provide descriptions for these items:

- Create a new assessment**: Points to the 'New assessment' item.
- View the assessments classified by status :**
 - "For review"
 - "Review status" (view for each assessment (classified by author's first name) who hasn't scored it yet)
 - "For approval"
- View the approved assessments classified by suppliers, region and project**: Points to the 'Approved' item.
- View the approved assessments classified by their scores :**
 - "Region" (hierarchisation by region, then by band of score), and
 - "Band" with the opposite hierarchisation

Acergy	Supply Chain Management	Apr.11.07
GR-SCM-013 Ver. 4.0	Work instruction for Supplier performance assessment	Page 155 of 14


Process Summary

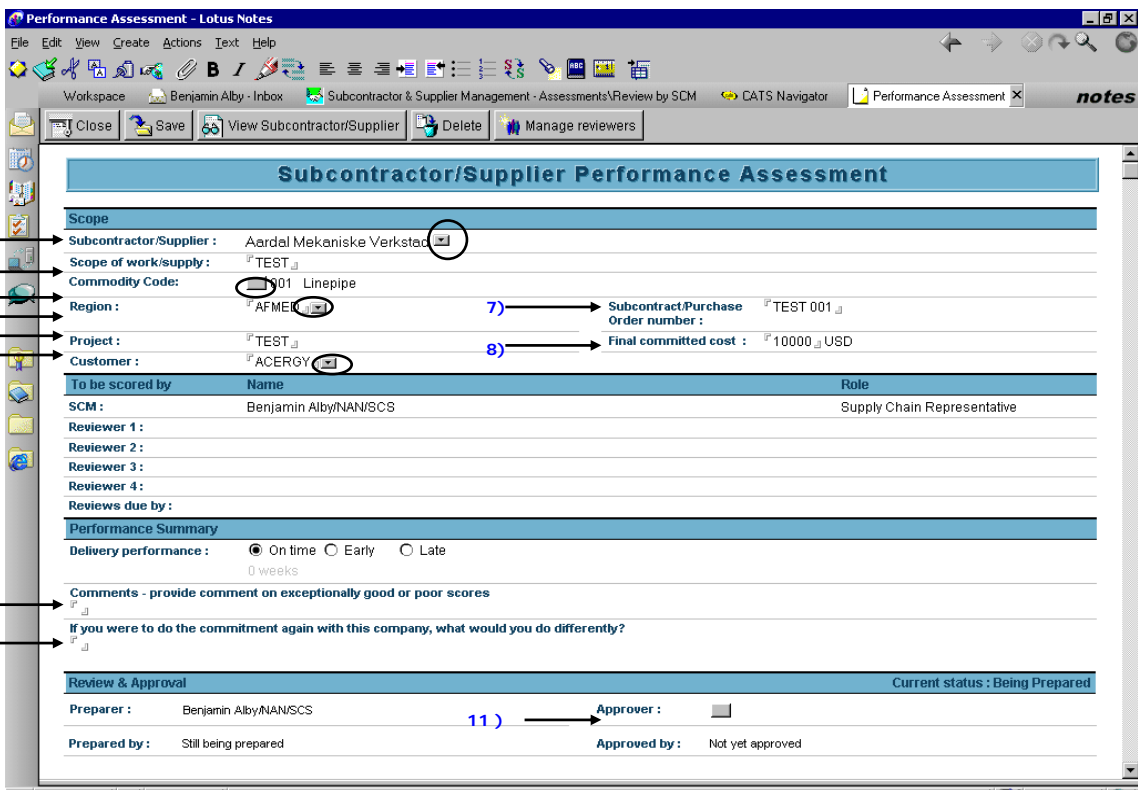
When creating a new Supplier performance assessment, the following steps are involved :

- Create a new draft performance assessment, with the details of the Supplier, scope of work and project.
- Select the personnel who will score the assessment, their respective roles and set the limit date for review in the procurement process with the button "Manage Reviewers". Chose the Approver too.
- Then you must send the document to the reviewers. Use the button "Submit for review" and enter any comments relating to the process. Once the mail is sent for scoring to the author and reviewers, it is automatically saved and the status changed to "For Review".
- When opening the assessment again, you can score it through the button "Enter scores"
- Once all the scores have been entered (you can see it in the view "For Review Status"), the next step is to submit the assessment for approval with the button "Submit for approval". This will send an e-mail notification to the Approver. The assessment is automatically saved and closed, and its status changes into "For Approval".
- Finally, the Approver can either approve or reject the assessment. If it is approved, the status becomes "Approved" and the assessment is locked. If it is rejected, it is sent back to the author.

Acergy	Supply Chain Management	Apr.11.07
GR-SCM-013 Ver. 4.0	Work instruction for Supplier performance assessment	Page 156 of 14

CREATE A NEW ASSESSMENT

To create a new assessment, click on "New Assessment"  in the Main View. Then enter the details as below:



The screenshot shows the Lotus Notes interface for a "Subcontractor/Supplier Performance Assessment". The form contains the following fields and sections:

- Scope:**
 - 1) Subcontractor/Supplier: Aardal Mekaniske Verkstad
 - 2) Scope of work/supply: TEST
 - 3) Commodity Code: 001 Linepipe
 - 4) Region: AFMEK
 - 7) Subcontract/Purchase Order number: TEST 001
 - 5) Project: TEST
 - 8) Final committed cost: 10000 USD
 - 6) Customer: ACERGY
- To be scored by:**

Name	Role
Benjamin Alby/NAN/SCS	Supply Chain Representative
- Performance Summary:**
 - Delivery performance: On time Early Late
 - 0 weeks
- Comments - provide comment on exceptionally good or poor scores:**
 - 9) If you were to do the commitment again with this company, what would you do differently?
 - 10)
- Review & Approval:**
 - Preparer: Benjamin Alby/NAN/SCS
 - 11) Approver:
 - Prepared by: Still being prepared
 - Approved by: Not yet approved

At the bottom, there are three smaller screenshots showing: 1) A list of suppliers, 3) A list of commodities, 4) A list of regions, and 6) A "Select Keywords" dialog box with a list of company names.

8) Enter the final committed cost

9) / 10) You can enter comments if you have interesting information

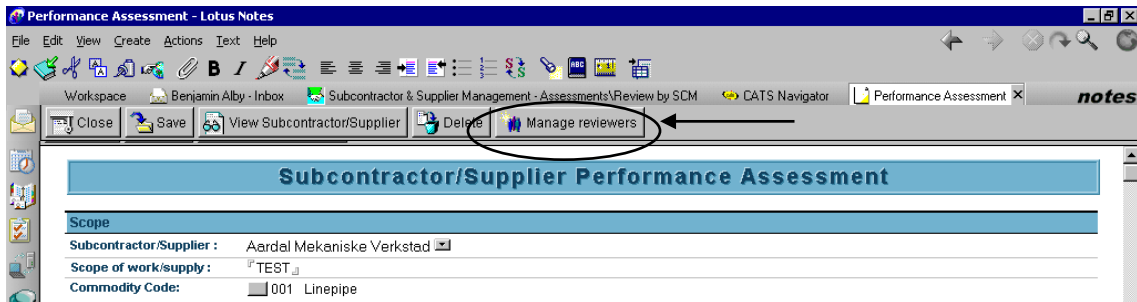
11) Chose the Approver in the list that will appear by ticking on the button (Do it

now or before sending for approval)(Groups are in the list, access by double clicking)

Acergy	Supply Chain Management	Apr.11.07
GR-SCM-013 Ver. 4.0	Work instruction for Supplier performance assessment	Page 157 of 14

MANAGE REVIEWERS AND SUBMIT FOR REVIEW

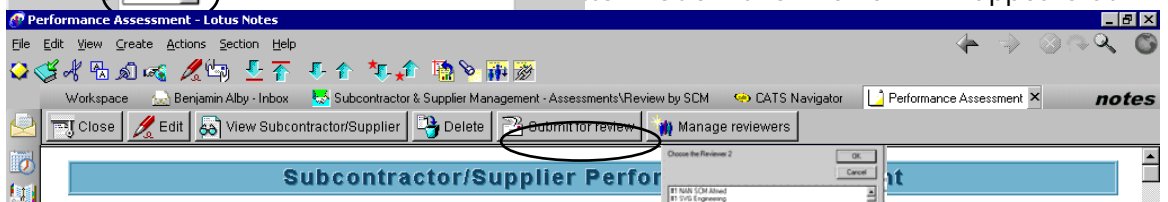
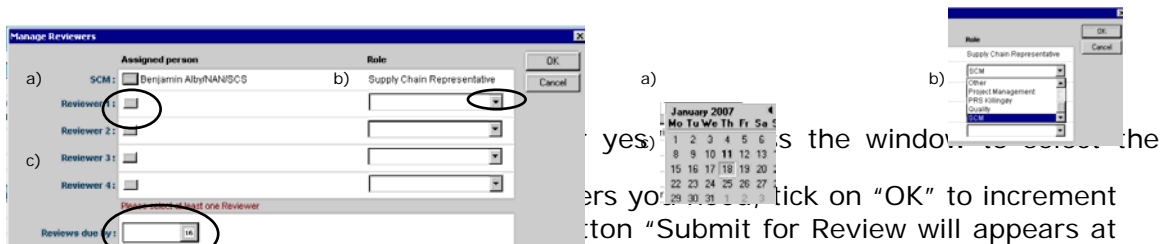
Once you have entered the primary details, you must select the personnel who will score the assessment, their respective roles and set the limit date for



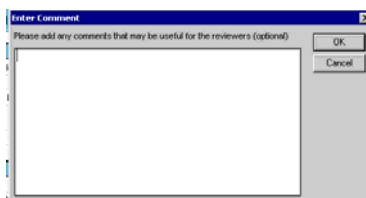
reviewing.

1) Use the button "Manage reviewers" to select them. The following window will appear :

3) The following window to select the reviewers then appears. a) Tick on the button on the left to select the reviewer, b) then use the list on the same line on the right to select his role. c) Finally chose the limit date for reviewers by using the button at the bottom of the window.



enable them to score. The following window will enable you to enter a notification for reviewers.



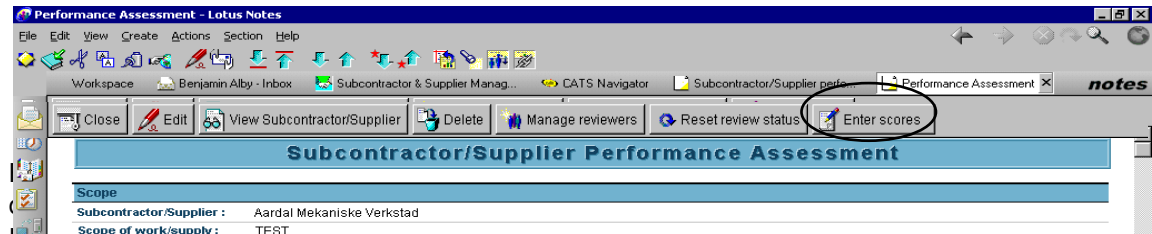
6) Tick on "OK" once you have entered your message, the mail will be sent with the assessment link attached and your message to the author and to the reviewers. The assessment will automatically be saved and closed, and its status will become "For Review".

Entering Scores

If you are a reviewer of an assessment, you will receive an email asking you to enter your scores. Click on the link in the email, and the assessment document will be opened on your screen. Alternatively, you can access the database via the icon on your Notes workspace, and click on the "For Review" view to see which assessments have been allocated to you.

Acergy	Supply Chain Management	Apr.11.07
GR-SCM-013 Ver. 4.0	Work instruction for Supplier performance assessment	Page 158 of 14

Once the assessment opened, use the button “Enter scores” to access to the window enabling you to score.



Enter the scores for each one, using the text to guide your score selection. If the category is not applicable, enter '0'. (Note that 0 scores are not included in the calculation of the overall average.) Click on “Next” to move to the next category.

Supplier Performance Assessment

Pre-award Commercial
 Assessment in support of Tendering requirements. Subcontractors' and Suppliers' responsiveness to requests for Budget or Firm quotations.

Unacceptable	Undesirable	Acceptable	Excellent
Incomplete response	Full but poor response	Full adequate response	Good response
Late untimely response in spite of expediting by us.	Timely response achieved only after expediting by us.	Timely response without Group expediting	Proactive in supplying timely response without expediting by us
Rebid required with extensive clarification and negotiation to achieve useable content	Bid only acceptable after clarification and negotiations	Good quality bid requiring limited pre-award clarification & some negotiations.	High quality bid requiring little clarification and pre-award negotiations
Formal bid requested but Budget price submitted. Limited validity offered. Numerous unpriced exceptions. High peripheral risk.	Formal bid requested but Budget price submitted. Minimal validity offered. Medium peripheral risk	Bid firm price, Limited Validity. Low peripheral risk	Bid Firm price & Validity for full Tender period with zero risk
Lacked understanding of T & C's with many objections and variations required	Many exceptions and variations to T & C's.	Minor exceptions and variations to T & C's	Accepted T & C's without qualification
Refused to negotiate delivery	Provided delivery Lead time but failed to demonstrate milestones	Offered compliant delivery Lead time and submitted milestone schedule	Offered improved delivery Lead Time and submitted integrated milestone schedule

1 2 3 4 5 6 7 8 9

Score for this category (1-9):

Enter 0 if this category does not apply

On the final screen, enter the score and then click on “Close and Save”. You will then return to the main document. The assessment at this point has a status of “For Review”.

Remark : The button « Reset Review Status » enables the author to reset the scoring status of a reviewer, for example if he has made mistakes while scoring and he needs to score again.

Acergy	Supply Chain Management	Apr.11.07
GR-SCM-013 Ver. 4.0	Work instruction for Supplier performance assessment	Page 159 of 14

OUTSTANDING ASSESSMENTS

The "Review Status" view shows which reviewers have not entered their scores for a particular assessment. Assessments are classified by author's first name.

Created	Supplier	Not yet scored
2 Benjamin Alby		
12/12/2006	3PS Inc.	Benjamin Alby Gerard LEBAUT
11/01/2007	A-Gulv Contracting AS	Benjamin Alby
5 Betty Tough		
20/03/2006	CR Encapsulation	Betty Tough Norman Simpson Jack Johnston
20/03/2006	Canusa Systems Ltd	Nicolas Holl Ian Reid
21/03/2006	ECE Engineering (Dundee) Ltd	Betty Tough Nicolas Holl Paul Robinson Stephen Rolfe
23/03/2006	Banford Associates Ltd	Betty Tough
11/04/2006	Pipeline Technique Ltd	Betty Tough Ian Shenstone Sue Galloway
5 Brad Youngson		
03/11/2004	BMT Cordah Ltd	Brad Youngson Colin Petterson Alan Buchan Alan Robertson Graham Garden
23/11/2004	B & A Hydraulics Ltd	All reviewers have entered scores
27/01/2005	iicorr Ltd. (CorrOcean)	Alan Buchan Graham Garden Ken Carter
06/10/2005	Oceaneering International Services Ltd	All reviewers have entered scores
11/10/2005	Impalloy Ltd	All reviewers have entered scores

Acergy	Supply Chain Management	Apr.11.07
GR-SCM-013 Ver. 4.0	Work instruction for Supplier performance assessment	Page 160 of 14

Amending and Submitting the Assessment For Approval

Once all the reviewers have entered their scores, the SCM originator, author of the assessment should submit it for approval. Before doing so, he/she should review the scores and comments entered. Select the assessment from the "For Review" view.

The screenshot shows the Lotus Notes Performance Assessment interface. The main window displays a table of category scores and a performance summary. The table has columns for Category scores, SCM, Reviewer 1, Reviewer 2, Reviewer 3, Reviewer 4, Agreed score, and Use this score. The performance summary includes delivery performance, late delivery, and comments on exceptionally good or poor scores.

Category scores	SCM	Reviewer 1	Reviewer 2	Reviewer 3	Reviewer 4	Agreed score	Use this score
1 Post-award Health Safety & Environmental Activities	5	1				4.0	
2 Pre-award Commercial	4	NA				4.0	
3 Subcontractors' & Suppliers' Management Of The Work And Schedule	8	4				6.0	
4 Post-award Commercial	7	NA				7.0	
5 Management And Control Of Sub-subcontractors & Sub-suppliers	4	4				4.0	
6 Subcontractors' & Suppliers' Engineering, Technical Execution And Competence	1	4				2.5	
7 Quality Assurance & Control	5	4				4.5	
8 Documentation	6	4				6.0	6
9 Installation & Commissioning	4	NA				4.0	
10 Start-Up /Initial Operations And Warranty	4	4				4.0	
11 A New Categorisation To Test Capital Letters	5	NA				5.0	
12 A New Criteria	6	NA				6.0	
13 Another new criteria to test	6	NA				6.0	
Overall average						4.8	

Performance summary
 Delivery performance : 2 weeks late
 Late delivery was due to : Other party
 Comments on exceptionally good or poor scores
 If you were to do the commitment again with this company, what would you do differently?

To modify any of the scores, click on the "Edit" button. A column headed "Use this score" will appear to the right of the scores (see below). Enter any scores you wish to change in this column. When you click on the "Save" button, the averages will be re-calculated.

If you have not selected an Approver at this point, click on the Edit button, and select an approver from the Address Book, and click on the "Save" button. Click on the "Submit for Approval" button and an email will be sent to the Approver with a link to the assessment.

The screenshot shows the Lotus Notes Performance Assessment interface with the "Submit for approval" button highlighted. The main window displays the "Subcontractor/Supplier performance assessment" form. The scope is "A-Gulv Contracting AS".

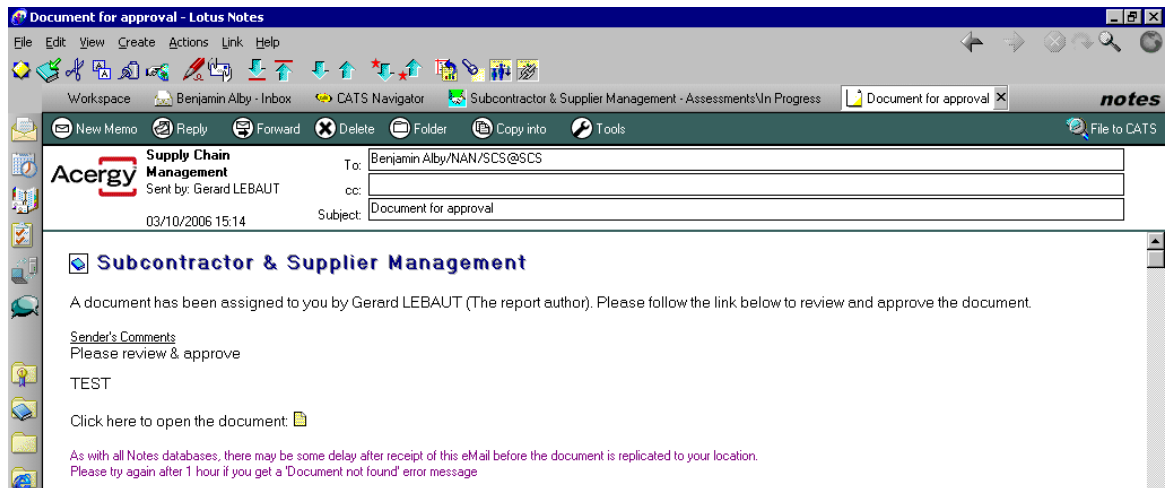
Subcontractor/Supplier performance assessment

Scope
 Subcontractor/Supplier : A-Gulv Contracting AS

Approving a Performance Assessment

Acergy	Supply Chain Management	Apr.11.07
GR-SCM-013 Ver. 4.0	Work instruction for Supplier performance assessment	Page 161 of 14

As the Approver of an Assessment, you will receive an e-mail containing a link to the document. Click on a the link to access the assessment directly. Alternatively, you can select the assessment from the "For Approval" view.



To approve, click on the "Approve" button. A prompt will ask you to confirm that the assessment is to be approved. Once approved, the assessment cannot be changed.

If you do not wish to approve the assessment, click on "Document is not prepared". This will change the status back to "For Review", and it will appear in the "For Review" view. The author of the Assessment can then Edit it as required.

