# Study on voluntary arrangements for collaborative working in the field of construction services

### [Contract No SI2.ICNPROCE015827500]

## **Final Report**

Part 1: Main Report

Submitted by

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Voluntary arrangements for collaboration in construction: Final Report

Part 1: Main Report

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### **Executive Summary**

This Report stems from a study contract placed by DG Enterprise and Industry with a research consortium led by Manchester Business School, UK (Contract No SI2.ICNPROCE015827500]). The study reviewed the use of voluntary arrangements that promote collaborative working in the construction sector in selected EU Member States, and the methods ('approaches') that had been adopted to promote these arrangements, and then on the basis of that review developed a 'Best Practice' Guide to such arrangements for use by the Commission in promoting their wider application. The study started on 20th December 2007, a draft of the guidance document was submitted on 20th November 2008 and the draft Final Report submitted on 20th January 2009.

The Report has three parts:

- Part 1 This main report, which covers the study process and presents the main findings and conclusions of the study
- Part 2 The draft Guide together with the some 21 associated Case Studies.
- Part 3 Seven Country Reports, one from each country represented in the Study Team, which provide an overview of that country's experience with voluntary arrangements for collaboration in the construction sector

This Executive Summary covers Parts 1 and 2. Chapter 5 of Part 1 is a Synthesis and Assessment Report which summarises the main elements of Part 3, the Country Reports, and draws overall conclusions from them. This Summary includes a summary of that chapter.

### Part 1: Main Report

Introduction (Chapter 1)

The study consortium included partners from seven Member States, six of which were named in the Specifications for the study (Annex A). The partners and principal contributors were:

Manchester Business School University of Manchester, UK (Dr John Rigby, Professor Roger Courtney. Dr David Lowe)

Belgian Building Research Institute (Dr Georges Klepfisch)

Danish Building Research Institute, University of Aalborg (Dr Jacob Norvig Larsen)

VTT, Technical Research Centre of Finland (Dr Pertti Lahdenperä)

Delft University of Technology, The Netherlands (Dr Rob Geraedts, Professor Hans Wamelink)

SINTEF, Norway (Dr Thorbjørn Ingvaldssen)

Swedish Construction Clients Association (Professor Stefan Sandesten)

<sup>&</sup>lt;sup>1</sup> Belgium, Denmark, Finland, The Netherlands, Norway, United Kingdom

### Policy context

The European Commission's 1997 Communication on the competitiveness of the construction sector<sup>2</sup> identified issues relevant to the performance of the sector and set out an Action Plan for addressing these. Since then, a range of studies undertaken in collaboration with national administrations and industry representative bodies has enhanced understanding and provided ways forward,. This study, the latest in the series, was commissioned in support of the Lead Market Initiative<sup>3</sup> which aims to stimulate innovation and enhanced competitiveness in selected market sectors, including Sustainable Construction.

Concerns over the performance of the construction sector, attributed to traditional structures of responsibility, have led in some Member States to the promotion of collaborative approaches to project delivery and to the fostering of longer-term relationships between client and supply interests. There is now considerable evidence that such measures can lead to more successful project outcomes. These types of development enhance the competitiveness of the industry, and by extension that of the European economy. The Action Plan for the Lead Market Initiative therefore included the publication of a Guide to establishing collaborative arrangements. However, there are issues both of consistency with EU competition and public procurement policies, and of compatibility with established structures and cultures within national construction sectors. The study was therefore established to explore these issues as well as the experience of the use of collaborative arrangements, and to develop the proposed Best Practice Guide in the light of the information gained.

### Work Programme

The study was carried out through a Work Programme comprised of six Tasks.

Task 1 Establishing the project information base and the stakeholder consultation arrangements

A shared project information database was created. This contained the more significant reports and other documentation identified by the members of the study consortium, particularly those with summaries in English.

In each of the countries studied, individuals and organisations with knowledge or experience of voluntary collaborative arrangements were identified. These were subsequently invited to contribute to the development of the Country Reports and the Best Practice Guide. A summary of the aims and programme for the study (Annex B) was prepared to assist communications.

### Task 2 Preparation of country studies

Each member of the study consortium prepared a report summarising the use of voluntary arrangements in their country and the approaches (if any) used to promote such arrangements. Some information was obtained on the use of voluntary collaborative arrangements in other countries, particularly Germany. The Country Reports were updated in the course of the study; the final texts form Part 3 of the study report.

Task 3 Analysis and assessment of country studies

The Country Reports were reviewed, with common elements, differences in emphasis, promotional approaches and key findings summarised in a Synthesis and Assessment Report which forms Chapter 5 of this report.

Task 4 Development and refinement of Best Practice Guide

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<sup>&</sup>lt;sup>2</sup> COM(97)539 – 4th November 1997

<sup>&</sup>lt;sup>3</sup> COM(2007)860 – a lead market initiative for Europe

Following endorsement of an outline proposal by the Management and Steering Group (MSG) for the study, a draft Guide was prepared. Consultations on the Guide took place in the countries represented in the Study consortium and in four other Member States. In addition, European representative bodies and relevant Directorates General were invited to comment. Case Studies illustrating the implementation of voluntary collaborative arrangements were also developed. The Guide, with the Case Studies, forms Part 2 of the study report.

#### Task 5 Preparation of reports

In addition to this final report, a Progress Report was prepared for the second meeting of the MSG, and a further report for the third meeting.

Task 6 Management of the study and liaison with the Commission and MSG members

> The Management and Steering Group met on three occasions; the records of those meetings are at Annex C.

### The scope of the study and the interpretation of 'voluntary arrangements for collaborative working' (Chapter 2)

Because a wide range of different specialists contribute to the execution of construction projects, much collaboration takes place in the normal course of business, and without specific measures or incentives. The focus of the study was not on these 'normal business' relationships but on arrangements that specifically aim to foster and reward collaborative behaviours and actions by members of a project team, or in a supply chain. The Study Team concluded that these have, as a common feature, a decision by one or more parties to the arrangement to give up some power or freedom of prospective benefit, in the belief - but not the certainty - that this will lead to a superior outcome for themselves and the other parties to the arrangement. A Danish definition of partnering illustrates the role of trust and belief in the development of such collaborative relationships:

'a type of collaboration in a construction project based on dialogue, trust, openness and with early participation from all actors. The project is carried out under a mutual agreement expressed by mutual activities and based on mutual economic interests'

Five types of voluntary arrangement were identified for inclusion in the study .These were not exclusive; it was recognised that relationships may in practice include elements of more than on type, and two of the Case Studies illustrate other forms of collaboration. They were discussed in a Briefing Document (Annex D) prepared following the second meeting of the MSG. Chapter 2, however, presents a revised discussion with takes into account later information.

### The five types were:

Project partnering - where the parties formally agree to work collaboratively in a single project, this agreement being often expressed in a 'partnering charter' or similar document and underpinned by agreements about sharing of savings, resolving disputes without recourse to litigation etc. The Country Reports showed that this was the most common form of voluntary arrangement in some of the countries studied (eg Denmark, Sweden) and had been used in all the countries studied. There was some experience in Germany also.

Strategic partnering - where a client decides to work with a defined set of supply interests over a number of projects, with mutually expressed intentions - sometimes

<sup>&</sup>lt;sup>4</sup> Guidelines for partnering, National Agency for Enterprise and Construction, Copenhagen (2004)

formalised into targets and commitments - to improve the quality of relationships and overall project performance. The actual works to be carried out may not be defined at the start of the arrangement. Again, this type was found in most of the countries studied

Framework arrangements – these are similar to strategic partnering in that a client selects certain suppliers to supply services for a defined period, and there is a mutual intention to improve the quality of relationships and of performance over that time. The actual works will not be defined at the start of the period but once a project is defined there is a secondary selection process to determine which firm(s) will carry it out. Framework arrangements should be distinguished from framework contracts; in the latter, the relationships is purely contractual with no commitment to mutual improvement.. The UK, particularly, has used this form of collaboration.

Alliances – a particularly strong form of project partnering in which the client and the principal supply interests create a joint organisation which has its own identity to deliver a project. In its strongest form this is established as a jointly-owned company. Examples of the use of alliance structures in infrastructure projects were identified in several countries.

Construction consortia – where a group of supply interests come to an agreement to develop and market services jointly. The study consortium distinguished between consortia formed specifically to tender for a particular project, which were considered to be 'normal business practice', and those intended to have a longer period of existence, during which the firms developed new construction services or tendered jointly for a number of projects. This form of collaboration, in contrast to the others, does not involve the client. Examples were identified in several of the study counties and in other Member States.

Voluntary arrangements are complementary to the contractual relationships between parties to a project and do not replace these. They promote a collaborative environment in which contractual obligations are fulfilled Thus they need to be distinguished from the use of integrated forms of contract (e.g. design-build-operate) which may not include any collaborative elements. Some measures to encourage collaboration (e.g. payment arrangements which encourage mutual problem-solving) may be included in contractual conditions.

Similarly, voluntary arrangements are distinct from funding arrangements – in particular public-private-partnerships do not necessarily include measures to promote collaborative although they often cause firms to come together in a consortium.

### **Discussion of other aspects of the study** (Chapter 3)

This chapter considers different aspects of the study Specifications:

- The scope of 'construction' Construction is interpreted as all the activities that contribute to the creation and maintenance of the built environment. This excludes 'engineering construction' (i.e. industrial and power plant); the study has focussed on voluntary arrangements in the construction of buildings and civil works where in some countries there have been national 'approaches' to the promotion of collaboration.
- The competitiveness of the construction sector and the European economy

  One aim of the study was to provide assessments of the impact of voluntary arrangements on the competitive position of firms that are party to such arrangements and of the overall contribution of such arrangements to the competitiveness of the European economy. The latter arises through the effect on the delivery of construction projects. Since construction is a key element in the delivery of many social and economic policies, this indirect impact is more significant than it might be for other industrial sectors.

### Policy implications

The principal EU policies relevant to voluntary arrangements are those concerned with public procurement, competition, SMEs and sustainable development. Other areas of policy which may benefit from voluntary arrangements are skills and training, and innovation. The Country Reports included discussion of policy interactions. In particular, the study considered the potential impact for SMEs of arrangements which raise the size of individual contracts or require investment of management time in the creation of new forms of relationship. The study identified guidance on these issues which was reflected in the Best Practice Guide.

Approaches to the promotion of voluntary arrangements
The Country Reports included reviews of the national programmes established in
some countries to promote collaborative ways of working, and of other measures (e.g.
those taken by representative bodies of contractors or clients) that promoted such
arrangements. A distinction was drawn between these high level 'approaches' and
the various measures identified which encourage and reward collaborative behaviour
and actions at the project level.

## The study information base: reference documentation and the Country Reports (Chapter 4)

### Reference documentation

The information base for the study forms Annex E. It includes official reports, guidance documentation, academic studies etc relevant to voluntary arrangements. Reflecting the focus on European experience, the material is drawn almost entirely from European sources. However, the Study Team are aware of documentation produced elsewhere (eg Australia, USA) and are satisfied that there is consistency between the experience of voluntary arrangements in Europe and in other continents. The information database has been structured by topic.

The academic literature on the rationale for firms entering into voluntary arrangements for collaboration (not just in construction) has been reviewed; this review forms Annex F.

### Country Reports

Each member of the study consortium prepared a review of the use of voluntary arrangements for collaboration in their country. These reports were a key input to the information base for the study and form Part 3 of the study report.

Each report covers the following topics:

- An introduction to the country and its construction sector
- The background to the application of voluntary collaborative arrangements, including any significant reports etc
- The extent of application of voluntary collaborative arrangements and experience of their use
- Factors which are considered relevant to the successful application of voluntary arrangements
- National or other 'approaches' (if any) used to promote the adoption of collaborative ways of working, including enquiries, reports, public purchasing practices, preparation of guidance material etc
- Observations on relationship of voluntary arrangements to European public procurement and other policies

However, the reports differ in their treatment of the subject because the situation in each country is different; for example not every country has had a national approach to the promotion of voluntary arrangements.

Individuals with experience in the arrangements being studied, or who were for other reasons qualified to comment on the outputs from the study, were identified in each country. These contributed through comments, and in some cases through workshops, to the development of the Country Reports. The individuals came from the organisations listed in Annex G.

The study also obtained information on the use of partnering in Germany and some examples of collaboration amongst SMEs in France and Italy, which were included in the Case Studies. But requests for examples from a wider range of countries did not produce additional material.

### Synthesis and Assessment Report (Chapter 5)

The Synthesis and Assessment Report is based on the Country Reports. It provides an overview of the use of voluntary arrangements in the countries studied, identifies common elements and significant differences in their application and draws conclusions on the approaches used to promote collaborative practices. The main findings include:

- The countries studied show wide diversity in their use of voluntary arrangements. This seems to be related (a) to the degree of cooperation that is embedded in their normal project structures or 'construction business system' (see Annex L) and (b) to views taken by public authorities on the appropriateness of such arrangements for public sector clients. However, even in countries with apparently extensive application, there are few data on overall usage or on overall financial or other benefits.
- Some counties have considerable experience of project partnering, with participants viewing this as a more desirable and effective means of delivering projects than traditional relationships. There are many examples of successful individual projects.
- Framework arrangements with collaborative elements (in contrast to simple framework contracts) and strategic partnering arrangements are less well established, although have found application particularly in housing. The UK in particular has extensive experience of frameworks. There are concerns in several countries over the potential impact on SMEs, and these have been addressed through legislative measures and the preparation of guidance.
- Few construction consortia or of alliances were identified, but there are successful examples.
- In three countries (Denmark, Netherlands, UK) distinct national 'approaches' to the promotion of voluntary arrangements could be identified. These have in each case stemmed from enquiries stimulated by dissatisfaction with the industry's performance and have involved some or all of: high-level reports, national promotional bodies, revision of public procurement guidance; audit body endorsement, research and training initiatives, and the development of performance indicators. These measures have been applied in combination in order to be mutually reinforcing, but the role of public procurement in bringing market influence to bear on the promotion of collaboration has been particularly significant. A principal conclusion is that exhortation alone will not bring about change.
- Elsewhere, collaborative arrangements have been introduced by contractors, but have required the active cooperation of client bodies and in Sweden, for example, some public sector clients have since taken a leading role in the promotion of collaboration in their own projects. Sweden is also notable for the development of postgraduate education aimed at improving client practice.

There is considerable consensus on the measures that managements can take to promote the creation of collaborative relationships. These include: early involvement of key parties; payment systems with 'pain/gain' sharing; adoption of dispute resolution procedures that avoid litigation; clarity in objectives; workshops to ensure communication and understanding of these objectives; setting and monitoring of performance targets. Openness and appropriate behaviours by individuals are considered crucial.

- There is also consensus supported by data from individual projects that such arrangements can lead to improved delivery of projects, with final outputs that better satisfy clients needs, more assurance on costs and timescales, fewer disputes and a generally more satisfying and acceptable working environment for all participants. While cost savings are not necessarily achieved, projects which have faced difficulties may be completed without the extra costs that would otherwise have been incurred.
- Public procurement requirements are seen in some countries as a barrier to the adoption of more collaborative ways of working or the creation of longer-term relationships. Sometimes the perceived barriers are the result of national rules; this is clearly the case when the policies apply to contracts below the EU threshold value. However, the wide use of different forms of voluntary arrangement in some countries implies that these can be successfully implemented within the scope of EU Directives.
- There is evidence to suggest that voluntary arrangements can support other EU policies including those on sustainable development, training and skills development and innovation.

### 'Best Practice' Guide and Case Studies (Chapter 6)

Aims and intended audience

The Best Practice Guide, with its associated Case Studies forms Part 2 of the final report. The structure and content of the Guide are summarised later. The aims of the Guide may be summarised as:

- 1) To create awareness that collaborative arrangements exist and have proved beneficial in some Member States
- 2) To outline the forms that these take and the nature of those benefits to the various parties in construction, as a stimulus to further investigation
- To provide initial advice on how they may be established, and factors that influence their success
- 4) To remind readers that implementation of voluntary arrangements for collaboration needs to be consistent with national and EU requirements and policies, and particularly should not present market barriers to SMEs
- 5) To suggest sources of further information

Although the Specifications for the study implied that the Guide would be aimed at SMEs, it became evident during the study that 'partnering' forms of collaboration were more suited to larger and more complex projects in which SMEs were less likely to play leading roles. It was therefore agreed in the course of the study that, while it should identify issues of particular relevance to SMEs, the main audiences for the Guide were:

- Significant clients who can benefit from voluntary arrangements
- Larger firms that undertake projects of a size that justify the learning processes involved
- Representative bodies of construction interests, including of SMEs
- Policy-makers and legal advisers

Since the Guide is intended to be relevant across the EU, it does not include detailed discussion of the legal or other regulatory frameworks relevant to the introduction of voluntary arrangements in an individual Member State. It stresses that local advice should be sought prior to any initiative to introduce such arrangements.

Annex H shows the proposal for the structure and content of the Guide that was considered by the MSG at its second meeting.

### Consultations

Detailed consultations on a draft text for the Guide took place in the countries represented in the Study consortium, and in four additional Member States: France, Germany, Greece and Poland. It was considered important to widen the consultation in order to obtain views from a wider range of construction cultures (see Annex L), and particularly from Member States which had little experience of voluntary arrangements. Through members of the MSG, views on the Guide were also received from other Member States and Directorates-General with relevant policy responsibilities were also invited to comment. Annex J lists the additional organisations consulted.

The study consortium recognised that conduction consultations on the basis of an English text would restrict comment and therefore to assist the consultation, a summary of the Guide and a draft letter with key questions were prepared, with the intention that these would be translate by the organisations that coordinated the consultations in each country. These documents are included in Annex I.

Overall, there was a positive response to the draft Guide; it was considered to be a clear and useful introduction to the subject. The three main themes in the responses were:

- Presentation It was suggested that this needed to be improved, with less solid text etc.
   This has been done in the text in Part 2. Associated with these comments were many to the effect that it would not have impact if it were only available in English.
- Depth of treatment Respondents wished to see more information relevant to local circumstances. As noted earlier, a Guide that is intended to be relevant across Europe cannot cover all the matters relevant to an individual Member State.
- Value to SMEs It was suggested that the Guide should be aimed at SMEs; for the reasons considered earlier, these are not thought to be the main direct audience.

The text of the Guide was revised to take into account the consultation responses and presented to the third meeting of the MSG.

### Case studies

The second part of the Guide consists of a set of 21 Case Studies drawn from the Member States represented in the study consortium, and from France and Italy. They illustrate how the types of voluntary arrangements for collaboration considered in the study have been implemented in the construction contexts (housing, infrastructure works etc) to which they are suited. While all the Case Studies demonstrate benefits from collaboration, some also illustrate problems, and in some cases the relationships have ended. Thus they reflect the realities of collaborative relationships. Each Case Study has one or more illustrations, which are included in Part 2, with the main source files being downloadable from the study Website.

Some draft Case Studies were included in the consultations on the Guide. There were requests for them to be more detailed, but this has implications for the overall length of the Guide and the extra detail may not be relevant in some Member States.

It is envisaged that the Guide and Case Studies will be professionally designed and printed following agreement on their final texts.

### The impact of voluntary arrangements and interactions with EU policies (Chapter 7)

### Benefits from the use of voluntary arrangements

It is not possible to derive from national data in any Member State an assessment of the overall cost savings or other benefits achieved through the use of voluntary arrangements for collaboration. Even in the UK, national data on the performance of the construction sector do not show clear evidence of change although collaborative arrangements are widely used. Other factors, such as increases in material costs, additional complexity of projects or new regulatory requirements may outweigh the impact of new arrangements.

However, there is strong evidence from individual projects that such benefits can be obtained. While there are individual cases of savings of more than 20%, a more typical figure is in the 5-10% range. Not all projects are, though suited to the introduction of collaborative ways of working; smaller, straightforward projects typical of the domestic sector will continue to be carried out through traditional processes. Perhaps 40% of construction turnover – representing the larger and more complex projects – could in principle benefit from the introduction of collaborative relationships. In combination, these considerations suggest that the potential direct impact of voluntary arrangements could be equivalent to 3-4% of construction turnover in the EU or 0.3-0.4% of EU GDP.

However, the indirect benefits could be more significant. The evidence from the Country Reports is that collaborative ways of working provide greater assurance of delivery; problems are addressed more effectively and projects completed without additional costs. Moreover, the costs and disruption associated with late completion of construction works are reduced or eliminated. And the benefits in terms of greater job satisfaction, lower turnover of the workforce, higher quality and greater investment in skills development need also to be noted. While these indirect benefits are largely unquantifiable, it is possible to assess the value of timely delivery as compared with late delivery in terms of the difference in whole-life benefits and saved costs and to show that it can be of the same magnitude as the direct cost savings.

### Transferability of practices

The consultation responses indicated that project partnering and construction consortia were the types of collaboration which attracted greatest interest in countries where voluntary arrangement were not widespread. It is arguable, however, that in principle every type that has been considered in the study could by applied across the EU.

But it is also clear that substantial perceptual and regulatory barriers to the adoption of such arrangements exist in some Member States; in particular, respondents indicated that public purchasing regulations would prevent their use, or that public authorities would not be willing to adopt them because of concerns for propriety. The consultations underlined the need for a promotional initiative in a Member State to be based on a full understanding of regulatory and commercial practices in that country.

The study revealed that there was scope for wider application of voluntary arrangements even in Member States with considerable experience of collaborative ways of working. Where there are national initiatives for their promotion, the study findings can be taken up in existing or planned activities; elsewhere, they will be brought to the attention of the organisations that contributed to consultations. Supporting measures which might be taken up more widely include: the pre-project workshop (Case Study 21); the concept of the 'temporary company'; and collective project-based insurance.

### Compatibility with EU policies

### 1) Public procurement

There is a strong perception in some Member States that EU public procurement requirements, as embodied in the Public Procurement Directives, inhibit the use of voluntary

arrangements for collaboration. This contrasts with the extensive use of such arrangements by public authorities in other Member States. The EU requirements cannot therefore be a fundamental barrier to the adoption of collaborative ways of working. Local interpretation of the requirements, or additional local rules, may though inhibit adoption. This indicates that promotion of voluntary arrangements would need to be accompanied by advice on procurement practices.

There are potential risks in the adoption of such arrangements, because they imply closer relationships between clients and suppliers. But these may be addressed through having full access to financial data and by clients maintaining awareness of market conditions and prices, for example by continuing to place some work through conventional tendering rather than a framework. Independent auditing of costs and designs will also provide assurance that clients are receiving value for money. The extensive use of voluntary arrangements by pubic authorities in some member States indicates that any associated risks are manageable.

### 2) SMEs

There is a risk that voluntary arrangements for collaboration may reduce market opportunities for SMEs; this would run counter to EU policy towards small firms. This risk has been recognised in some Member States and has been addressed both through legislation and guidance. The interests of SMEs can be safeguarded and some forms of voluntary arrangement may offer them a more secure business environment than normal business practices. Overall, there is no inherent incompatibility between voluntary arrangements and the aims of EU policy, but care is needed to avoid undesirable impacts.

### 3) Sustainable development

Voluntary arrangements facilitate communications among the parties to the construction process. This leads to reduced waste and greater alignment with client requirements. Achieving high levels of environmental performance in buildings also requires all parties to communicate effectively. Voluntary arrangements also facilitate the use of Life Cycle Costing, help to promote innovation, and contribute to skills development.

### 4) Contractual, management and insurance issues

Voluntary arrangements are not substitutes for contracts but help to provide a project environment in which contractual obligations may be more effectively fulfilled. They may be introduced alongside conventional contracts but forms of contract based on collaborative principles have been developed in some Member States and are generally considered helpful. Annex K summarises the ways in which some newer forms of contract in the UK incorporate collaborative elements.

Management practices are at the core of collaborative ways of working. There are challenges for managements and for individuals in moving to collaborative relationships. SMEs. particularly, may find it difficult to devote the necessary management resource to understanding new principles of operation and client bodies may need to take the initiative to identify needs and make provision for appropriate training.

Most collaborations have take place with conventional Insurance arrangements in which each party is covered by their own indemnity insurance. But project-based collective insurance is used in some Member States (eg Belgium) and this is generally thought to be helpful in promoting collaboration. The introduction of longer term relationships may stimulate the wider provision of such insurance, by enabling insurers to assess the track record of combinations of firms. The Commission has instituted a separate study of insurance for construction.

### **Promotion of voluntary arrangements for collaboration** (Chapter 8)

The introduction of voluntary arrangements for collaboration requires changes in procurement and management practice on the part of the client and construction interests involved in a project. These will not happen unless the various parties are persuaded of the advantages.

The Country Reports suggest that, amongst the different interests, public sector clients have a particularly important role in achieving change, by providing market-related incentives for change. But in turn they will be able to introduce new processes only if the national framework for public procurement allows them to do so.

Simple promotion of the Guide will therefore not be sufficient to achieve the changes required, but it is a starting point. It will serve to raise awareness of voluntary arrangements and of their potential benefits. Beyond that, in any individual Member State there would need to be an appraisal of the scope of the introduction of collaborative ways of working, including an assessment of the regulatory and commercial framework for construction, and the development of a change programme.

Several tiers of proposals for promotion of the Guide and more generally for promotion of voluntary arrangements are therefore put forward:

### i) Promotion of the Guide

- In the English text, distribution to national administrations, European representative bodies and the construction media, supplemented by local distribution as appropriate
- In other languages, to similar bodies
- Provision of Web access
- Providing access through the European Enterprise Network
- Through support for European or local launch events

### ii) Provision of additional advice and guidance

- Supporting the production of local editions of the Guide which incorporate guidance on local requirements, sources of advice etc
- Arranging for translation of a wider range of guidance material
- Preparing guidance and Case Studies on procurement issues relevant to the implementation of collaborative arrangements
- Supporting the exchange of experience through networks

### iii) Generating the motivation for change

- Supporting national conferences
- Offering financial assistance for national studies, perhaps linked to inputs from other EU Member States

Complementing these measures, there might be an examination of the way in which other EU programmes could promote the use of voluntary arrangements. Structural Funds and the European Investment Bank, for example, provide financial support for infrastructure projects. These might be linked to the adoption of collaborative relationships. On a smaller scale, support for improving the energy efficiency of buildings might be accompanied by a stimulus to the creation of consortia of SMEs.

### Final observations (Chapter 9)

Achieving widespread adoption of voluntary arrangements requires long-term commitment. Public procurement practices are crucial; they can continue to influence the industry after specific promotional initiatives have ceased. They are particularly important in current market conditions where there are powerful pressures for intense price-based competition and a reversion to traditional relationships. Convincing people of the benefits will require persuasive data from local projects; in turn, there will need to be agreed performance indicators and data collection processes.

The development of a core set of indicators at European level would assist evaluation of the competitiveness of European construction and could be the basis of regular monitoring of construction performance which would help to maintain the commitment to different ways of working. The promotion of collaborative processes has been only one aspect of construction change programmes in Member States and these indicators would underpin wider change initiatives.

Thus the production and promotion of the Guide could be a catalyst for wider change in the European industry, to the benefit of everyone.

### Part 2: Guide and Case Studies

### Part 1: Guidance

### **Introduction (Section 1)**

This Guide stems from a study of the use of collaborative arrangements in construction, commissioned by DG ENTR of the European Commission. Experience in a number of EU Member Sates indicates that when firms engaged in a construction project commit explicitly to working in a collaborative manner, better outcomes are achieved than under conventional arrangements. Moreover, the individuals concerned find the working environment more satisfying. Another form of collaboration takes place when firms come together to exploit market opportunities which they could not address individually.

This Guide is addressed to all concerned with the supply of construction-related services, and to clients for construction. It provides initial advice on different forms of collaboration in order to inform individuals and organisations about these ways of working and to promote their adoption. However, it is not a definitive guide to the application of the EU Public Procurement Directives or to local requirements which would influence the adoption of the collaborative ways of working. Local advice on these issues should be sought.

### Review of collaborative relationships (Section 2)

The Guide identifies five types of collaborative arrangement, but relationships may in practice include elements of several types of arrangement:

- Project partnering where the client and principal supply interests in a specific project formally agree to work collaboratively
- Strategic partnering where a client works with a limited set of supply interests over a
  number of projects (not all of them necessarily defined at the start of the arrangement),
  with the agreed intention of improving the quality of their relationships and the level of
  their performance over the course of the projects.
- Framework arrangement this is similar to strategic partnering in that the client selects a number of firms to carry out works in a future period, with the aim of mutual improvement and benefit, but there is a secondary selection process to determine which firm(s) will deliver a specific project. Often the arrangement concerns smaller items of work.
- Alliance a particular form of project partnering in which the client and supply interests form a joint organisation with its own identity to deliver the project. At its strongest, the client becomes a shareholder in a jointly-owned company.
- Construction consortium where a group of supply interests (often SMEs) agree to develop and market their services jointly or to develop a new product or service. The consortium enhances the overall market competitiveness of its member firms. This is distinct from the temporary relationships that firms enter into in order to tender for a specific project.

Collaborative relationships are based on *trust* and *openness* amongst the parties, and lead to behaviours and decisions which provide mutual, not just individual benefit. They are also based on *belief* rather than certainty. The parties to the relationship have no guarantee that they will benefit from it, but believe that this will happen.

Collaborative arrangements linked to projects are not a substitute for a contract; they enable contractual obligations to be discharged more effectively.

The benefits of collaborative relationships for clients and suppliers include:

- More reliable delivery of projects
- Fewer (or even zero) formal disputes or instances of conflict
- Improved communications, leading to better problem-solving and potential cost savings
- Continuous performance improvement and transfer of knowledge between projects
- · Greater assurance on payment schedules
- Greater ability to address markets

### For the community, benefits include:

- More reliable delivery of facilities, so that the benefits of use may be realised on schedule and the disruptions of late-running projects avoided
- Incentives by firms for investment in skills development
- Reduction of wastes and more sustainable construction

The greatest benefits from collaboration on projects are achieved with larger, more complex projects where there are challenges which should be addressed jointly. Strategic partnering bring benefits when there is scope for providing a flow of work within the capabilities of the partner organisations and firms have an incentive to invest in the relationship. Construction consortia are similarly founded on a perception of market opportunities that will lead to commitment by the partners.

### Successful collaborative relationships (Section 3)

This Section summarises factors which contribute to successful collaborative relationships and outlines ways of fostering collaboration. The topics covered include:

- The critical importance of inter-personal relationships
- The central role of leadership, particularly by senior managers in client organisations.
- The selection of partners who share a willingness and commitment to working collaboratively
- The benefits of early appointment of key members of a project team
- The need to establish a common understanding of the principles and objectives of the collaboration, and to express these in an agreed, public document
- The interactions between contractual provisions and measures that support collaboration
- Measures which promote collaborative behaviours and good communications
- The role of rigorous performance monitoring in maintaining healthy and effective relationships
- Financial incentives for collaboration
- Procedures that that enable disputes to be settled without recourse to legal action
- The collective management of risk

### Compliance with EU and national policies and requirements (Section 4)

This Section contains general guidance on the relationship between collaborative ways of working and the requirements of the EU procurement and competition legislation but it is not intended to be a definitive guide to the application of such legislation. It:

- considers how collaborative arrangements may be implemented in a way that is wholly compatible with EU Procurement Directives
- Points out that national procurement and other requirements should be taken into account; hence appropriate advice should be sought before implementation of collaborative arrangements.

- Underlines the need to ensure that SMEs are not excluded from collaborative arrangements and offers guidance on how this may be avoided. Including:
  - Having separate framework for projects of different sizes
  - o Having appropriate tendering and management arrangements
  - o Holding consultations with SMEs on future opportunities
  - o Identifying management needs and assisting the development of capabilities

### Sources of further advice and guidance (Section 5)

### Part 2: Case Studies

The Case Studies illustrate how voluntary collaborative arrangements have been employed in a wide variety of construction contexts and in a range of Member States. Most are examples of the types of collaboration considered in the main part of the Guide but two (20 and 21) show different ways in which firms have come together in a collaborative activity.

The Case Studies present the key points of each collaboration. Where possible, each includes a source from which further information may be obtained.

Brief details of each Case Study are given below:

No.	Type*	Country	Name
1	PP	SE	Klockarbo Housing
2	PP	BE	Janssen Pharmaceutica
3	PP	NO	State Archives
4	PP	SE	Göta Tunnel
5	PP	DK	Öresund Link
6	PP	BE	Brussels Office Renovation
7	PP	SE	Linköping Hospital
8	PP	NO	Baerum Municipality Model
9	SP	DK	Consensus housing
10	SP	DK	Management of Danish Main Roads
11	FA	UK	Birmingham Construction Partnership
12	FA	UK	Procure21
13	FA	UK	Hillingdon Homes
14	AL	NL	Waardse Alliance
15	AL	UK	NW Gas Alliance
16	CC	FI	Concrete consortium
17	CC	NL	EspritHuis
18	CC	SE	Arcona
19	CC	ΙΤ	CIPEA
20	0	FR	FFACB
21	0	FI	Pre-project Clinic

\* AL - Alliance

**CC- Construction Consortium** 

FA – Framework Arrangement

PP - Project Partnering

SP - Strategic Partnering

O - Other

The table below shows how the Case Studies illustrate the application of voluntary arrangements in different construction contexts. (Numbers refer to the previous table.)

Construction	Ty	pe of volu	luntary arrangement for collaboration			
Context	PP	SP	FA	AL	CC	0
New housing	1	9			16(iii)	20
					17(iii)	
New building	2, 3		11(i)		18	
			12(ii)		19(i)	
Infrastructure works	4, 5			14		21
Renovation/	6, 7, 8(ii)	10	13	15		
maintenance						

### Notes:

- i) Also renovation/maintenance
- ii) Also an example of the selection of construction consortia
- iii) Also an example of product innovation through a consortium

# Executive Summary (French) Résumé exécutif

Ce rapport résulte d'un contrat d'étude entre un consortium de recherche dirigé par la Business School of Manchester et la DG Entreprises et Industrie (Contrat N° SI2.ICNPROCE015827500). Cette étude a examiné l'expérience acquise dans certains Etats membres de l'Union européenne concernant l'utilisation d'accords volontaires pour encourager une meilleure collaboration dans le secteur de la construction, et les méthodes ('les approches') employées pour promouvoir ces accords. Il s'agit, en se basant sur cette analyse, de fournir un Guide des « meilleures pratiques » pour la promotion de ces dits accords, qui pourrait être suivi par la Commission pour la mise en œuvre de ces accords à plus grande échelle. L'étude a commencé le 20 décembre 2007, le projet du Guide a été remis le 20 Novembre 2008, et le projet de Rapport final de cette étude le 20 Janvier 2009.

Ce rapport est organisé en trois parties :

Partie 1 Le rapport principal qui explique le processus de l'étude et en présente les résultats principaux ainsi que les conclusions.

Partie 2 Le Guide ainsi que les textes de 21 études de cas.

Partie 3 Le Rapport des sept pays (un par pays représenté au sein de l'équipe de l'étude) qui fournit une vue d'ensemble de l'expérience acquise en matière d'accords volontaires de collaboration dans le secteur de la construction.

Le résumé exécutif traite des Parties 1 et 2. Le Chapitre 5 de la Partie 1 est un Rapport de synthèse et d'évaluation des principaux éléments de la Partie 3, le Rapport des sept pays, et en tire les conclusions générales. Ce résumé donne aussi un aperçu du chapitre 5.

### Partie 1: Rapport principal

### **Introduction** (Chapitre 1)

Le consortium de l'étude est composé de partenaires issus de sept pays membres, parmi lesquels <sup>5</sup> six sont nommés dans les termes de référence de l'étude (Annexe A). Les principaux partenaires et collaborateurs sont :

Ecole de commerce de Manchester Université de Manchester, Royaume Uni (Dr John Rigby, Professeur Roger Courtney, Dr David Lowe)

Le Centre Scientifique et Technique de la Construction (Dr Georges Klepfisch)

L'Institut danois de recherche en construction, Université d'Aalborg (Dr Jacob Norvig Larsen)

VTT, le Centre finlandais de recherche technique (Dr Pertti Lahdenperä)

Université de Technologie de Delft, Pays Bas (Dr Rob Geraedts, Professor Hans Wamelink)

<sup>&</sup>lt;sup>5</sup> Belgique, Danemark, Finlande, Pays Bas, Norvège, Royaume Uni.

SINTEF, Norvège (Dr Thorbjørn Ingvaldssen)

Association suédoise des clients du secteur de la construction (Professeur Stefan Sandesten)

### Contexte politique

La Communication de la Commission Européenne de 1997 sur la compétitivité du secteur de la construction a soulevé un certain nombre de questions quant à la performance du secteur de la construction<sup>6</sup> et a établi un plan d'action afin d'y répondre. Depuis, des études menées en collaboration avec les administrations nationales et les organisations de cette industrie ont permis de mieux comprendre la situation et ont proposé d'éventuelles solutions. Cette étude, qui est la dernière en date à ce sujet, a été demandée dans le cadre de l'Initiative sur les Marchés Porteurs (IMP)<sup>7</sup> visant à stimuler l'innovation et à encourager la concurrence dans des secteurs de marché sélectionnés tels que la construction durable.

Des inquiétudes quant à la performance du secteur de la construction, attribuées aux structures traditionnelles de responsabilité, ont conduit certains Etats membres à promouvoir la mise en place d'approches collaboratives pour la réalisation de projets et à encourager des relations durables entre clients et fournisseurs. Il est aujourd'hui largement démontré que de telles mesures peuvent améliorer les résultats d'un projet. Ce type d'initiative accroît la compétitivité de l'industrie de construction et, par là-même, celle de l'économie européenne. Par conséquent, le plan d'action de l'Initiative sur les Marchés Porteurs comprend la publication d'un Guide pour établir les accords de collaboration. Cependant, ces derniers soulèvent des questions de cohérence avec la politique de concurrence et des marchés publics de l'Union Européenne, ainsi que de compatibilité avec les cultures et structures existant au sein des secteurs nationaux de la construction. Cette étude a donc été menée dans le but d'explorer ces questions et l'expérience acquise en matière d'accords volontaires de collaboration et de développer le Guide des meilleures pratiques sur la base de ces informations.

### Plan de Travail

Le plan de travail de l'étude comprend six tâches :

# Tâche n° Mise en place de la base d'information de l'étude et des dispositions pour sa consultation.

Un projet de base de données commune a été créé. Cette base contient les rapports les plus importants ainsi que d'autres documents identifiés par les membres du consortium d'étude, notamment ceux contenant des résumés en anglais.

Au sein de chacun des pays étudiés, des personnes connaissant ou ayant acquis une certaine expérience en accords volontaires de collaboration, ont été identifiées. Elles ont ensuite été invitées à participer aux rapports des sept pays et au Guide des meilleures pratiques. Un résumé des objectifs et du programme de l'étude (Annexe B) a été préparé pour assister la communication.

## Tâche n° Préparation des études par pays. 2

Chaque membre du consortium de l'étude a préparé un rapport, résumant

<sup>&</sup>lt;sup>6</sup> COM(97)539 – 4 Novembre 1997.

<sup>&</sup>lt;sup>7</sup> COM(2007)860 – une initiative sur les marchés porteurs pour l'Europe.

l'utilisation des accords volontaires dans leur pays et, le cas échéant, les méthodes utilisées afin de promouvoir de tels accords. Des informations ont aussi été obtenues sur les accords volontaires de collaboration dans le secteur de la construction dans d'autres pays tels que l'Allemagne. Les rapports des sept pays ont été actualisés au cours de l'étude ; les textes définitifs se trouvent en Partie 3 de ce rapport.

### Tâche n° 3

Analyse et évaluation des études de pays

Les rapports des sept pays ont été révisés ; les éléments communs, leurs différents focus, les approches promotionnelles et leurs observations principales sont résumés dans un Rapport de synthèse et d'évaluation au chapitre 5 de ce document.

### Tâche n°4

Composition et révision du Guide des meilleures pratiques

Suite à l'approbation par le Groupe de Pilotage (GP) des grandes lignes du projet d'étude. Un premier Guide a été préparé. Il a été consulté dans les pays représentés au sein du consortium d'étude ainsi que dans quatre autres pays membres. De plus, des organisations européennes et les services de la Commission européenne ont été invités à faire part de leurs commentaires. Des études de cas ont été aussi conduites pour illustrer la mise en application des accords volontaires de collaboration.

### Tâche n°

Préparation des rapports

En plus de ce rapport final, un Rapport d'étapes a été préparé pour la deuxième réunion du GP suivi d'un autre rapport pour la troisième réunion.

## Tâche n° 6

Organisation de l'étude et liaison avec la Commission et les membres du GP

Le GP s'est réuni à plusieurs reprises. Les minutes de ces réunions se trouvent en Annexe C.

# Délimitation du champ de l'étude et interprétation du concept 'accords volontaires de collaboration' (Chapitre 2)

Etant donné le grand nombre de spécialistes qui contribuent à la mise en œuvre de projets de construction, une grande partie du processus de collaboration se déroule naturellement et sans mesures spécifiques. Cette étude ne se concentre pas sur ces accords « naturels » de collaboration mais sur ceux qui proposent des mesures spécifiques pour encourager et récompenser la collaboration entre les membres d'une équipe de projet ou au sein d'une chaîne logistique. Le consortium de l'étude est arrivé à la conclusion que le point commun entre ces accords réside dans la décision, par une ou plusieurs des parties concernées, de renoncer à certains pouvoirs ou libertés, relatifs à des profits potentiels, dans l'espoir - mais pas la certitude - que cela mène à un meilleur résultat pour eux-mêmes et pour les autres parties de l'accord. Une définition danoise du partenariat reflète le rôle de la confiance dans le développement de telles relations collaboratives :

'un exemple de collaboration dans un projet de construction basé sur le dialogue, la confiance, la transparence et la participation dès le début de tous les acteurs. Le succès du projet est basé sur un accord mutuel, des activités en commun et des intérêts économiques mutuellement avantageux pour toutes les parties.'

<sup>-</sup>

<sup>&</sup>lt;sup>8</sup> Directives pour le partenariat. Agence Nationale pour l'Entreprenariat et la Construction, Copenhague (2004).

Cinq types d'accords volontaires ont été identifiés et étudiés. Ceux-ci ne sont pas exclusifs. Des éléments de plusieurs types d'accords peuvent se retrouver en pratique dans les relations établies entre les parties. Les cinq types d'accords sont les suivants :

Le partenariat de projet – lorsque les parties acceptent de travailler en collaboration sur un projet unique de manière formelle. Cet engagement est souvent exprimé dans une 'charte de partenariat' ou tout autre document similaire. Il est aussi soutenu par des accords relatifs au partage des surcoûts et des profits et à la résolution des conflits sans recours pour litige, etc. Les rapports des sept pays ont démontré que c'est l'accord volontaire le plus commun dans certains des pays examinés (comme le Danemark et la Suède) et utilisé dans tous les pays étudiés. Il a aussi été utilisé en Allemagne.

Le partenariat stratégique – lorsqu'un client décide de travailler avec un groupe de fournisseurs sur plusieurs projets ; cela implique que les intentions de chacun soient clairement exprimées. Elles sont parfois formalisées par des objectifs et engagements afin d'améliorer la qualité des relations et la performance générale des projets. Le travail effectif à accomplir ne sera peut être pas défini au début de l'accord. Ce type d'accord est aussi commun à la plupart des pays étudiés.

Les accords cadre – ces accords sont similaires aux partenariats stratégiques dans la mesure où un client choisit certains fournisseurs pour lui fournir des services pendant une période déterminée, et il existe une intention commune d'améliorer la qualité des rapports et la performance sur cette période. Le travail en lui-même peut ne pas être défini au début de la période donnée mais une fois le projet défini un processus de sélection secondaire est lancé pour déterminer quelle(s) entreprise(s) va ou vont mener le projet. Les accords cadre sont différents des contrats cadre car au sein de ce dernier, les rapports sont purement contractuels et il n'existe pas d'engagement pour l'amélioration de la performance de chacun. Cette forme de collaboration a été particulièrement utilisée au Royaume Uni.

Les alliances – une forme particulière de projet de partenariat au sein duquel le client et les fournisseurs principaux créent une organisation conjointe avec sa propre identité pour mener à bien un projet. Dans les cas les plus extrêmes, cet accord est établi par une entreprise où les parties sont associées. Les alliances ont été identifiées dans plusieurs pays pour des projets d'infrastructure.

Les consortiums de construction – lorsqu'un groupe de fournisseurs aux intérêts communs parvient à un accord pour développer et commercialiser des prestations de services en association. Le consortium d'étude a distingué entre les consortiums formés pour travailler sur un projet particulier, ce qui constitue des pratiques commerciales normales, et ceux qui sont formés à long terme, permettant aux entreprises de promouvoir ensemble des projets à venir. Ce type de collaboration, par opposition aux autres, n'implique pas le client. Des exemples de ce cas de figure ont été identifiés dans plusieurs des pays

Les accords volontaires ne se substituent pas aux relations contractuelles entre les parties pour un projet donné mais s'y ajoutent. Ils encouragent un environnement collaboratif au sein duquel les obligations contractuelles sont honorées. Ils doivent donc être distingués des contrats intégrés ('conception-construction-exploitation'), qui peuvent ne pas inclure d'éléments de collaboration. Certaines mesures telles que des accords de paiement encourageant la résolution mutuelle de problèmes peuvent être incluses dans les clauses du contrat.

De même, les accords volontaires sont différents des accords de financement – en particulier des partenariats public-privé qui ne contiennent pas toujours des mesures visant à promouvoir la collaboration même s'ils encouragent les entreprises à s'associer au sein d'un consortium.

### Analyse des autres aspects de l'étude. (Chapitre 3)

Ce chapitre considère divers aspects des 'Caractéristiques de l'étude' :

Définition de la notion de 'construction'

La notion de *construction* englobe toutes les activités qui contribuent à la création et à l'entretien de l'environnement bâti. Cela n'inclut pas l'ingénierie de construction' (les centrales industrielles et électriques). L'étude s'est concentrée sur les accords volontaires concernant la construction de bâtiments et travaux civils, lorsqu'il y a eu des approches nationales visant à promouvoir la collaboration.

- La compétitivité du secteur de la construction et l'économie européenne
  - L'un des objectifs du projet est d'étudier l'impact des accords volontaires sur la position concurrentielle des entreprises qui en faisaient partie et la contribution générale de ces accords à la compétitivité de l'économie européenne. Cette compétitivité dépend de l'effet de ces accords sur la réalisation de projets de construction. Etant donné que la construction est un élément clé au niveau politique et économique, cet impact indirect est plus important que dans d'autres secteurs.
- Implications de la politique de l'Union Européenne.

Les mesures politiques principales de l'UE relatives aux accords volontaires sont celles concernant les marchés publics, la concurrence, les PME et le développement durable. D'autres domaines qui pourraient éventuellement bénéficier des accords volontaires sont ceux du savoir faire, la formation et l'innovation. L'interaction entre ces mesures et les domaines politiques est discutée dans les Rapports des sept pays. L'étude a considéré en particulier l'impact que peuvent avoir les accords volontaires sur les PME, lorsque ces accords augmentent les contrats individuels ou impliquent un investissement en termes de gestion du temps pour créer de nouvelles relations. L'étude propose des conseils en la matière. Ceux-ci sont recueillis dans le Guide des meilleures pratiques.

Approches pour la promotion des accords volontaires

Les Rapports des sept pays contiennent une analyse des programmes nationaux mis en place dans certains pays pour la promotion de méthodes collaboratives de travail et d'autres mesures (comme les mesures prises par les organisations représentant les entrepreneurs et les clients) pouvant promouvoir des accords. Ils ont distingué ces approches de haut niveau des diverses mesures encourageant et récompensant les comportements et actions de collaboration au niveau du projet.

La base d'information : documentation de référence et Rapports des sept pays (Chapitre 4)

#### Documentation de référence

La base d'information pour le projet se trouve en Annexe E. Elle comprend des rapports officiels, une documentation-conseil, des études académiques d'intérêt pour les accords volontaires. Le matériel, reflétant l'expérience acquise en Europe, provient principalement de sources européennes. Cependant, le consortium du projet qui est au courant de la documentation extracommunautaire (Australie, Etats Unis), se dit satisfaite de la cohérence entre l'expérience acquise en matière d'accords volontaires en Europe et dans d'autres continents. La base d'information a été organisée de façon thématique.

La bibliographie académique sur les raisons qui poussent les entreprises à passer des accords volontaires de collaboration (pas seulement dans la construction) a été consultée. L'état de la question est recueilli en Annexe F. Les difficultés que les partenariats tentent de contourner ne seront pas facilement allégées. Le manque de confiance, en partie due aux asymétries d'information et au style "dilemme du prisonnier à un coup" des contrats traditionnels de la construction restent des caractéristiques distinctives du secteur. Cependant, il est tout à fait possible de changer les cultures du contrat dans la construction.

Ceci exige la mise en place d'un large éventail d'initiatives à l'approche collective afin de prendre en compte comment les clients et entrepreneurs perçoivent les mesures d'encouragement.

Il est prouvé que passer d'interactions isolées et ponctuelles vers des interactions continues et plus répétées devrait lentement créer une nouvelle culture où la collaboration est accrue. Ce processus est déjà lancé dans certains pays. Au Royaume Uni, les nouvelles formes de contrats et d'accords volontaires sont en cours de développement et certaines sont même de plus en plus utilisées. Ceci a été démontré par les enquêtes du RICS sur les contrats de construction en usage. L'expérimentation en matière de nouvelles formes de contrat, parmi lesquels il existe des cas de réussite et des cas d'échec, est essentielle pour parvenir à un changement. Au fur et à mesure que les avantages économiques des accords volontaires deviennent une évidence, les formes de contrats plus traditionnelles et basées sur la confrontation deviendront obsolètes. Au fur et à mesure que le contexte et la culture au sein desquels les entreprises interagissent entre elles et avec les clients changent, les stratégies rationnelles des entreprises dans l'industrie et pour les clients utiliseront de plus en plus les accords volontaires.

### Rapports des sept pays

Chaque membre du consortium de l'étude a préparé un compte rendu relatif à l'utilisation des accords volontaires de collaboration dans leur pays respectif. Ces rapports (v. Partie 3 de ce Rapport) ont été essentiels pour la base de données de l'étude.

Chaque rapport aborde les points suivants :

- Une introduction sur le pays et son secteur de construction
- Le contexte de mise en place des accords volontaires de collaboration et les movens de les promouvoir, incluant tout les rapports importants, etc.
- L'importance de l'utilisation des accords volontaires de collaboration et l'expérience acquise dans leur utilisation.
- Les facteurs clés dans le succès de leur mise en place.
- Les approches nationales et autres (s'il en existe) utilisées pour promouvoir l'adoption de méthodes collaboratives de travail, incluant les pratiques d'achat, la préparation de matériel-conseil, etc.
- Observations sur le rapport entre les accords volontaires et les politiques européennes en matière d'approvisionnement public et autres mesures politiques.

Etant donné que la situation est différente dans chaque pays, ces rapports diffèrent dans leur traitement du sujet. Par exemple, l'approche nationale à la promotion des accords volontaires n'existe pas dans tous les pays.

Des personnes ayant acquis de l'expérience en matière d'accords volontaires ou étant pour différentes raisons qualifiées pour commenter les résultats de l'étude ont été identifiées dans chaque pays. Ces personnes ont contribué aux rapports produits par pays par le biais de commentaires ou (parfois) d'ateliers. Les organisations auxquelles appartiennent ces personnes sont listées en Annexe G.

Des informations ont été obtenues concernant l'usage du partenariat en Allemagne et des cas de collaboration entre PME en France et en Italie. Celles-ci apparaissent dans les études de cas mais la recherche de cas similaires sur un échantillon plus large de pays n'a pas fourni de matériel additionnel.

### Rapport de synthèse et d'évaluation (Chapitre 5)

Le rapport de synthèse et d'évaluation se base sur les Rapports des sept pays. Ce document apporte une vision globale de l'utilisation des accords volontaires dans les pays étudiés et dégage les éléments communs ainsi que les différences majeures quant à leur application. Les conclusions principales sont :

- Les pays étudiés montrent une grande diversité quant à leur utilisation d'accords volontaires. Ceci semble être lié (a) au degré de coopération inhérent à leurs structures normales de projet ou à leur système commercial de construction (voir Annexe L) et (b) à la position des autorités publiques sur le bienfait de ces accords pour les clients du secteur public. Cependant, même dans des pays avec une application apparemment extensive des accords, il y a peu de données sur l'usage général ou sur les avantages financiers ou autres.
- Certains pays possèdent une grande expérience en partenariat et les participants considèrent que c'est un moyen plus souhaitable et efficace de mener à bien des projets que les relations traditionnelles. Il existe de nombreux exemples de projets réussis.
- Les accords cadres prévoyant des éléments de collaboration (par opposition aux simples contrats-cadres) et les accords stratégiques de partenariat sont moins développés, sauf dans certains domaines d'application tels que le logement par exemple. Le Royaume Uni possède une bonne expérience de ce type d'accords. Il existe des inquiétudes dans plusieurs pays quant à l'impact potentiel sur les PME. Des mesures législatives et des conseils spécifiques ont répondu à ces inquiétudes.
- Peu de cas de consortiums de construction ou d'alliance ont été identifiés mais ceux-ci ont été une réussite.
- Des 'approches' distinctes pour la promotion des accords volontaires ont été identifiées dans trois pays (Danemark, Pays Bas, Royaume Uni). Celles-ci ont été développées à la suite d'une enquête, stimulée par l'insatisfaction liée à la performance de l'industrie. Ces approches ont tenu compte des critères suivants (tous ou en partie): rapports stratégiques, les organismes nationaux de promotion, révision des guides en matière de politique de marchés publics, l'approbation par des instances d'audit, les projets de recherche et de formation, le développement d'indicateurs de performance. Tous ces critères fonctionnent de façon complémentaire pour une meilleure efficacité mais le rôle des marchés publics est essentiel pour orienter le marché vers plus de collaboration.
- Ailleurs, les accords de collaboration ont été introduits par les entrepreneurs mais ont demandé la coopération active des organisations représentant les clients; en Suède, par exemple, certains clients du secteur public ont depuis assumé un rôle leader dans la promotion de collaboration dans leurs propres projets. La Suède est aussi remarquable pour le développement de l'éducation supérieure visant à améliorer les pratiques des clients.
- Il existe un certain consensus quant aux mesures qui peuvent être adoptées afin de promouvoir la création de relations de collaboration. Celles-ci incluent: la participation des parties les plus importantes dès les premières phases du projet; des systèmes de paiement impliquant le partage des 'risques et profits'; l'adoption de procédure de résolutions de conflits afin d'éviter les litiges; une clarté dans la définition des objectifs; des ateliers pour assurer une meilleure communication et compréhension des objectifs; la mise en place et le suivi des objectifs de performance. De plus, la transparence et les bonnes pratiques sont considérées comme des éléments cruciaux.
- Il y a aussi consensus appuyé par des données issues de projets particuliers sur le fait que de tels accords peuvent entrainer une meilleure réalisation des projets,

un résultat final répondant mieux aux besoins des clients, plus de fiabilité au niveau des coûts et des délais, moins de conflits et en général un environnement de travail plus satisfaisant pour toutes les parties. Bien qu'il n'y ait pas nécessairement de réduction de coûts, les projets ayant fait face à des difficultés aboutiraient sans les coûts additionnels habituels.

- Dans certains pays, les exigences des politiques de marchés publics sont perçues comme un frein à l'adoption de mesures visant à favoriser le travail en collaboration ou la création de relations commerciales plus durables. Parfois, ce qui est perçu comme une barrière est le résultat de législations nationales s'appliquant à des contrats en dessous de la valeur seuil de l'UE. Cependant, l'usage prononcé des différentes formes d'accords volontaires dans certains pays laisse entendre que ceux-ci peuvent être bien appliqués dans le champ des directives de l'UE.
- Certains résultats suggèrent que les accords volontaires peuvent soutenir d'autres politiques de l'UE en matière de développement durable, de savoir faire et d'innovation, par exemple.

### Guide des meilleures pratiques et étude de cas (Chapitre 6)

Objectifs et public visé

Le Guide des meilleures pratiques et les études de cas qui l'accompagnent sont en Partie 2 du Rapport final. La structure et le contenu du guide sont résumés plus loin. Les objectifs du Guide peuvent être résumés ainsi :

- 1) Sensibiliser au le fait que les accords de collaboration existent et se sont avérés avantageux dans certains Etats membres ;
- 2) Enumérer les différents types d'accords et la nature des avantages qu'ils présentent pour les différentes parties dans le secteur de la construction, pour stimuler plus de recherche en ce sens :
- Apporter des conseils sur comment ces accords peuvent être établis et quels sont les facteurs qui influent sur leur succès
- 4) Rappeler aux lecteurs que la mise en œuvre des accords volontaires de collaboration doit être cohérente avec les politiques et les exigences nationales et européennes. En particulier, elle ne doit pas créer de barrières aux PME;
- 5) Proposer des sources d'information complémentaires.

Bien que les termes de référence de l'étude suggère que le Guide vise les PME, l'étude a révélé que les formes de partenariat de collaboration sont plus adaptées aux projets complexes et de grande envergure dans lesquels les PME sont moins amenées à jouer un rôle prépondérant. Il a donc été décidé au cours de l'étude que même si le Guide devrait soulever des questions d'une importance particulière pour les PME, son public principal est :

- Les clients importants qui peuvent bénéficier des accords volontaires ;
- Les grandes entreprises qui mènent des projets d'une envergure justifiant les processus d'apprentissage nécessaires ;
- Les organismes représentatifs des intérêts de la construction, y compris ceux des PME;
- Les décideurs politiques et les conseillers juridiques.

Etant donné que le Guide doit avoir une portée sur l'UE, il n'inclut pas une discussion détaillée des cadres juridiques et réglementaires spécifiques aux Etats membres. Il insiste sur le besoin de chercher des conseils au niveau local avant toute initiative d'utilisation de ces accords.

L'Annexe H présente la proposition de structure et de contenu du Guide vu par le GP lors de sa deuxième réunion.

#### Consultations

Le projet de Guide a fait l'objet d'une large consultation dans les pays représentés au sein du consortium d'étude et quatre Etats membres additionnels : la France, l'Allemagne, la Grèce et la Pologne. La consultation a été élargie afin d'obtenir un retour d'un plus large éventail de cultures de construction (v. Annexe L) et particulièrement d'Etats membres qui ont peu d'expérience en matière d'accords volontaires. Par le biais du GP, il y a eu aussi un retour d'autres Etats membres et de DG aux responsabilités connexes. L'Annexe J liste les organisations additionnelles consultées.

Le consortium de l'étude a reconnu que consulter sur la base d'un texte en anglais restreindrait les commentaires. Ainsi, pour assister la consultation, un résumé du Guide et des questions clés ont été préparées afin que les organisations qui coordonnaient la consultation dans chaque pays les traduisent. Ces documents se trouvent en Annexe I.

En général, les réactions ont été très positives ; il a été perçu comme un moyen clair et efficace de découvrir le sujet. Les trois thèmes principaux qui ont été retrouvés dans les réponses sont :

- Présentation II a été suggéré d'améliorer la présentation avec moins de texte ininterrompu, etc. Ce changement a été appliqué au texte en Partie 2 de ce document. De nombreux commentaires ont aussi soulevé le faible impact d'une version monolingue du Guide en anglais.
- Profondeur de traitement Les personnes sondées auraient souhaité voir plus d'information sur les circonstances locales. Comme cela a été souligné plus tôt, un Guide qui doit avoir une portée européenne ne peut aborder tous les aspects d'un seul Etat membre.
- Valeur pour les PME II a été suggéré que le Guide vise les PME. Pour les raisons avancées plus haut, celles-ci ne constituent pas le public le plus concerné directement.

Le texte du Guide a été revu en fonction des réponses issues du processus de consultation et présenté à la troisième réunion du GP.

### Etudes de cas

La seconde partie de ce Guide contient 21 études de cas réalisées dans les Etats membres représentés au sein du consortium d'étude, et en France et en Italie. Elles illustrent la façon dont les accords volontaires de collaboration discutés dans l'étude ont été mis en pratique dans divers contextes de construction où ils sont adaptés (logement, infrastructure, etc.). Si toutes les études de cas démontrent les avantages de la collaboration, elles en montrent aussi les inconvénients. Dans certains cas les relations entre les parties ont été interrompues. Les études de cas reflètent donc la réalité des relations de collaboration. Chaque étude de cas a une ou plusieurs illustrations qui sont recueillis en Partie 2 de ce document et sont aussi téléchargeables sur le site web de l'étude.

Certaines études de cas (en phase de brouillon) ont été inclues dans le processus de consultation sur le guide. Les plus amples informations demandées par les personnes sondées n'ont pas été ajoutées étant donné qu'elles n'auraient pas été importantes dans certains Etats membres et qu'elles auraient rallongé le Guide.

Une fois les textes définitifs approuvés, le Guide et les études de cas pourraient être maquettés et imprimés par un professionnel.

## L'impact des accords volontaires et les interactions avec les politiques de l'UE (Chapitre 7)

Avantages liés à l'usage d'accords volontaires

Il n'est pas possible d'évaluer la totalité des profits ou autre avantage découlant de l'usage des accords volontaires de collaboration en se basant sur les données nationales consultées pour chaque Etat membre. Même au Royaume Uni, où les accords de collaboration sont largement utilisés, les données nationales sur la performance du secteur de la construction ne démontrent pas clairement de changement. D'autres facteurs, tels que l'augmentation des coûts en matériel, la complexité des projets ou les nouvelles exigences réglementaires peuvent réduire l'impact des nouveaux accords et certainement rendre l'estimation du bénéfice net de ces changements plus difficile.

Cependant, les projets individuels prouvent nettement que ces avantages existent. S'il y a des cas individuels avec une réduction des coûts de plus de 20%, un chiffre plus typique serait de 5 à 10%. Mais tous les projets ne sont pas adaptés aux méthodes collaboratives de travail. Les projets plus petits, plus directs, typiques du secteur national sont encore conduits de façon traditionnelle. Le consortium de l'étude estime que 40% du chiffre d'affaire de la construction – représentant les projets les plus grands et les plus complexes – pourrait en principe bénéficier de relations de collaboration. Ces observations indiquent que l'impact potentiel direct des accords volontaires pourrait être équivalent à 3-4% du chiffre d'affaire de la construction dans l'UE et de 0.3-0.4% du PIB de l'UE.

Cependant, les avantages indirects pourraient être bien plus importants. Les Rapports des pays démontrent que les méthodes collaboratives de travail permettent une meilleure garantie de délivrance des projets et donc une réduction des risques ; les problèmes sont résolus de manière plus efficace et les projets finalisés sans coûts additionnels. De plus, les coûts et les perturbations dues à une délivrance tardive des travaux de construction sont réduits ou éliminés. Et les avantages en termes de satisfaction, de réduction du renouvellement de la main d'œuvre, d'amélioration de la qualité et d'un meilleur investissement dans le développement de compétences sont aussi à souligner. Même si les avantages indirects sont en grande partie non-quantifiables, il est possible d'évaluer la valeur d'une délivrance en temps et en heure par rapport à une délivrance tardive en termes d'avantages à long-terme et de réduction des coûts et de démontrer que ces avantages peuvent être d'aussi grande importance que la réduction des coûts directs.

### Transférabilité des pratiques

Les réponses à la consultation ont indiqué que les partenariats de projet et les consortiums de construction étaient des formes de collaboration qui éveillaient le plus d'intérêt dans les pays où les accords volontaires n'étaient pas fréquents. Cependant, il n'est pas certain que tous les accords étudiés puissent être appliqués dans toute l'UE.

Mais il est clair qu'il existe d'importantes barrières réglementaires ou ressenties à l'adoption de ces accords existent dans certains Etats membres. En particulier, les personnes sondées ont indiqué que les règlements d'achat public empêcheraient leur utilisation, ou que les autorités publiques ne seraient pas prêtes à les adopter à cause des inquiétudes quant à la propriété. Les consultations ont souligné le besoin qu'une initiative de promotion dans un Etat membre se base sur une compréhension totale des pratiques réglementaires et commerciales sur le pays en question.

L'étude a révélé qu'il existe un champ pour une plus ample application des accords volontaires même dans les Etats membres ayant une expérience considérable en méthodes collaboratives de travail. Là où il existe des initiatives nationales pour la promotion de ces méthodes, les résultats de l'étude sont issus d'activités existantes ou planifiées ; ailleurs, ils seront communiqués aux organisations ayant contribué aux consultations. Les mesures d'appui qui pourraient être poursuivies à plus grande échelle sont les ateliers pré-projet (Etude de cas 21), le concept de l'éentreprise temporaire' et l'assurance collective du projet.

### Compatibilité avec les politiques de l'UE

### 1) Marchés publics

Il est fortement ressenti dans certains Etats membres que les mesures de l'UE en matière de marchés publics telles que celles des Directives « marchés publics » réduisent l'usage d'accords volontaires de collaboration. Ceci est en contradiction avec l'usage étendu de ces accords par les autorités publiques dans d'autres Etats membres. Les mesures de l'UE ne peuvent donc pas être une barrière fondamentale aux méthodes collaboratives de travail. L'interprétation locale des mesures ou autres règlements locaux supplémentaires doivent donc aussi réduire l'adoption des accords. Ceci indique que la promotion des accords volontaires aurait besoin de conseils sur les pratiques de fourniture.

L'adoption de ces accords entraîne des risques potentiels car elle implique des rapports plus proches entre clients et fournisseurs. Cependant, ces risques peuvent être évités en assurant l'accès total aux informations financières et en assurant la conscientisation des clients sur les conditions et prix du marché, par exemple en conservant une part du travail dans un cadre conventionnel plutôt que collaboratif. Un audit de coûts et de designs indépendant assurera aussi que les clients en aient pour leur argent. L'usage extensif des accords volontaires par les autorités publiques dans certains Etats membres indique que tout risque associé est gérable.

### 2) PME

Il existe un risque que les accords volontaires de collaboration réduisent les opportunités de marché des PME, ce qui irait à l'encontre de la politique de l'UE en faveur des petites entreprises. Le risque a été identifié dans certains Etats membres. La législation et les conseils y ont répondu. Les intérêts des PME peuvent être protégés et certains des accords volontaires pourraient leur offrir un environnement commercial plus sûr. En général, il n'y a pas d'incompatibilité inhérente entre les accords volontaires et les objectifs de la politique de l'UE mais pour éviter des effets indésirables il est important d'y porter une attention particulière.

### 3) Développement durable

Les accords volontaires facilitent la communication entre les parties pendant le processus de construction. Ceci conduit à une réduction des déchets et une meilleure réponse aux attentes du client. Un haut niveau de performance environnementale dans la construction demande aussi que toutes les parties communiquent de manière efficace. Les accords volontaires facilitent aussi l'usage du Coût Global Etendu , aident à promouvoir l'innovation et contribuent au développement de compétences.

### 4) Questions contractuelles, de gestion et d'assurance

Les accords volontaires ne substituent pas les contrats mais créent un environnement de projet dans lequel les obligations contractuelles seront remplies de manière plus efficace. Ils peuvent être utilisés en plus des contrats conventionnels. Cependant, des types de contrat de collaboration ont été créés dans certains Etats membres et ont généralement été utiles. L'Annexe K résume la manière dont ces types de contrat incorporent des éléments de collaboration dans le Royaume-Uni.

Les pratiques de gestion sont au cœur des méthodes collaboratives de travail. Se tourner vers des relations collaboratives pose des défis pour la gestion et pour les individus. Les PME en particulier trouveront peut-être difficile de se dévouer à la compréhension des nouveaux principes de fonctionnement et les organisations des clients auront certainement besoin de prendre des initiatives pour identifier des besoins et de mettre en place une formation adéquate.

La plupart des collaborations ont été mises en œuvre avec des accords conventionnels d'assurance où chaque partie était couverte par sa propre assurance-dommages. Les assurances conjointes pour un projet donné ne sont utilisées que dans certains Etats membres (Belgique) et sont souvent perçues comme un encouragement à la collaboration. La mise en place de relations à long-terme devrait stimuler une plus large offre d'assurance permettant aux assureurs d'évaluer l'historique des associations d'entreprises. La Commission a lancé une étude distincte sur l'assurance pour la construction.

### La promotion des accords volontaires de collaboration (Chapitre 8)

L'usage des accords volontaires de collaboration demande des changements dans les pratiques de fourniture et de gestion de la part du client et des différentes parties intéressées au projet. Ceux-ci seront inapplicables à moins que les différentes parties soient persuadées de leurs avantages. Les Rapports des sept pays suggèrent que parmi les différentes parties intéressées, les clients du secteur public ont un rôle particulièrement important pour parvenir à un changement en mettant en place des mesures d'encouragement du marché. Les accords pourront introduire de nouveaux processus seulement si un cadre national sur les marchés publics le leur permet.

La simple promotion du Guide ne sera donc pas suffisante pour parvenir aux changements demandés mais est un point de départ. Il permettra de conscientiser sur les accords volontaires et leurs avantages potentiels. De plus, dans tout Etat membre individuel, le champ d'utilisation des méthodes collaborative de travail aurait besoin d'être évalué, incluant une évaluation du cadre réglementaire et commercial relatif à la construction et le développement d'un programme de changement.

Plusieurs niveaux de propositions pour la promotion du Guide et plus généralement pour la promotion des accords volontaires sont donc présentés :

- i) Promotion du Guide
  - Avec le texte en anglais, distribution aux administrations nationales, aux organisations représentatives européennes et aux médias du secteur de la construction, en plus d'une distribution locale adaptée
  - Dans d'autres langues, à des organismes similaires
  - Accès au site web et inclusion de liens à l'intérieur du matériel pour en faciliter l'usage
  - Accès au Réseau Entreprise Europe
  - A travers le soutien des événements européens et locaux de lancement
- ii) Conseils additionnels
  - Soutenir la production d'éditions locales du Guide qui donne des conseils sur les règlements locaux et où trouver des conseils, etc.
  - S'assurer de la traduction d'un plus large matériel de conseil
  - Préparer des conseils et des études de cas sur les questions de fourniture relevant de la mise en place des accords de collaboration
  - Soutenir l'échange d'expérience par le biais de réseaux
- iii) Motiver vers le changement
  - Soutenir les conférences nationales
  - Offrir une assistance financière pour les études nationales, peut-être en lien avec les autres Etats membres.

En plus de ces mesures, la façon dont les programmes de l'UE pourraient promouvoir l'usage des accords volontaires pourrait être analysée. Les financements structurels et la Banque Européenne d'Investissement, par exemple, apportent un soutien financier aux projets d'infrastructure. Ceux-ci pourraient être liés à l'adoption de relations de collaboration. A plus petite échelle, le soutien à l'amélioration de l'efficacité énergétique des bâtiments pourrait être accompagné d'un stimulus à la création de consortiums de PME.

### **Observations finales** (Chapitre 9)

L'adoption étendue d'accords volontaires demande un engagement à long terme. Les pratiques de fourniture sont cruciales. Elles peuvent continuer d'influencer l'industrie après que des initiatives promotionnelles spécifiques aient cessé. Elles sont particulièrement importantes dans les conditions actuelles du marché exerçant de fortes pressions pour une forte concurrence des prix et un retour à des rapports traditionnels. Persuader les individus des avantages des accords volontaires de collaboration exigera des données convaincantes de projets locaux. De même, des indicateurs de performance et des processus de collection de données devront être accordés.

Le développement d'un ensemble central d'indicateurs au niveau européen assisterait l'évaluation de la compétitivité de la construction et pourrait être la base de control régulier de la performance de la construction. Ceci aiderait à maintenir l'engagement envers différentes méthodes de travail. La promotion de processus de collaboration n'a été qu'un aspect des programmes de changement dans le secteur de la construction dans les Etats membres et ces indicateurs seraient à la base d'initiatives de changement.

Donc, la production et la promotion du Guide pourraient être un catalyseur pour un changement plus large au sein de l'industrie européenne au bénéfice de tous.

### Partie 2: Guide et études de cas

### Part 1: Conseils

### Introduction (Section 1)

Ce Guide est issu d'une étude sur l'usage des accords volontaires de collaboration, à la demande de la DG ENTR de la Commission européenne. L'expérience acquise dans un nombre d'Etats membres de l'UE indique que lorsque les entreprises engagées dans un projet de construction s'engagent explicitement à travailler en collaboration, meilleurs sont les résultats que lors de relations conventionnelles. De plus, les individus concernés trouvent l'environnement de travail plus satisfaisant. Une nouvelle forme de collaboration se met en place lorsque les entreprises s'unissent pour exploiter les opportunités de marché auxquelles elles ne sauraient répondre seules.

Ce Guide s'adresse à tous ceux et celles concerné(e)s par la fourniture de services liés à la construction et aux clients de la construction. Il donne des conseils de base sur les différentes formes de collaboration afin d'informer les individus et organisations de ces méthodes de travail et d'en promouvoir l'adoption. Cependant, ce n'est pas un guide définitif à l'application des Directives de l'UE en matière de fourniture publique ou des réglementations locales qui influenceraient l'adoption de méthodes collaboratives de travail. Il est nécessaire de toujours rechercher des conseils au niveau local.

### Les différentes relations de collaboration (Section 2)

Le Guide identifie cinq types d'accord de collaboration mais, en pratique, des éléments de plusieurs types d'accord peuvent se retrouver dans les relations établies entre les parties :

- Le partenariat de projet le client et les parties principales intéressées à un projet spécifique s'accordent formellement à travailler en collaboration
- Partenariat stratégique un client travaille avec un fournisseur sur un certain nombre de projets (ces projets ne sont pas tous forcément définis au début de l'accord), dans l'intention accordée d'améliorer la qualité de leurs relations et le niveau de leur performance au cours des projets.
- Accord cadre il ressemble au partenariat stratégique car le client sélectionne un nombre d'entreprises pour faire des travaux sur une période donnée dans l'intention d'une

amélioration et d'avantages mutuels. Cependant, il existe un processus de sélection secondaire pour déterminer quelle(s) entreprise(s) va (ou vont) mener un projet particulier. L'engagement peut être moins important quant à l'amélioration de la performance. Souvent, cet accord concerne des projets plus petits.

- Alliance une forme particulière de partenariat stratégique dans laquelle le client et le fournisseur créent une organisation conjointe avec sa propre identité pour mener à bien le projet. Dans les cas les plus extrêmes, le client devient un associé de l'entreprise conjointe.
- Consortium de construction où un groupe de fournisseurs (souvent des PME) s'accordent à développer et à commercialiser ensemble un nouveau produit ou service.
   Le consortium encourage la compétitivité de ses entreprises membres sur le marché.
   Ceci est différent des relations temporaires que les entreprises établissent pour un projet spécifique.

Les relations de collaboration sont basées sur la *confiance* et *l'ouverture* entre les parties et conduisent à des comportements et des décisions qui offrent des avantages mutuels, non pas individuels. Elles sont aussi basées sur le *soulagement* plutôt que la certitude. Les parties à cette relation n'ont aucune garantie des avantages mais y croient.

Les accords de collaboration liés aux projets ne se substituent pas à un contrat. Ils permettent de soulager des obligations contractuelles de façon plus efficace.

Les avantages des relations de collaboration pour les clients et les fournisseurs comprennent :

- Une délivrance des projets plus fiable
- Moins (ou même zéro) disputes formelles ou cas de conflits
- Une communication améliorée conduisant à une meilleure résolution des conflits et à une économie des coûts potentiels
- Une amélioration continue de la performance et du transfert de connaissances entre les projets
- Un meilleur respect des délais de paiement
- Une meilleure capacité de répondre aux besoins du marché.

Pour la communauté, les avantages comprennent :

- Une meilleure délivrance des infrastructures pour éviter les dépassements de délais et les perturbations qui y sont liées
- Encouragement par les entreprises à investir dans le développement de compétences
- Réduction des déchets et une construction plus durable.

Les avantages de la collaboration sont plus importants pour les projets plus grands, complexes où il existe des défis à relever conjointement. Les partenariats stratégiques sont avantageux lorsqu'il est possible de fournir un flux de travail entrant dans les capacités des organisations partenaires et lorsque les entreprises sont encouragées à investir dans la relation. De façon similaire, les consortiums de construction sont fondés sur des opportunités de marché dont la perception conduira à un engagement des partenaires.

### Succès des relations de collaboration (Section 3)

Cette section résume les facteurs qui contribuent au succès des relations de collaboration et liste les différentes manières d'encourager la collaboration. Les sujets abordés comprennent :

- L'importance critique des relations interpersonnelles
- Le rôle central du leadership, particulièrement des *senior managers* dans les organisations des clients

- La sélection des partenaires qui partagent un désir et un engagement à travailler en collaboration
- Les bénéfices de la désignation des membres clés de l'équipe au début du projet
- Le besoin d'établir une compréhension commune des principes et objectifs de la collaboration et d'exprimer ceux-ci dans un document public conjointement accepté
- Les interactions entre les provisions contractuelles et les mesures qui soutiennent la collaboration
- Les mesures qui encouragent les comportements de collaboration et une bonne communication
- Le rôle d'un control rigoureux de la performance dans le maintien de relations saines et efficaces
- Les encouragements financiers à la collaboration
- Les procédures qui permettent de résoudre les conflits sans avoir recours à la justice
- La gestion conjointe des risques

### Respect des politiques et des mesures nationales et de l'UE (Section 4)

Cette Section contient des conseils sur la relation entre les méthodes collaboratives de travail et les obligations issues de la législation de l'UE en matière de fourniture et de concurrence mais le Guide n'est pas exhaustif en ce qui concerne l'application de la législation en question. Le Guide :

- considère la façon dont les accords de collaboration peuvent être complètement compatibles avec les Directives de l'UE en matière de fourniture
- souligne les mesures en matière de fourniture et autre qui devraient être tenues en compte. Il est important de demander un conseil adapté avant de mettre en place des accords de collaboration.
- Souligne le besoin de garantir que les PME ne soient pas exclues des accords de collaboration et d'apporter des conseils sur comment éviter ce problème, incluant :
  - L'utilisation des cadres différents pour des projets d'envergure différente
  - o L'utilisation des accords de gestion et de commercialisation appropriés
  - o La consultation des PME sur les opportunités à venir
  - L'identification des besoins de gestion et assistance au développement des capacités.

### Pour plus de conseils (Section 5)

### Part 2: Etudes de cas

Les études de cas illustrent comment les accords volontaires de collaboration ont été employés dans un large éventail de contextes de construction et dans un grand nombre d'Etats membres. La plupart sont des exemples de types de collaboration étudiés dans la partie principale du Guide mais deux d'entre elles (20 and 21) montrent différentes méthodes d'union des entreprises pour un projet de collaboration.

Les études de cas présentent les points clés de chaque collaboration. Chacune d'entre elle comprend (lorsque c'est possible) une source où obtenir de plus amples informations.

Les détails de chaque étude de cas sont apportés ci-dessous :

No.	Type*	Country	Name
1	PP	SE	Klockarbo Housing
2	PP	BE	Janssen Pharmaceutica
3	PP	NO	State Archives

### Voluntary arrangements for collaboration in construction: Final Report

Part 1: Main Report

4	PP	SE	Göta Tunnel
5	PP	DK	Øresund Link
6	PP	BE	Brussels Office Renovation
7	PP	SE	Linköping Hospital
8	PP	NO	Baerum Municipality Model
9	SP	DK	Consensus housing
10	SP	DK	Management of Danish Main Roads
11	FA	UK	Birmingham Construction Partnership
12	FA	UK	Procure21
13	FA	UK	Hillingdon Homes
14	AL	NL	Waardse Alliance
15	AL	UK	NW Gas Alliance
16	CC	FI	Concrete consortium
17	CC	NL	EspritHuis
18	CC	SE	Arcona
19	CC	ΙΤ	CIPEA
20	0	FR	FFACB
21	0	FI	Pre-project Clinic

\* AL – Alliance CC- Consortium de construction FA – Accord cadre PP – Partenariat de projet

SP – Partenariat stratégique O - Autre

Le tableau ci-dessous présente comment les études de cas illustrent l'application d'accords volontaires dans différents contextes de construction. (Les chiffres font références au tableau précédent.)

CONTEXTE DE	TYPE D'ACCORD VOLONTAIRE DE COLLABORATION					
CONSTRUCTION	PP	SP	FA	AL	CC	0
Nouveaux logements	1	9			16(iii) 17(iii)	20
Nouveaux bâtiments	2, 3		11(i) 12(ii)		18 19(i)	
Travaux d'infrastructure	4, 5			14		21
Rénovation/ maintenance	6, 7, 8(ii)	10	13	15		

### Notes:

- i Aussi rénovation/maintenance
- ii Aussi un exemple de la sélection des consortiums de construction
- iii Aussi un exemple d'innovation de produit par un consortium

## **Executive Summary (German)**

Diesem Bericht liegt eine Auftragsstudie zugrunde, mit deren Erstellung die Generaldirektion Unternehmen und Industrie ein Forschungskonsortium unter Führung der *Manchester Business School* im Vereinigten Königreich betraut hat (Auftragsnummer No SI2.ICNPROCE015827500). Diese Studie bewertete in ausgewählten EU-Mitgliedsstaaten die Anwendung von freiwilligen Vereinbarungen, die partnerschaftliches Arbeiten im Baugewerbe fördern, sowie die Methoden (,Herangehensweisen'), die zur Förderung dieser Vereinbarungen angewendet worden sind. Auf der Grundlage dieser Untersuchungen wurde dann ein Leitfaden zur optimalen Verfahrensweise hinsichtlich solcher Vereinbarungen erstellt, der die Kommission darin unterstützen soll, die Förderung einer breiteren Anwendung dieser Vereinbarungen umzusetzen. Die Studie begann am 20. Dezember 2007. Am 20. November 2008 wurde ein Entwurf des Leitfadens eingereicht; am 20. Januar 2009 folgte der Entwurf des Abschlussberichts.

Der Bericht besteht aus drei Teilen:

- Teil 1 Diesem Hauptbericht, der den Studienverlauf erörtert und die wichtigsten Forschungsergebnisse und Schlussfolgerungen darlegt
- Teil 2 Dem Entwurf des Leitfadens einschließlich der Texte für die 21 dazugehörigen Fallstudien.
- Teil 3 Sieben Länderberichten, jeweils einer für jedes der im Forschungsteam vertretenen Länder, die einen Überblick über die Erfahrung des jeweiligen Landes hinsichtlich der Anwendung von freiwilligen Vereinbarungen für Gemeinschaftsprojekte im Baugewerbe gibt

Diese Kurzdarstellung umfasst die Teile 1 und 2. Kapitel 5 von Teil 1 besteht aus einem Abschluss- und Bewertungsbericht, in dem die wichtigsten Punkte aus Teil 3, den Länderberichten und den daraus folgenden allgemeinen Schlussfolgerungen zusammengefasst sind. ((see also English version))

## **Teil 1: Hauptbericht**

Einleitung (Kapitel 1)

Das Forschungskonsortium umfasste Partnerinstitutionen aus sieben Mitgliedsstaaten, von denen sechs in den Vorgaben für die Studie aufgeführt waren (Anhang A). Die Partnerinstitutionen und Hauptbeitragenden waren im Einzelnen:

Manchester Business School University of Manchester, Vereinigtes Königreich (Dr. John Rigby, Professor Roger Courtney, Dr. David Lowe)

Belgian Building Research Institute (Dr. Georges Klepfisch)

Danish Building Research Institute, University of Aalborg (Dr. Jacob Norvig Larsen)

VTT, Technical Research Centre of Finland (Dr. Pertti Lahdenperä)

Delft University of Technology, Niederlande (Dr. Rob Geraedts, Professor Hans Wamelink)

SINTEF, Norwegen

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<sup>&</sup>lt;sup>9</sup> Belgien, Dänemark, Finnland, Niederlande, Norwegen, Vereinigtes Königreich

(Dr. Thorbjørn Ingvaldssen)

Swedish Construction Clients Association (Professor Stefan Sandesten)

## Der politische Rahmen

Die "Mitteilung der Kommission zur Wettbewerbsfähigkeit der Bauwirtschaft", <sup>10</sup> die die Europäische Kommission 1997 veröffentlicht hat, identifizierte Problemfelder, die für die Leistungsfähigkeit des Baugewerbes relevant sind, und formulierte einen Aktionsplan zur Überwindung dieser Probleme. Seitdem sind eine Reihe von Studien in Zusammenarbeit mit nationalen Verwaltungen und Industrievertretern durchgeführt worden, die zu einem besseren Verständnis der Problematik beigetragen und Lösungswege aufgezeigt haben. Diese Studie ist die jüngste Untersuchung in dieser Reihe. Sie wurde zur Unterstützung der Leitmarktinitiative <sup>11</sup> in Auftrag gegeben, die zum Ziel hat, Innovation und verbesserte Wettbewerbsfähigkeit in ausgewählten Branchen einschließlich nachhaltigen Bauens zu fördern.

Bedenken bezüglich der Leistungsfähigkeit des Baugewerbes, die traditionellen Verantwortlichkeitsstrukturen zugeschrieben werden, haben in einigen Mitgliedsstaaten zur Förderung von partnerschaftlichen Herangehensweisen bei der Ausführung von Projekten und der Pflege von längerfristigen Beziehungen zwischen Kunden und Anbietern geführt. Es gibt mittlerweile deutliche Belege dafür, dass solche Maßnahmen zu erfolgreicheren Projektergebnissen führen können. Diese Entwicklungen stärken die Wettbewerbsfähigkeit der Industrie und darüber hinaus auch die der europäischen Gesamtwirtschaft. Aus diesem Grund beinhaltete der Aktionsplan der Leitmarktinitiative die Veröffentlichung eines Leitfadens zur Etablierung von freiwilligen Vereinbarungen. Allerdings sind hierbei Fragen nach deren Übereinstimmung mit der Wettbewerbs- und Vergabepolitik der EU und Vereinbarkeit mit etablierten Strukturen und Vorgehensweisen innerhalb der nationalen Baugewerbe zu berücksichtigen. Ziel dieser Studie ist es, diese Problemfelder sowie Erfahrungswerte hinsichtlich der Verwendung von partnerschaftlichen Vereinbarungen zu untersuchen und mit Hilfe der gewonnenen Informationen den bereits erwähnten Leitfaden zu entwickeln.

#### Arbeitsprogramm

Diese Studie wurde unter Verwendung eines Arbeitsprogramms durchgeführt, das sechs Aufgabenbereiche umfasste.

## Aufgabenbereich 1

Erstellung der Informationsgrundlagen für das Projekt und Festlegung der Vorgehensweise bei der Anhörung von Interessensvertretern

Es wurde eine gemeinsame Informationsdatenbank für das Projekt erstellt. Diese Datenbank enthielt wichtige Berichte und andere Dokumente, die von den Mitgliedern des Forschungskonsortiums als zentral erachtet wurden, insbesondere solche, die Zusammenfassungen in Englisch beinhalteten.

In jedem der untersuchten Länder wurden Einzelpersonen und Organisationen ermittelt, die über Wissen oder Erfahrung mit freiwilligen partnerschaftlichen Vereinbarungen verfügen. Diese wurden in der Folge eingeladen, zur Erstellung der Länderberichte und des Leitfadens beizutragen. Zudem wurde eine Zusammenfassung der Ziele und des Programms der Studie (Anhang B) angefertigt, um die Kommunikation zu erleichtern.

## Aufgabenbereich 2

Vorbereitung der Länderstudien

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<sup>&</sup>lt;sup>10</sup> COM(97)539 – 4. November 1997

<sup>&</sup>lt;sup>11</sup> COM(2007)860 – eine Leitmarktinitiative für Europa

Jedes Mitglied des Forschungskonsortiums verfasste einen Bericht, der die Verwendung von partnerschaftlichen Vereinbarungen im jeweiligen Land sowie die Herangehensweisen zur Förderung solcher Vereinbarungen (sofern vorhanden) zusammenfasst.. Darüber hinaus wurden teilweise Informationen über die Anwendung von freiwilligen partnerschaftlichen Vereinbarungen in anderen Ländern herangezogen, insbesondere von Deutschland. Die Länderberichte wurden im weiteren Verlauf der Studie aktualisiert; die Endversionen der jeweiligen Texte bilden Teil 3 des Studienberichts.

## Aufgabenbereich 3 Analyse und Bewertung der Länderstudien

Die Länderstudien wurden ausgewertet. Gemeinsamkeiten und Unterschiede bezüglich verschiedener Schwerpunkte, Förderungsmethoden und wichtigste Forschungsergebnisse sind anschließend in einem Abschluss- und Bewertungsbericht zusammengefasst worden, der Kapitel 5 dieses Berichts bildet.

## Aufgabenbereich 4 Entwicklung und Ausarbeitung des Leitfadens zur optimalen Herangehensweise

Nach Bestätigung einer Projektskizze durch den Management- und Lenkungsausschuss (MLA) für die Studie wurde ein Leitfadenentwurf angefertigt. In den Ländern, die im Forschungskonsortium vertreten sind, sowie vier weiteren Mitgliedsstaaten wurden Konsultationen zu diesem Leitfaden durchgeführt. Außerdem wurden europäische Vertreter und relevante Generaldirektionen gebeten, den Entwurf zu kommentieren. Darüber hinaus wurden Fallstudien entwickelt, um die Anwendung von freiwilligen partnerschaftlichen Vereinbarungen zu illustrieren. Der Leitfaden bildet zusammen mit den Fallstudien Teil 2 des Berichts.

## Aufgabenbereich 5 Anfertigung der Berichte

Zusätzlich zu diesem Schlussbericht wurden ein Fortschrittsbericht für das zweite Treffen des MLA und ein weiterer Bericht für das dritte Treffen erstellt.

## Aufgabenbereich 6 Koordinierung der Studie und Zusammenarbeit mit der Kommission

und den Mitgliedern des Management- und Lenkungsausschusses Der Management- und Lenkungsausschuss kam zu drei Beratungen zusammen; die Aufzeichnungen zu diesen Sitzungen finden sich in Anhang C.

# Anwendungsbereich der Studie und Begriffsfassung von 'freiwilligen Vereinbarungen für partnerschaftliches Arbeiten' (Kapitel 2)

Auf Grund der Tatsache, dass eine Vielzahl verschiedener Spezialisten zur Ausführung von Bauprojekten beitragen, ist deren Zusammenarbeit Bestandteil des üblichen Geschäftsablaufs, ohne dass es spezifische Maßnahmen oder Anreize gibt. Der Schwerpunkt der Studie lag jedoch nicht auf diesen "üblichen Geschäftsbeziehungen", sondern auf den Vereinbarungen, die eigens zum Ziel haben, partnerschaftliche Verhaltensweisen und Handlungen von Mitgliedern eines Projektteams oder einer Zuliefererkette zu fördern. Die Forschergruppe kam zu dem Schluss, dass solchen Vereinbarungen eines gemein ist: Eine oder mehrere Vertragsparteien entscheiden, einen Teil ihrer Verfügungsgewalt oder Handlungsfreiheit hinsichtlich potentieller Vorteile aufzugeben, in der Vermutung – jedoch nicht der Gewissheit –, dass dies zu einem besseren Ergebnis für sie selbst und die übrigen Vertragsparteien führen wird. Eine dänische Definition von "Partnering"<sup>12</sup> stellt die Rolle von Vertrauen und Zutrauen bei der Entwicklung solcher Kooperationsbeziehungen heraus:

 $<sup>^{12}</sup>$  Leitfaden für "Partnering", National Agency for Enterprise and Construction, Kopenhagen (2004)

,eine Form der Zusammenarbeit während eines Bauvorhabens, die sich auf Dialog, Vertrauen und Offenheit gründet, und in der alle Akteure frühzeitig beteiligt werden. Das Vorhaben wird auf Grundlage gegenseitiger Vereinbarungen durchgeführt, die sich in gemeinsamen Aktivitäten ausdrücken und auf gemeinsamen wirtschaftlichen Interessen beruhen'

Diese Studie beinhaltet fünf Typen freiwilliger Vereinbarungen. Diese schließen sich gegenseitig nicht aus; es wurde angenommen, dass Geschäftsbeziehungen in der Praxis mehr als einen Typus beinhalten können. Zwei der Fallstudien illustrieren andere Formen der Zusammenarbeit. Diese wurden in einem einführenden Dokument (Anhang D) diskutiert, das nach dem zweiten Treffen des Management- und Lenkungsausschusses angefertigt wurde. Kapitel 2 beinhaltet eine überarbeitete Fassung dieses Dokuments, in das später hinzugekommene Informationen eingearbeitet sind.

Die fünf Typen freiwilliger Vereinbarungen sind:

"Projekt-Partnerschaft" – hier treffen die Parteien formelle Vereinbarungen, partnerschaftlich an einem bestimmten Projekt zu arbeiten. Diese Vereinbarungen werden häufig in Form einer "Partnerschafts-Urkunde" oder einem ähnlichen Dokument festgehalten und werden dann von weiteren Abmachungen begleitet, in denen die Partner die gemeinsame Nutzung von Ressourcen verabreden, sich dazu verpflichten, Streitigkeiten unter Ausschluss des Rechtsweges auszutragen, etc. Die Länderberichte zeigten, dass dies ist die häufigste Form freiwilliger Vereinbarungen in einigen der untersuchten Länder ist (Dänemark, Schweden), und in allen der untersuchten Länder angewendet wird. Dies gilt auch für Deutschland.

"Strategische Partnerschaft" - hier entscheidet sich ein Kunde dafür, bei einer Reihe von Projekten mit einer bestimmten Gruppe von Anbietern zusammenzuarbeiten. Es werden gegenseitige Absichtserklärungen vereinbart – unter Umständen wird dies auch formal in Zielvereinbarungen und Verpflichtungen abgefasst – um die Qualität der Beziehungen und der Projektumsetzung zu verbessern. Es ist möglich, dass die tatsächlich auszuführenden Arbeiten zu Beginn der Vereinbarung noch nicht festgelegt werden. Auch dieser Typus tritt in den meisten der untersuchten Länder auf.

Rahmenvereinbarungen – diese ähneln strategischen Partnerschaften darin, dass auch hier ein Kunde bestimmte Anbieter und deren Dienstleistungen für einen bestimmten Zeitraum auswählt. Es besteht dabei die beidseitige Absicht, Geschäftsbeziehungen und Arbeitsleistung im Laufe dieses Zeitraums zu verbessern. Die zu leistende Arbeit wird zu Beginn des Zeitraums nicht genau definiert. Sobald das Projekt jedoch definiert wurde, wird ein zweiter Auswahlprozess vorgenommen, um zu entscheiden, welche(s) Unternehmen zur Ausführung eines Projekts herangezogen wird. Rahmenvereinbarungen sollten von Rahmenverträgen unterschieden werden. In letzteren sind die Geschäftsbeziehungen rein vertraglich, es besteht jedoch keine freiwillige Verpflichtung zur beidseitigen Verbesserung der Leistungsfähigkeit. Insbesondere das Vereinigte Königreich hat diese Form von Zusammenarbeit verwendet.

Allianzen – sind eine besonders starke Form von "Projekt-Partnerschaft", in der der Kunde und der Hauptanbieter eine gemeinsame Entität gründen, die zur Projektumsetzung über eine eigene Identität verfügt. Die stärkste Ausprägung einer solchen Organisation ist ein in gemeinsamem Eigentum befindliches Unternehmen. Beispiele für die Nutzung von Allianz-Strukturen in Infrastrukturprojekten wurden in mehreren Ländern vorgefunden.

Baukonsortien – hierbei vereinbart eine Gruppe von Anbietern, Dienstleistungen gemeinsam zu entwickeln und zu vermarkten. Es wurde unterschieden zwischen Konsortien, die gebildet werden, um sich an der Ausschreibung für ein bestimmtes Projekt zu beteiligen, was als "übliche Geschäftspraktik" betrachtet wurde, und

solchen Konsortien, die langfristiger bestehen, um neue Baudienstleistungen zu entwickeln oder sich an einer Reihe von zukünftigen Ausschreibungen zu beteiligen. Im Gegensatz zu den vorgenannten Typen der Zusammenarbeit schließt diese Form den Kunden nicht mit ein. Beispiele für die Verwendung von Allianzen wurden in mehreren der untersuchten Länder und weiteren Mitgliedsstaaten vorgefunden.

Freiwillige Vereinbarungen ergänzen vertragliche Beziehungen zwischen Projektparteien, ersetzen diese aber nicht. Sie fördern ein partnerschaftliches Umfeld, in dem vertragliche Verpflichtungen erfüllt werden. Daher müssen sie von integrativer Vertragsgestaltung (z.B. Planung-Bau-Nutzung/ design-build-operate) unterschieden werden, die unter Umständen keine partnerschaftlichen Elemente enthalten. Andere Maßnahmen, die zum Ziel haben, Zusammenarbeit zu fördern (z.B. Zahlungsvereinbarungen, die gegenseitige Problemlösungen anregen), können in die Vertragsbedingungen mit eingeschlossen werden.

In ähnlicher Art und Weise unterscheiden sich freiwillige Vereinbarungen von Finanzierungsvereinbarungen – insbesondere öffentlich-private Partnerschaften beinhalten nicht notwendigerweise Maßnahmen zur Förderung partnerschaftlicher Projekte, obwohl sie Firmen häufig dazu veranlassen, sich zu einem Konsortium zusammenzuschließen.

## Diskussion anderer Aspekte der Studie (Kapitel 3)

In diesem Kapitel werden verschiedene Aspekte der Untersuchungsvorgaben erörtert:

- Definition von 'Bauen'
  - Zum Begriff des "Bauens" werden alle Tätigkeiten gerechnet, die zur Schaffung und Aufrechterhaltung der gebauten Umwelt beitragen. Dies schließt "technisches Bauen" (z.B. Industriebauten und Kraftwerke) aus; die vorliegende Untersuchung hat sich auf freiwillige Vereinbarungen beim Bau von Gebäuden und bei sonstigen Baumaßnahmen konzentriert, bei denen es nationale "Herangehensweisen" zur Förderung der Zusammenarbeit gegeben hat.
- Die Wettbewerbsfähigkeit des Bausektors und die europäische Wirtschaft
  Eines der Ziele dieser Studie war es, die Auswirkungen von freiwilligen
  Vereinbarungen auf die Wettbewerbsposition von Firmen zu bewerten, die
  Vertragspartei einer solchen Vereinbarung sind, sowie den Beitrag solcher
  Vereinbarungen zur Wettbewerbsfähigkeit der europäischen Wirtschaft insgesamt.
  Letzterer entsteht durch die Auswirkung von freiwilligen Vereinbarungen auf die
  Umsetzung von Bauprojekten. Da Bauen ein Schlüsselelement in der Umsetzung von
  Sozial- und Wirtschaftspolitik ist, sind diese indirekten Auswirkungen größer, als dies
  in anderen Industriebereichen der Fall sein dürfte.
- Implikationen politischer Maßnahmen
  - Die wichtigsten EU-Maßnahmen, die freiwillige Vereinbarungen betreffen, beziehen sich auf öffentliche Auftragsvergabe, Wettbewerb, kleine und mittlere Unternehmen (KMUs) und nachhaltige Entwicklung. Andere Politikbereiche, die von freiwilligen Maßnahmen profitieren könnten, sind Aus- und Fortbildung und Innovation. Die Länderberichte schließen die Diskussion von Wechselwirkungen zwischen politischen Maßnahmen mit ein. Die Studie berücksichtigt insbesondere den potentiellen Einfluss von Vereinbarungen auf KMUs, die das Volumen individueller Verträge erhöhen oder größere zeitliche Investitionen zur Schaffung neuer Beziehungsformen erfordern. Diese Studie entwickelte Hinweise zu diesen Themenfeldern, die sich im Leitfaden zur optimalen Herangehensweise widerspiegeln.
- Herangehensweisen zur F\u00f6rderung freiwilliger Vereinbarungen
  - Die Länderberichte beinhalteten Bewertungen von nationalen Programmen, die in einigen Ländern eingeführt worden sind, um Formen partnerschaftlichen Arbeitens sowie andere Maßnahmen, die solche Vereinbarungen unterstützen (z.B. solche, die von Vertretern von Bauunternehmern oder Kunden) zu fördern. Hierbei wurde unterschieden zwischen "Herangehensweisen" auf Makroebene und verschiedenen anderen Maßnahmen, die partnerschaftliches Handeln auf der Projektebene fördern und belohnen.

# Informationsgrundlage der Studie: Dokumentation der Quellennachweise und Länderberichte (Kapitel 4)

#### Dokumentation der Quellennachweise

Informationsgrundlage dieser Studie sind die im Anhang E aufgeführten Quellen. Der Anhang enthält offizielle Berichte, Leitlinien, akademischen Studien und andere Quellen, die für freiwillige Vereinbarungen relevant sind. Dem Schwerpunkt dieser Untersuchung auf dem europäischen Kontext entsprechend, stammt dieses Material größtenteils aus europäischen Quellen. Jedoch sind dem Forscherteam andernorts produzierten Quellen bekannt (z.B. Australien, USA) und konnte zu seiner Zufriedenheit feststellen, dass die Erfahrungswerte hinsichtlich freiwilliger Vereinbarungen in Europa und anderen Kontinenten übereinstimmen. Die dafür erstellte Informationsdatenbank ist thematisch strukturiert worden.

Die akademische Literatur zu den wirtschaftlichen Grundüberlegungen für Firmen, die auf freiwillige Vereinbarungen zur Zusammenarbeit (nicht nur im Bereich des Baugewerbes) eingeht, wurde ausgewertet; diese Auswertung bildet Anhang F. Die Faktoren, die diejenigen Schwierigkeiten verursachen, die "Partnering" zu lindern versucht, sind nicht ohne weiteres zu beseitigen. Mangelndes Vertrauen, das teilweise auf Fehlinformationen beruht, und eine Konstellation des traditionellen Baugewerbes, die man spieltheoretisch als Gefangendilemma beschreiben könnte, bleiben hervorstechende Merkmale dieses Bereichs. Dennoch ist es eindeutig möglich, bestimmte Verhaltensweisen bei Vertragsabschlüssen im Baugewerbe zu verändern. Dies geht jedoch nur, wenn Anreize bei Kunden und Bauunternehmern in Form einer ganzen Spannbreite von Initiativen berücksichtigt werden, die ihrerseits auf einem kollektiven Ansatz beruhen.

Es gibt klare Hinweise darauf, dass eine Bewegung weg von einmaligen Interaktionen und hin zu kontinuierlichen und wiederholten Gemeinschaftsaktionen nach und nach eine neue Verhaltensweise schaffen könnte, in der größere Anreize zu Zusammenarbeit entstehen. In einigen Ländern ist dieser Prozess bereits auf dem Weg. Im Vereinigten Königreich werden derzeit neue Vertragsformen und freiwillige Vereinbarungen entwickelt, von denen einige auch verstärkt verwendet werden, wie Beobachtungen im Rahmen von Erhebungen zum Gebrauch von Bauaufträgen durch die *Royal Institution of Chartered Surveyors* belegen. Dieses Experimentieren mit neuen Vertragsformen, von denen einige mehr und andere weniger erfolgreich sein werden, ist von zentraler Bedeutung, um Veränderungen herbeizuführen. Wenn die wirtschaftlichen Vorteile von freiwilligen Vereinbarungen offensichtlicher werden, werden ältere, nachteilige Formen von freiwilligen Vereinbarungen als kostspielig angesehen und wahrscheinlich weniger verwendet werden. Da sich Verhaltensweisen und der Kontext, in dem Firmen miteinander und mit ihren Kunden interagieren, ändern können, werden Firmen der Industrie und deren Kunden, strategisch vernüftig, zunehmend freiwillige Vereinbarungen nutzen.

#### Länderberichte

Jedes Mitglied des Forschungskonsortiums hat eine Bewertung der Anwendung von freiwilligen Vereinbarungen der Zusammenarbeit in seinem Land erstellt. Diese Berichte waren Kernbestandteil der Informationsgrundlage für die Studie und bilden Teil 3 des Forschungsberichts.

Jeder Bericht deckt die folgenden Themenbereiche ab:

- Einführung in das Land und seine Bauwirtschaft
- Hintergrundinformationen hinsichtlich der Anwendung von freiwilligen Kooperationsvereinbarungen einschließlich bedeutender Berichte etc.
- Das Ausmaß der Anwendung von freiwilligen Kooperationsvereinbarungen und Erfahrungswerte bezüglich ihrer Verwendung
- Faktoren, die im Hinblick auf eine erfolgreiche Anwendung der Vereinbarungen als relevant erachtet werden.

 Nationale oder (falls vorhanden) andere "Herangehensweisen", die genutzt werden, um die Annahme und Verbreitung partnerschaftlichen Arbeitens einschließlich Anfragen, Berichte, öffentlichen Auftragsvergabepraktiken, Vorbereitung von Leitfäden usw. zu unterstützen

 Anmerkungen zum Verhältnis von freiwilligen Vereinbarungen und europäischer öffentlicher Auftragsvergabe sowie anderen Richtlinien.

Allerdings unterscheiden sich die Berichte in ihrer Herangehensweise an das Thema, weil die Situation in jedem Land anders ist; zum Beispiel gab es nicht in jedem der untersuchten Länder eine nationale Herangehensweise zur Förderung freiwilliger Vereinbarungen.

In jedem Land wurden Personen mit Erfahrung in den untersuchten Vereinbarungen, oder solche, die aus anderen Gründen qualifiziert waren, die Ergebnisse der Studie zu kommentieren, identifiziert. Sie trugen durch Kommentare und in manchen Fällen auch durch workshops zur Entstehung der Länderberichte bei. Diese Personen gehören zu den Organisationen, die in Anhang G aufgeführt sind.

Darüber hinaus erhielt diese Studie Informationen über die Anwendung von "Partnering" in Deutschland und einige Beispiele für Zusammenarbeit von KMUs in Frankreich und Italien, die in die Fallstudien aufgenommen wurden. Anfragen für Beispiele aus weiteren Ländern haben jedoch kein zusätzliches Material hervorgebracht.

## Abschluss- und Auswertungsbericht (Kapitel 5)

Der Abschluss- und Auswertungsbericht beruht auf den Länderberichten. Er gibt einen Überblick über die Verwendung freiwilliger Vereinbarungen in den untersuchten Ländern, stellt Gemeinsamkeiten und wichtige Unterschiede heraus und zieht Schlussfolgerungen hinsichtlich der Herangehensweisen, die angewendet wurden, um partnerschaftliche Praktiken zu fördern. Nachfolgend die wichtigsten Ergebnisse:

- In den untersuchten Ländern lässt sich eine Vielfalt unterschiedlicher Anwendungen von freiwilligen Vereinbarungen beobachten. Dies steht augenscheinlich in Zusammenhang mit
- a) dem Umfang der Kooperation, der in der üblichen Projektstruktur oder dem "Bauwirtschaftssystem" (siehe Anhang L) verankert ist, und
- b) den Ansichten von Behörden hinsichtlich der Angemessenheit solcher Vereinbarungen für Kunden des öffentlichen Sektors. Allerdings findet sich selbst für diejenigen Länder, in denen freiwillige Vereinbarungen offenbar umfangreich genutzt werden, nur wenig Datenmaterial, das Aufschluss über den Umfang der Anwendung und finanzielle oder sonstige Vorteile gibt.
- Einige Länder verfügen über beachtliche Erfahrung mit "Projekt-Partnerschaften", wobei die Beteiligten dies als eine erstrebenswertere und effektivere Form der Projektdurchführung ansehen als traditionelle Beziehungen. Es gibt zahlreiche Beispiele für erfolgreiche Einzelprojekte.
- Rahmenvereinbarungen mit partnerschaftlichen Elementen (im Unterschied zu Rahmenverträgen) und Vereinbarungen über Strategische Partnerschaften " sind weniger weit verbreitet, obwohl sie insbesondere im Wohnungsbau verwendet werden. Besonders im Vereinigten Königreich liegen umfassende Erfahrungen zu Rahmenvereinbarungen vor. In einigen Ländern gibt es Bedenken hinsichtlich der potentiellen Auswirkungen auf KMUs, denen mit legislativen Maßnahmen und der Ausarbeitung von Leitlinien begegnet worden ist.
- Es sind nur wenige Beispiele für Baukonsortien und Allianzen gefunden worden, dennoch gibt es einige erfolgreiche Beispiele.
- In drei Ländern (Dänemark, den Niederlanden und dem Vereinigten Königreich) konnten eindeutig nationale "Herangehensweisen" zur Förderung von freiwilligen

Vereinbarungen identifiziert werden. Diese sind immer aus Umfragen hervorgegangen, die aus Unzufriedenheit mit dem Leistungsvermögen der Industrie resultierten, und umfassten jeweils teilweise oder vollständig die folgenden Elemente: Berichte auf höchster Ebene, nationale Förderungsgremien, überarbeitete Leitfäden bezüglich der öffentlichen Auftragsvergabe, Befürwortung durch Wirtschaftsprüfungsinstitutionen, Forschungs- und Ausbildungsinitiativen und die Entwicklung von Leistungsindikatoren. Diese Maßnahmen wurden in Kombination verwendet, um sie gegenseitig zu verstärken. Die marktbeeinflussende Rolle öffentlicher Auftragsvergabe bei der Förderung von Zusammenarbeit ist dabei besonders wichtig. Eine der Hauptschlussfolgerungen besteht darin, dass bloße Ermunterung keinen Wandel herbeiführen wird.

- Andernorts sind Kooperationsvereinbarungen von Bauunternehmern eingeführt worden, die jedoch die aktive Zusammenarbeit von Kundenvertretern erfordern. In Schweden zum Beispiel haben einige Kunden aus dem öffentlichen Sektor seitdem eine führende Rolle in der Förderung von Zusammenarbeit in ihren Projekten übernommen. Bemerkenswert ist in Schweden auch die Entwicklung von Studienprogrammen über den ersten Abschluss hinaus, die auf die Verbesserung im Umgang mit Kunden abzielen.
- Es herrscht Konsens hinsichtlich der Maßnahmen, die Geschäftsleitungen nutzen können, um die Entstehung partnerschaftlicher Beziehungen zu fördern. Darunter finden sich die folgenden Elemente: die frühzeitige Einbindung der Hauptbeteiligten, Zahlungssysteme, bei denen Gewinn und Verlust geteilt werden, die Akzeptanz von Konfliktlösungsverfahren, die juristische Prozesse vermeiden, klare Zielvorstellungen, workshops, die die Kommunikation und das Verständnis der Ziele sicherzustellen, und die Formulierung und Überprüfung von Zielvorgaben. Offenheit und förderndes Verhalten von Einzelpersonen werden dabei als zentral erachtet.
- Es besteht außerdem Einigkeit darüber, das solche Vereinbarungen zu einer verbesserten Projektumsetzung führen, zu Gesamtergebnissen, die die Kundenbedürfnisse besser befriedigen, mehr Verlässlichkeit hinsichtlich der Kostenund Zeitplanung, weniger Streitigkeiten, was allgemein zu einem befriedigenderen und angenehmeren Arbeitsumfeld für alle Beteiligten führen kann. Dieser Konsens wird durch Daten aus Einzelprojekten bestätigt. Während nicht notwendigerweise Kostenersparnisse erzielt werden, können unter Umständen Projekte, die mit finanziellen Schwierigkeiten konfrontiert waren, ohne zusätzliche Kosten zu Ende geführt werden, die andernfalls angefallen wären.
- In einigen Ländern werden öffentliche Vergaberichtlinien als hinderlich für die Übernahme partnerschaftlicherer Arbeitsweisen oder die Entstehung langfristiger Beziehungen angesehen. Manchmal sind die wahrgenommenen Hindernisse das Ergebnis nationaler Richtlinien; dies ist eindeutig dann der Fall, wenn sie sich auf Richtlinien beziehen, die Aufträge unterhalb der EU-Schwelle betreffen. Allerdings zeigt die weit verbreitete Anwendung unterschiedlicher Formen von freiwilligen Vereinbarungen in einigen Ländern, dass diese im Rahmen von EU-Richtlinien erfolgreich durchgeführt werden können.
- Es gibt Hinweise darauf, dass freiwillige Vereinbarungen andere EU-Maßnahmen einschließlich derer hinsichtlich nachhaltiger Entwicklung, Aus- und Fortbildung und Innovation unterstützen.

## Leitfaden zur optimalen Herangehensweise und Fallbeispiele (Kapitel 6)

## Ziele und Zielgruppe

Der Leitfaden zur optimalen Herangehensweise bildet zusammen mit den Fallbeispielen Teil 2 des Abschlussberichts. Aufbau und Inhalt des Leitfadens werden später zusammengefasst. Die Ziele des Leitfadens sind:

- 1) Bewusstsein dafür zu schaffen, dass Kooperationsabsprachen existieren und sich in einigen Mitgliedsstaaten als vorteilhaft erwiesen haben.
- 2) die verschiedenen Formen dieser Vereinbarungen darzustellen und die Art und Weise der erwähnten Vorteile für die jeweiligen Beteiligten im Baugewerbe aufzuzeigen, um weitere Untersuchungen anzuregen
- 3) grundlegende Anleitung zu geben, wie diese Vereinbarungen aufgebaut werden können und welche Faktoren ihren Erfolg beeinflussen
- 4) die Aufmerksamkeit darauf zu richten, dass die Umsetzung partnerschaftlicher Vereinbarungen zum Zweck der Zusammenarbeit mit nationalen und EU-Anforderungen und Direktiven konsistent sein müssen, und insbesondere keine Marktzugangsbeschränkungen für KMUs mit sich bringen sollte
- 5) weitere Informationsquellen aufzuzeigen.

Obwohl die Vorgaben für die Studie vorsahen, dass der Leitfaden sich auf KMUs bezieht, wurde während der Untersuchungen deutlich, dass "Partnering" Formen von Zusammenarbeit eher auf größere und komplexere Projekte passen, in denen es weniger wahrscheinlich ist, dass KMUs eine tragende Rolle spielen. Daher wurde im Verlauf der Studie vereinbart, dass, obwohl der Leitfaden Problemfelder identifizieren soll, die von besonderer Bedeutung für KMUs sind, die Hauptzielgruppen die folgenden sein sollten:

- wichtige Kunden, die von freiwilligen Vereinbarungen profitieren können
- größeren Firmen, die Projekte in Größenordnungen durchführen, die die notwendigen Lernprozesse rechtfertigen
- Vertreter des Baugewerbe einschließlich KMUs
- Entscheidungsträger und Rechtsbeistände

Da der Leitfaden im gesamten EU-Raum angewendet werden soll, enthält er keine detaillierte Diskussion der rechtlichen oder regulativen Rahmenbedingungen, die für die Einführung von freiwilligen Vereinbarungen in einem einzelnen Mitgliedstaat von Bedeutung sind. Es wird betont, dass vor jeglicher Initiative zur Einführung solcher Vereinbarungen örtlicher Rat eingeholt werden sollte.

Anhang H zeigt den Vorschlag für Aufbau und Inhalt des Leitfadens, der beim zweiten Treffen des MLA diskutiert wurde.

#### Konsultationen

Es wurden ausführliche Beratungen des Textentwurfs für den Leitfaden in allen der im Forschungskonsortium vertretenen Länder sowie vier weiteren Mitgliedsstaaten durchgeführt: Frankreich, Deutschland, Griechenland und Polen. Es wurde für wichtig gehalten, die Konsultation auszuweiten, um Meinungen aus einer größeren Spannbreite von Handlungsebenen im Baugewerbe mit einzubeziehen (siehe Anhang L), insbesondere von solchen Mitgliedsländern, die nur über wenig Erfahrung mit freiwilligen Vereinbarungen verfügen. Über Mitglieder des MLA wurden auch Meinungen aus anderen Mitgliedstaaten hinsichtlich des Leitfadens eingeholt und Generaldirektionen mit relevanten Zuständigkeitsbereichen eingeladen, den Leitfaden zu kommentieren. Anhang J enthält eine Auflistung von darüber hinaus konsultierten Organisationen.

Das Forschungskonsortium erkannte an, dass die Durchführung von Konsultationen auf der Grundlage eines Textes in Englisch die Kommentierung beschränken würde. Daher wurde eine Zusammenfassung des Leitfadens und ein Entwurfsschreiben mit Schlüsselfragen vorbereitet, mit der Absicht, diese von den Organisationen übersetzen zu lassen, die die Konsultationen in jedem Land koordinierten. Diese Dokumente sind in Anhang I beigefügt.

Insgesamt war die Resonanz auf den Leitfaden positiv; er wurde für eine klare und nützliche Einführung zum Thema gehalten. Die drei Hauptmotive in den Reaktionen waren:

- Präsentation: Es wurde vorgeschlagen, dass diese verbessert werden müsste, z.B. weniger durchgängigen Text enthalten solle usw. Dies wurde im Text in Teil 2 umgesetzt. In Zusammenhang mit diesen Kommentaren wurde häufig erwähnt, dass der Leitfaden keine Wirkung entfalten würde, wenn er ausschließlich auf Englisch erhältlich wäre.
- Ausführlichkeit der Themenbehandlung: Die Befragten wünschten mehr Informationen bezüglich der örtlich relevanten Umstände. Wie bereits erwähnt kann ein Leitfaden, der zur Verwendung in ganz Europa gedacht ist, nicht alle Fragen berücksichtigen, die für einen einzelnen Mitgliedsstaat von Bedeutung sind.
- Wert für KMUs: Es wurde vorgeschlagen, dass der Leitfaden auf KMUs abzielen solle; aus den vorgenannten Gründen werden diese nicht als die direkte Hauptzielgruppe erachtet

Der Text des Leitfadens wurde unter Berücksichtigung der Antworten aus den Konsultationen überarbeitet und während des dritten Treffens des MLA vorgestellt.

#### Fallstudien

Der zweite Teil des Leitfadens besteht aus 21 Fallstudien, die sich auf die Mitgliedsstaaten, die im Forschungskonsortium vertreten sind, und auf Italien und Frankreich beziehen. Sie zeigen, wie die verschiedenen Arten von freiwilligen Vereinbarungen zur Zusammenarbeit, die in der Studie berücksichtigt wurden, im jeweiligen baugewerblichen Kontext umgesetzt worden sind, zu dem sie passen (Wohnungsbau, infrastrukturelle Arbeiten etc.). Während alle Länderstudien Vorteile der Zusammenarbeit aufzeigen, weisen einige auf Probleme hin, und in manchen Fällen sind Beziehungen beendet worden. Zu jeder Fallstudie gehören eine oder mehrere Illustrationen, die in Teil 2 enthalten sind, un auch von der website der Studie heruntergeladen werden können.

Einige Fallstudienentwürfe wurden bei den Konsultationen zum Leitfaden berücksichtigt. Es wurde darum gebeten, diese ausführlicher zu gestalten, aber dies hätte Auswirkungen auf die Gesamtlänge des Leitfadens gehabt, und zusätzliche Details wären für einige Mitgliedsstaaten unter Umständen nicht relevant.

Es wird beabsichtigt, den Leitfaden und die Fallbeispiele professionell ausgestalten und drucken zu lassen, sobald Einigkeit hinsichtlich ihrer Endfassung besteht.

# **Die Auswirkungen freiwilliger Vereinbarungen und Interaktionen mit EU-Richtlinien** (Kapitel 7)

Vorteile der Anwendung freiwilliger Vereinbarungen

Es ist nicht möglich, aus den nationalen Daten eines Mitgliedsstaates eine Beurteilung der Gesamtkostenersparnisse oder anderer Gewinne abzuleiten, die aus der Anwendung freiwilliger Vereinbarungen zur Zusammenarbeit resultieren. Selbst im Vereinigten Königreich zeigen nationale Daten über die Leistungsfähigkeit des Bausektors keine klaren Belege für Veränderungen, obwohl partnerschaftliche Vereinbarungen häufig verwendet werden. Andere

Faktoren, zum Beispiel ein Anstieg der Materialkosten, zusätzliche Komplexität von Projekten oder neue Regulationsanforderungen können die Auswirkungen neuer Vereinbarungen überwiegen und tragen sicherlich zu der Schwierigkeit, den Netto-Gewinn solcher Veränderungen abzuschätzen, bei.

Allerdings gibt es in Einzelprojekten starke Anzeichen dafür, dass solche Gewinne erzielt werden können. Während es Einzelfälle gibt, in denen mehr als 20% der Kosten eingespart werden konnten, liegt der durchschnittliche Wert im Bereich zwischen 5-10%. Es eignen sich allerdings nicht alle Projekte für die Einführung von kooperativen Arbeitsweisen; kleinere, einfache Projekte, die für den innerstaatlichen Sektor charakteristisch sind, werden weiterhin mittels traditioneller Prozesse ausgeführt werden. Vielleicht 40% des Baugewerbsumsatzes – die auf größere und komplexere Projekte entfallen – könnten grundsätzlich von der Einführung partnerschaftlicher Beziehungen profitieren. Zusammengenommen lassen diese Überlegungen vermuten, dass der potentielle direkte Einfluss von freiwilligen Vereinbarungen 3-4% des Baugewerbsumsatzes in der EU oder 0,3-0,4% des EU-BIP entsprechen könnte.

Allerdings könnten indirekte Auswirkungen von größerer Bedeutung sein. Die Länderberichte belegen, dass partnerschaftliche Arbeitsweisen mehr Sicherheit in der Projektumsetzung mit sich bringen und daher Risiken reduzieren. Probleme werden effizienter angegangen und Projekte ohne zusätzliche Kosten abgeschlossen. Darüber hinaus werden die Kosten und Unterbrechungen reduziert oder eliminiert, die mit der verspäteten Fertigstellung von Bauarbeiten in Zusammenhang stehen. Außerdem sollten auch die Vorteile beachtet werden, die in Form von größerer Zufriedenheit mit der Arbeit, niedrigerer Fluktuation der Belegschaft, höherer Qualität und größeren Investitionen in Zusatzausbildungen entstehen. Während diese Vorteile weitestgehend nicht quantifizierbar sind, ist es jedoch möglich, in Hinblick auf Laufzeiterträge und Kostenersparnisse den Wert pünktlicher im Vergleich zu verspäteter Projektausführung zu bestimmen und zu zeigen, dass sich dieser in einer ähnlichen Größenordnung bewegt wie direkte Kostenersparnisse.

## Übertragbarkeit der Praktiken

Die Antworten aus den Konsultationen weisen darauf hin, dass "Projekt-Partnerschaften" und Baukonsortien diejenigen Formen von Zusammenarbeit waren, die das größte Interesse in solchen Ländern erregten, in denen freiwillige Vereinbarungen wenig verbreitet waren. Man kann jedoch argumentieren, dass grundsätzlich alle in der Studie berücksichtigten Formen der Zusammenarbeit in der EU angewendet werden könnten.

Es ist allerdings auch deutlich, dass in einigen Mitgliedsstaaten substantielle regulative Hindernisse für die Übernahme solcher Vereinbarungen bestehen; insbesondere äußerten die Befragten, dass es öffentliche Auftragsvergaberegeln gebe, die deren Anwendung verhindern würden, oder dass Behörden diese aufgrund von Bedenken hinsichtlich der Eigentümerschaft nicht zu übernehmen bereit seien. In den Konsultationen wird der Bedarf nach einer Förderungsinitiative in den Mitgliedsstaaten betont, die auf einem umfassenden Verständnis der behördlichen und kommerziellen Praktiken in dem jeweiligen Land basieren sollten.

Die Studie verdeutlichte, dass selbst in Mitgliedsländern mit beträchtlicher Erfahrung in partnerschaftlichen Arbeitsweisen weitere Entfaltungsmöglichkeiten für eine breitere Verwendung freiwilliger Vereinbarungen bestehen. Dort, wo es bereits nationale Initiativen zu deren Förderung gibt, können die Ergebnisse der Studie in bestehenden oder geplanten Projekten aufgegriffen werden; andernorts werden die Organisationen, die an den Beratungen mitgewirkt haben, auf diese aufmerksam gemacht. Unterstützende Maßnahmen, die häufiger durchgeführt werden könnten, umfassen die Abhaltung eines workshop vor dem eigentlichen Projekt (Fallstudie 21), das Konzept des 'temporären Unternehmens', und den Abschluss einer kollektiven projektbezogenen Versicherung.

#### Vereinbarkeit mit EU-Richtlinien

## 1) Öffentliche Auftragsvergabe

In einigen Mitgliedsstaaten gibt es eine starke Wahrnehmung, dass die EU-Vorgaben zur öffentlichen Auftragsvergabe, wie sie in den Direktiven zur öffentlichen Auftragsvergabe festgeschrieben sind, die Anwendung freiwilliger Vereinbarungen zur Zusammenarbeit hemmen. Dies steht in Kontrast zur umfangreichen Verwendung solcher Vereinbarungen durch Behörden in anderen Mitgliedsstaaten. Die EU-Vorgaben können daher kein fundamentales Hindernis für die Annahme partnerschaftlicher Arbeitsweisen sein. Örtliche Interpretationen der Vorgaben, oder zusätzliche örtliche Richtlinien können jedoch deren Übernahme verhindern. Dies deutet darauf hin, dass die Förderung freiwilliger Vereinbarungen mit einer Beratung hinsichtlich öffentlicher Auftragsvergabepraktiken einhergehen sollte.

Die Übernahme solcher Vereinbarungen birgt potentielle Risiken, weil sie ein engeres Verhältnis zwischen Kunden und Anbietern mit sich bringt. Diese können durch vollen Zugang zu Finanzdaten und eine stete Beobachtung der Marktbedingungen und Preise durch den Kunden angegangen werden, indem der Kunde beispielsweise einen Teil der Arbeit durch konventionelle Ausschreibungen und nicht in Form einer Rahmenvereinbarung in Auftrag gibt. Unabhängige Prüfung der Kosten, Planung und Gestaltung eines Projekts werden darüber hinaus sicherstellen, dass Kunden für ihre Ausgaben angemessene Leistungen erhalten. Die breite Verwendung freiwilliger Vereinbarungen durch Behörden in einigen Mitgliedsstaaten zeigt, dass mit der Verwendung solcher Vereinbarungen verbundene Risiken handhabbar sind.

## 2) KMUs

Es besteht das Risiko, dass freiwillige Vereinbarungen die Marktchancen für KMUs verringern; dies würde der EU-Politik gegenüber kleineren Firmen entgegen laufen. Dieses Risiko wurde in einigen Mitgliedsstaaten erkannt und sowohl über die Gesetzgebung als auch über Leitlinien angegangen. Die Interessen von KMUs können gesichert werden, und einige Formen freiwilliger Vereinbarungen könnten ihnen ein sicheres Geschäftsumfeld bieten als übliche Geschäftspraktiken. Insgesamt sind freiwillige Vereinbarungen und die Ziele der EU-Politik grundsätzlich vereinbar, aber es ist Vorsicht geboten, um unerwünschte Auswirkungen zu vermeiden.

## 3) Nachhaltige Entwicklung

Freiwillige Vereinbarungen erleichtern die Kommunikation unter den am Bauprozess Beteiligten. Dies führt zu Aufwandsreduzierung und einer stärkeren Ausrichtung an Kundenvorgaben. Eine effiziente Kommunikation aller Beteiligten ist auch notwendig, um ein hohes Niveau in der Ökobilanz von Gebäuden zu erreichen. Freiwillige Vereinbarungen vereinfachen auch die Planung der Gesamtlaufkosten, helfen, Innovation zu fördern, und tragen zum Kompetenzaufbau bei.

## 4) Vertrags-, Managements- und Versicherungsangelegenheiten

Freiwillige Vereinbarungen sind kein Ersatz für Verträge, aber sie tragen dazu bei, ein Projektumfeld zu schaffen, in dem vertragliche Verpflichtungen effizienter erfüllt werden können. Sie können zusätzlich zu konventionellen Verträgen getroffen werden, aber in einigen Mitgliedsstaaten sind auch Vertragsformen entwickelt worden, die auf partnerschaftlichen Prinzipien beruhen und allgemein als hilfreich eingestuft werden Anhang K fasst die Wege zusammen, auf die einige neuere Formen des Vertrags im Vereinigten Königreich zusammenarbeitende Elemente vereinigen.

Management-Praktiken bilden den Kern partnerschaftlicher Arbeitsweisen. Management und Einzelpersonen werden durch die Übernahme partnerschaftlicher Beziehungen vor Herausforderungen gestellt. Insbesondere für KMUs könnte es sich als schwierig erweisen, organisatorische Ressourcen aufzubringen, die notwendig sind, um die neuen Arbeitsabläufe

zu verstehen, und Kundenvertreter müssen unter Umständen die Initiative ergreifen, um den Bedarf zu ermitteln und Vorkehrungen für angemessene Zusatzausbildungen treffen.

Die meisten Gemeinschaftsprojekte sind mit konventionellen Versicherungsvereinbarungen abgewickelt worden, in denen jede Partei durch ihre eigene Haftpflichtversicherung abgesichert ist. Allerdings wird in einigen Mitgliedsstaaten (z.B. Belgien) eine projektbasierte Gemeinschaftsversicherung abgeschlossen, was allgemein als hilfreich erachtet wird, um die Zusammenarbeit zu fördern. Die Einführung längerfristiger Beziehungen kann eine größere Verbreitung solcher Versicherungen anregen, indem Versicherer in die Lage versetzt werden, die Schadensbilanz von Kombinationen von Firmen auszuwerten. Die Kommission hat eine separate Studie zu Versicherungen im Baugewerbe in die Wege geleitet.

## Förderung von freiwilligen Vereinbarungen zur Zusammenarbeit (Kapitel 8)

Die Einführung von freiwilligen Vereinbarungen zur Zusammenarbeit erfordert Veränderungen in den Auftragsvergabe- und Managementpraktiken auf Seiten des Kunden und der Bauunternehmer, die in ein Projekt involviert sind. Diese werden nicht eintreten, solange nicht alle Beteiligten von ihren Vorteilen überzeugt sind. Die Länderstudien deuten darauf hin, dass unter den verschiedenen Interessenvertretern Kunden aus dem öffentlichen Sektor eine besonders wichtigere Rolle dabei spielen, Veränderungen herbeizuführen, indem sie marktbezogene Anreize für solche Veränderungen bereitstellen. Umgekehrt werden sie jedoch nur dann in der Lage sein, neue Prozesse einzuführen, wenn die nationalen Rahmenbedingungen für öffentliche Auftragsvergabe ihnen dies gestatten.

Aus diesem Grund wird die bloße Verbreitung des Leitfadens allein nicht ausreichen, um die notwendigen Veränderungen herbeizuführen, aber es ist ein Anfang. Sie wird dazu beitragen, ein Bewusstsein für das Bestehen und die potentiellen Vorteile von freiwilligen Vereinbarungen zu schaffen. Darüber hinaus bräuchte man in jedem einzelnen Mitgliedstaat eine Abschätzung des Anwendungsbereichs für die Einführung von partnerschaftlichen Arbeitsweisen, einschließlich einer Bewertung der regulativen und kommerziellen Rahmenbedingungen im Baugewerbe, und die Entwicklung eines Programms für Veränderung.

Daher werden zur Verbreitung des Leitfadens und freiwilliger Vereinbarungen allgemein die nachfolgenden Schritte vorgeschlagen:

- i) Verbreitung des Leitfadens
  - Verteilung der englischen Fassung an nationale Verwaltungen, europäische Vertreter und baugewerbliche Medien, ergänzt durch Verteilung vor Ort, soweit angebracht
  - in anderen Sprachen an ähnliche Institutionen
  - Bereitstellung von Internetzugang und Einarbeitung von Hypertext-Links in das Material zur einfacheren Nutzung
  - Sicherstellung von Zugang zum Leitfaden durch das Europäische Unternehmensnetzwerk
  - Unterstützung durch europäische Markteinführungsveranstaltungen oder solche vor Ort
- ii) Bereitstellung zusätzlicher Auskunft und Beratung
  - Unterstützung der Produktion örtlicher Editionen des Leitfadens, die Anleitungen zu örtlichen Vorgaben, Beratungsstellen usw. miteinschließt
  - Übersetzung weiteren Beratungsmaterials
  - Ausarbeitung von Ratgebern und Fallstudien zu Beschaffungsbelangen, die für die Umsetzung von Kooperationsvereinbarungen relevant sind
  - Unterstützung des Erfahrungsaustauschs durch Netzwerke
- iii) Generieren von Motivation für Veränderungen
  - Unterstützung nationaler Konferenzen
  - Angebot finanzieller Unterstützung für nationale Studien, vielleicht in Verbindung mit Input aus anderen EU-Mitgliedsstaaten

In Ergänzung zu diesen Maßnahmen könnte eine Untersuchung dazu durchgeführt werden, wie andere EU-Programme die Anwendung freiwilliger Vereinbarungen fördern könnten. Strukturfonds und die Europäische Investitionsbank zum Beispiel stellen finanzielle Unterstützung für Infrastrukturprojekte bereit. Diese könnten mit der Übernahme von partnerschaftlichen Beziehungen verbunden werden. In kleinerem Umfang könnte die Unterstützung von Gebäudeenergieeffizienz durch einen Anreiz begleitet werden, KMU-Konsortien zu gründen.

## Schlussbetrachtung (Kapitel 9)

Das Erzielen einer weit verbreiteten Nutzung von freiwilligen Vereinbarungen erfordert langfristigen Einsatz. Öffentliche Auftragsvergabepraktiken sind dabei entscheidend; sie können die Branche auch noch nach Ablauf bestimmter Förderungsinitiativen weiterhin beeinflussen. Sie sind besonders unter den derzeitigen Marktbedingungen wichtig, in denen großer Preisdruck und eine Rückkehr zu traditionellen Geschäftsbeziehungen (einschließlich der Beziehung zwischen Kunden und Anbietern) herrschen. Um Menschen von den Vorteilen freiwilliger Vereinbarungen zu überzeugen, braucht es überzeugende Daten aus örtlichen Projekten; im Gegenzug wird es notwendig sein, Leistungsindikatoren und Datensammlungen

Die Entwicklung eines Kernsets von Indikatoren auf europäischer Ebene würde bei der Bewertung der Wettbewerbsfähigkeit des europäischen Baugewerbes helfen und könnte die Grundlage regelmäßiger Kontrolle der Leistungsfähigkeit des Baugewerbes bilden, was dazu beitragen würde, die Verpflichtung zu verschiedenen Arbeitsweisen beizubehalten. Die Förderung partnerschaftlicher Prozesse war nur ein Aspekt von Programmen zu Veränderungen im Baugewerbe in den Mitgliedsstaaten, und diese Indikatoren würden auch bei weiteren Veränderungsinitiativen unterstützend wirken.

Daher wäre die Erstellung und Verbreitung des Leitfadens, zum Vorteil eines jeden Einzelnen, und würde beschleunigend auf einen größeren Wandel im europäischen Baugewerbe wirken.

## Teil 2: Leitfaden und Fallbeispiele

## Teil 1: Leitfaden

#### Einleitung (Abschnitt 1)

Dieser Leitfaden basiert auf einer Studie über die Verwendung partnerschaftlicher Vereinbarungen im Baugewerbe, die durch die Generaldirektion Unternehmen und Industrie der Europäischen Kommission in Auftrag gegeben wurde. Die Erfahrungen einer Reihe von EU-Mitgliedsstaaten deuten darauf hin, dass Firmen, die sich in Bauprojekten explizit einer partnerschaftlichen Arbeitsweise verschreiben, bessere Ergebnisse erzielen als solche, die unter Verwendung konventioneller Vereinbarungen erreicht werden. Darüber hinaus empfinden betroffene Einzelpersonen das Arbeitsumfeld als befriedigender. Eine andere Form der Zusammenarbeit ist gegeben, wenn Firmen sich zusammenschließen, um Marktchancen zu nutzen, die ihnen als Einzelunternehmen verschlossen bleiben würden.

Dieser Leitfaden richtet sich an all diejenigen, die mit dem Angebot von Dienstleistungen im Baugewerbe befasst sind, und an die Kunden in diesem Bereich. Er gibt einführende Anleitungen hinsichtlich verschiedener Formen der Zusammenarbeit, um Einzelpersonen und Organisationen über diese Arbeitsweisen zu informieren und deren Anwendung zu fördern. Es handelt sich allerdings nicht um einen allumfassenden, abschließenden Leitfaden zur Verwendung von EU-Direktiven zur öffentlichen Auftragsvergabe oder örtlichen Vorgaben, die die Übernahme partnerschaftlicher Arbeitsweisen beeinflussen. Es sollte immer örtlicher Rat zu diesen Belangen eingeholt werden.

#### Auswertung partnerschaftlicher Beziehungen (Abschnitt 2)

Der Leitfaden identifiziert fünf Typen partnerschaftlicher Vereinbarungen, wobei tatsächliche Beziehungen Elemente von mehr als einem Typus enthalten können:

• "Projekt-Partnerschaften" – hier vereinbaren Kunde und Hauptanbieter formell, im Rahmen eines bestimmten Projektes partnerschaftlich zu arbeiten

- "Strategische Partnerschaften" hier arbeitet ein Kunde mit einer begrenzten Anzahl von Anbietern in einer Reihe von Projekten (von denen nicht alle notwendigerweise zu Beginn der Vereinbarung festgelegt werden). Dabei wird vereinbart, dass es beabsichtigt ist, die Qualität der Beziehungen und die Leistungsfähigkeit im Verlauf des Projekts zu verbessern.
- Rahmenvereinbarungen diese sind insofern ähnlich zu "Strategischen Partnerschaften", als auch hier der Kunde eine Reihe von Firmen auswählt, um künftig Arbeiten auszuführen. Ziele sind hierbei beidseitige Verbesserung und Vorteile in vielerlei Hinsicht. Es gibt hierbei aber noch einen zweiten Auswahlprozess, um zu festzulegen, welche(s) Unternehmen ein bestimmtes Projekt ausführen soll. Diese Vereinbarungen betreffen häufig kleinere Arbeitsaufträge.
- Allianzen eine bestimmte Form von "Projekt-Partnerschaften", in der Kunde und Anbieter eine gemeinsame Entität gründen, die zur Ausführung des Projekts über eine eigene Identität verfügt. In ihrer stärksten Ausprägung wird der Kunde Anteilseigner an einem in gemeinsamem Besitz befindlichen Unternehmen.
- Baukonsortium hier vereinbart eine Gruppe von Anbietern (häufig KMUs), ihre Dienstleistungen gemeinsamen zu entwickeln und zu vermarkten oder ein neues Produkt oder neue Dienstleistungen zu entwickeln. Das Konsortium verstärkt die Gesamtwettbewerbsfähigkeit seiner Mitgliedsfirmen. Dieser Typus ist von befristeten Beziehungen zu unterscheiden, die Firmen eingehen, um sich an einer Ausschreibung für ein bestimmtes Projekt zu beteiligen.

Partnerschaftliche Beziehungen beruhen auf Vertrauen und Offenheit unter den Vertragsparteien, und führen zu Verhaltensweisen und Entscheidungen, die beidseitige, nicht nur individuelle Vorteile mit sich bringen. Sie beruhen außerdem eher auf Annahmen als auf Gewissheit. In dieser Beziehung haben beide Seiten keine Garantie dafür, dass sie von ihr profitieren werden, glauben aber dennoch daran, dass dies der Fall sein wird.

Partnerschaftliche Vereinbarungen, die an Projekte gebunden sind, sind kein Ersatz für einen Vertrag; sie ermöglichen eine effizientere Abarbeitung vertraglicher Verpflichtungen.

Die Vorteile partnerschaftlicher Vereinbarungen für Kunden und Anbieter beinhalten:

- zuverlässigere Projektumsetzung
- weniger (oder gar keine) formelle Streitigkeiten oder Konfliktfälle
- bessere Kommunikation, die zu besserer Problemlösung und potentiellen Kostenersparnissen führen
- kontinuierliche Leistungsfähigkeitsverbessrung und Wissenstransfer zwischen Proiekten
- mehr Sicherheit in Zahlungsplänen
- größere Fähigkeit, Märkte zu erschließen

#### Vorteile für die Gemeinschaft umfassen:

- zuverlässigere Bereitstellungen von Einrichtungen, so dass die Vorteile der Anwendung von freiwilligen Vereinbarungen nach Zeitplan realisiert und Unterbrechungen verspäteter Projekte vermieden werden können
- Anreize für Firmen, in Fortbildungen zu investieren
- Aufwandsreduzierung und nachhaltigeres Bauen

Die größten Vorteile von Projektzusammenarbeit werden im Rahmen größerer, komplexerer Projekte erzielt, bei denen Herausforderungen gemeinsam angegangen werden sollten. "Strategische Partnerschaften" sind gewinnbringend, wenn sie Raum dafür bieten, Arbeitsabläufe im Rahmen der Fähigkeiten der Partnerorganisationen abzuwickeln, und Firmen einen Anreiz haben, in die Beziehung zu investieren. Baukonsortien basieren in

ähnlicher Weise auf der Wahrnehmung von Marktchancen, die zu Verpflichtungen der Beteiligten führen werden.

## Erfolgreiche partnerschaftliche Beziehungen (Abschnitt 3)

Dieser Abschnitt fast die Faktoren zusammen, die zu erfolgreichen partnerschaftlichen Beziehungen beitragen, und zeigt Wege auf, Zusammenarbeit zu fördern. Dabei werden die folgenden Themen behandelt:

- die entscheidende Bedeutung zwischenmenschlicher Beziehungen
- die zentrale Rolle von Führung, insbesondere durch höheres Management in Kundenvertretungen
- die Auswahl von Partnern, die die Bereitschaft und die Verpflichtung zu partnerschaftlichem Arbeiten teilen
- die Vorteile durch frühzeitige Ernennung der Hauptmitglieder eines Projektteams
- die Notwendigkeit, ein gemeinsames Verständnis von Prinzipien und Zielen der Zusammenarbeit sicherzustellen und diese in einem abgesprochenen, öffentlich zugänglichen Dokument zu formulieren
- die Interaktion zwischen vertraglichen Vorkehrungen und Maßnahmen, die die Zusammenarbeit unterstützen
- Maßnahmen, die partnerschaftliche Verhaltensweisen und gute Kommunikation fördern
- die Rolle strikter Leistungsüberwachung bei der Aufrechterhaltung gesunder und effizienter Beziehungen
- finanzielle Anreize zur Zusammenarbeit
- Vorgehensweisen, die es zulassen, Streitigkeiten ohne Anrufung der Gerichte zu schlichten
- kollektives Risikomanagement

## Einhaltung von EU- und nationalen Richtlinien und Vorgaben (Abschnitt 4)

Dieser Abschnitt enthält allgemeine Anleitungen hinsichtlich des Verhältnisses von partnerschaftlichen Arbeitsweisen und EU-Vorgaben zu Auftragsvergabe und Wettbewerb. Es handelt sich hierbei jedoch nicht um eine allumfassende, abschließende Anleitung zur Umsetzung solcher Gesetzgebung. Dieser Abschnitt

- betrachtet, wie partnerschaftliche Vereinbarungen so durchgeführt werden können, dass sie mit EU-Direktiven zur Auftragsvergabe vollständig kompatibel sind
- stellt heraus, dass nationale Auftragsvergabe und andere Vorgaben berücksichtigt werden sollten; daher sollte immer angemessener Rat eingeholt werden, bevor partnerschaftliche Vereinbarungen umgesetzt werden.
- betont, dass es notwendig ist, dass KMUs nicht von partnerschaftlichen Vereinbarungen ausgeschlossen werden, und bietet Rat, wie dies vermieden werden kann. Dies beinhaltet:
  - o verschiedene Rahmenbedingungen für Projekte unterschiedlicher Größenordnungen
  - o angemessene Ausschreibungen und Management-Vereinbarungen
  - o Abhalten von Konsultationen mit KMUs zu künftigen Gelegenheiten
  - o Identifizierung von Management-Bedürfnissen und Hilfestellung bei der Entwicklung von Fähigkeiten

#### Weitere Quellen für Auskunft und Beratung (Abschnitt 5)

#### Teil 2: Fallstudien

Die Fallstudien zeigen, wie partnerschaftliche Vereinbarungen in einer Vielzahl von Kontexten im Baugewerbe und in verschiedenen Mitgliedsstaaten genutzt worden sind. Die meisten Beispiele betreffen diejenigen Typen der Zusammenarbeit, die im Hauptteil des Leitfadens

berücksichtigt wurden. Zwei davon (20 und 21) zeigen allerdings auch andere Arten partnerschaftlicher Aktivität, zu denen sich Firmen zusammengeschlossen haben.

Diese Fallstudien weisen die Hauptpunkte jeder Zusammenarbeit auf. Soweit möglich enthält jede von ihnen einen Hinweis auf eine Quelle, von der weiterführende Informationen eingeholt werden können.

Einzelne Details einer jeden Fallstudie sind nachfolgend aufgeführt:

<b>N</b> r. 1	<b>Typus</b> * PP	<b>Land</b> Schweden	Name Klockarbo Housing		
2	PP	Belgien	Janssen Pharmaceutica		
3	PP	Norwegen	State Archives		
		<del>-</del>			
4	PP	Schweden	Göta Tunnel		
5	PP	Dänemark	Øresund Link		
6	PP	Belgien	Brussels Office Renovation		
7	PP	Schweden	Linköping Hospital		
8	PP	Norwegen	Baerum Municipality Model		
9	SP	Dänemark	Consensus housing		
10	SP	Dänemark	Management of Danish Main Roads		
11	FA	Vereinigtes Königreich	Birmingham Construction Partnership		
12	FA	Vereinigtes Königreich	Procure21		
13	FA	Vereinigtes Königreich	Hillingdon Homes		
14	AL	Niederlande	Waardse Alliance		
15	AL	Vereinigtes Königreich	NW Gas Alliance		
16	CC	Finnland	Concrete consortium		
17	CC	Niederlande	EspritHuis		
18	CC	Schweden	Arcona		
19	CC	Italien	CIPEA		
20	0	Frankreich	FFACB		
21	0	Finnland	Pre-project Clinic		
Alliance		CC – Construction Consortium			

\* AL – Alliance (Allianz) (Baukonsortium)

FA – Framework Arrangement (Rahmenvereinbarung) (PP – Project Partnering (Projekt-Partnerschaft")

SP – Strategic Partnering (Sonstige)

Die untenstehende Tabelle zeigt, wie die Fallstudien die Anwendung von freiwilligen Vereinbarungen in verschiedenen baugewerblichen Kontexten darstellen. (Die Zahlen beziehen sich auf die vorhergehende Tabelle).

BAUGEWERB-LICHER KONTEXT	TYPUS FREIWILLIGER VEREINBARUNGEN ZUR ZUSAMMENARBEIT					
KONTEXT	PP	SP	FA	AL	CC	0
Wohnungsneubau	1	9			16(iii) 17(iii)	20
Neubau	2, 3		11(i) 12(ii)		18 19(i)	
Infrastrukturelle Arbeiten	4, 5			14		21
Renovierung/ Instandhaltung	6, 7, 8(ii)	10	13	15		

## Anmerkungen:

- i) ii) Auch Renovierung/Instandhaltung
- Auch ein Beispiel für die Auswahl von Baukonsortien
- iii) Auch ein Beispiel für Produktinnovation durch ein Konsortium

## 1. Introduction

## 1.1 Background to the study

## 1.1.1 EU policy background

The European Commission's 1997 Communication on the competitiveness of the construction sector <sup>13</sup> identified issues relevant to the performance of the sector and set out an Action Plan for addressing these. Since then, a range of studies undertaken in collaboration with national administrations and industry representative bodies has enhanced understanding and provided ways forward, some of which have been implemented through Commission policies and regulatory requirements. Recent reports have, for example, concerned the impact of aspects of certain European Community policies on the competitiveness of the construction sector <sup>14</sup> (the study was carried out by a team led by Manchester Business School), and the use of Life Cycle Costing and the development of a European costing model <sup>15</sup>.

This concern for the competitiveness of construction is a manifestation of the Commission's long-standing aim to enhance the competitiveness of the European economy and in particular to promote the conditions that will foster innovation. The Lisbon Strategy of 2006 recognised innovation as a key driver of productivity growth and competitiveness; the various measures for addressing the innovation challenge are set out in the Competitiveness and Innovation Framework Programme <sup>16</sup> adopted following the Lisbon Declaration.

The Commission's Lead Market Initiative <sup>17</sup> is the latest policy initiative aiming to stimulate innovation in construction. Under this initiative, the Commission are taking a range of measures, including policy actions and the stimulation of concerted action by public authorities, in order to encourage innovation and foster enhanced competitiveness in selected market sectors, one of which is Sustainable Construction. Annex 1 of the Communication set out the intended actions in each of the six Lead Markets. In that Annex, the Commission stated its intention to publish a 'guide to establishing schemes for collaborative working schemes in construction projects'. The study reported here was commissioned in order to provide that Guide. This report is therefore an early output of the Lead Market Initiative.

## 1.1.2 Industry background

The procurement and contractual policies adopted by construction clients essentially determine the structures of responsibility within the construction sector and the way in which different parties to a project interact to deliver that project. In many (but not all) EU Member States, it has been traditional for clients to procure design services separately from construction services, while operation and maintenance have been subject to further, separate procurement actions. These fragmented structures, while offering flexibility and facilitating a high degree of competition, have in recent years been heavily criticised for leading to lack of co-ordination and at times conflict among parties to the construction project, and overall inefficiency in delivery.

To overcome these perceived deficiencies, more integrated forms of project delivery structures, such as 'Design-Build' or 'Design-Build-Operate' have been introduced. In the past

from <a href="http://ec.europa.eu/enterprise/construction/compet/life-cycle-costing/guidance-case-study.pdf">http://ec.europa.eu/enterprise/construction/compet/life-cycle-costing/guidance-case-study.pdf</a>.

<sup>&</sup>lt;sup>13</sup> COM(97)539 – 4th November 1997

<sup>&</sup>lt;sup>14</sup> Analysis and assessment of the elements of certain Community policies that impact on the competitiveness of the construction sector, November 2006. Available from <a href="http://ec.europa.eu/enterprise/construction/compet/policies\_en.htm">http://ec.europa.eu/enterprise/construction/compet/policies\_en.htm</a>.

<sup>15</sup> Available

<sup>&</sup>lt;sup>16</sup> Decision 1638/2006/EC, 24 October 2006

<sup>&</sup>lt;sup>17</sup> COM(2007)860 – a lead market initiative for Europe

20 years, these have been supplemented in some countries by measures that explicitly encourage and reward collaboration in project delivery. There is now considerable evidence that an explicit commitment to collaboration, underpinned by appropriate management and financial measures, leads to more successful project outcomes, with benefits for clients, supply-side interests (contractors, designers etc) and ultimately the users of the final constructed output.

Another aspect of the desire to create different forms of relationship between supply and client interests in construction has been the use in some countries of 'framework' agreements, in which clients, following a selection process, undertake to place work with a limited number of suppliers for a defined period. Such arrangements offer suppliers greater assurance of workload and provide them with an incentive to invest in appropriate recruitment, training etc. They also enable suppliers to become more familiar with the client's requirements and procedures, thus enabling the works to be delivered more effectively.

By helping all parties to focus on achieving a successful project outcome, these types of development serve to enhancing the performance of the construction sector. They therefore increase the competitiveness of the industry and, by extension, of the European economy.

#### 1.1.3 The study remit

Annex A presents the Technical Specification for the study as set out in the Invitation to Tender (ENTR/07/008). This makes clear that although the Commission consider that the wider introduction of collaborative arrangements would promote the objectives of the 1997 Communication on the construction sector and would be consistent with the Competitiveness and Innovation Framework Programme, there are issues both of consistency with EU competition and other policies, and of compatibility with established structures and cultures within national construction sectors. Any wider promotion therefore needs to be based on an understanding of:

- The types of voluntary collaboration that have been found to lead to successful outcomes and factors in that success
- The ways in which voluntary collaborations have been promoted and how these have influenced construction markets in the countries concerned.
- Consistency with other EU policies, notably those concerning public procurement and the competitive position of SMEs
- The potential benefits to be derived from wider introduction of voluntary collaboration
- The most appropriate ways of promoting such arrangements in countries where these forms of collaboration are not widely employed, particularly taking into account the compatibility of collaborative arrangements with traditional structures and cultures.

Accordingly, this study was commissioned to provide that understanding and then to develop a 'Best Practice' Guide to the creation of voluntary collaborative arrangements which could be a focus for subsequent promotional initiatives.

## 1.1.4 Structure of report

The report is presented in three parts, each of which is a separate document:

Part 1 This main report, which covers the study process and presents the main findings and conclusions of the study

Part 2 The draft Guide and the associated Case Studies.

Part 3 The Country Reports, covering the experience with voluntary arrangements for collaboration in each country represented in the Study Team

## 1.2 The Study Team

The consortium responsible for the study was led by Manchester Business School (MBS), part of the University of Manchester, UK. The principal MBS members of staff concerned with the study were:

Dr John Rigby Senior Research Fellow

**Project Co-ordinator** 

Dr David Lowe Senior Lecturer,

Construction Project Management

Professor Roger Courtney Professorial Fellow in Construction Innovation

Kathryn Morrison Research Associate

Deborah Cox Research Fellow

Project administration

Other members of MBS staff who contributed to the study were:

Professor Francis Chittenden Small firms and taxation

Professor Jean Shaoul Pubic-private partnerships

Professor Graham Winch Project management and procurement

The study consortium included partners from six other European countries, five of which stemmed from the requirement in the Specifications that the study should cover at least six named countries<sup>18</sup>. The partners (and principal contributors) were:

Belgian Building Research Institute (Dr Georges Klepfisch)

Danish Building Research Institute, University of Aalborg (Dr Jacob Norvig Larsen)

VTT Technical Research Centre of Finland (Dr Pertti Lahdenperä)

Delft University of Technology, The Netherlands (Dr Rob Geraedts, Prof H Wamelink)

SINTEF, Norway (Dr Thorbjørn Ingvaldssen)

Swedish Construction Clients Association (Professor Stefan Sandesten)

The partners had particular responsibility for obtaining and analysing inputs from their countries, while also contributing to the overall planning and execution of the study.

## 1.3 Pre-study timetable

The prior information notice for the study (2007/S 36 - 43225) was published in the OJEU on 21st February 2007. The contract notice (2007/S 73 - 88495) was published on 14th April 2007. The date for receipt of proposals was 4th June 2007. The Commission communicated

<sup>18</sup> Belgium, Denmark, Finland, The Netherlands, Norway, United Kingdom

their decision to the successful consortium on 22nd October 2007 and the contract for the study was signed by the Commission on 20th December 2007. This date defined the delivery dates for the Progress Report (20th June 2008), the draft Guide (20th November 2008) and the draft Final Report (20th January 2009).

## 1.4 Summary description and project Website

In order to facilitate communications about the study, early in the study the Study Team prepared a brief summary of the study objectives, and an introduction to the partners in the consortium. This is presented in Annex B. To facilitate communications with the Management and Steering Group and other interested parties, a Website for the study was created on the MBS Website.

## 1.5 Work Programme

The study was carried out through six distinct tasks.

Task 1 Establishing the reference documentation of the study and the consultation arrangements

Each partner identified reports and other documentation relevant to the study. A shared project information database was created, containing the more significant of these reports, particularly those with summaries in English.

In parallel, the partners in the Study Team identified individuals from each of the counties studied who had knowledge or experience of the kinds of voluntary arrangements that were the focus of the study. These persons were then invited to contribute to the study's review of experience with such arrangements and to comment on the draft Guide.

## Task 2 Preparation of country studies

Each member of the Study Team prepared, with the aid of consultations in their countries, a report summarising the use of voluntary arrangements in their country and the approaches (if any) used to promote such arrangements. These reports are presented in Part 3 of this Final Report. The Specifications envisaged that up to ten countries might be reviewed but requests for information about experience in countries other than those represented in the Study Team met with very limited response (see Section 4.3)

## Task 3 Analysis and assessment of country studies

A Synthesis and Assessment Report (Chapter 5 of this report) was prepared which provided an overview of the experience of the countries covered by the Country Reports, drawing out the common elements, noting differences in emphases, and reviewing the promotional approaches employed and the factors that had led to take-up of voluntary arrangements.

Drafts of the Country Reports and of the Synthesis and Assessment Report were presented to the second meeting of the Management and Steering Group.

## Task 4 Development and refinement of EU guidance on good practice

A proposal for the structure and content of the Guide, based on the experience revealed by the Country Reports, was considered by the Management and Steering Group at its second meeting. Following endorsement of the proposal by the Group, a draft text for the Guide and accompanying Case Studies was developed. Consultations on the Guide took place in the countries represented in the Study Team and in four additional countries (France, Germany, Greece, Poland). A revised text was then considered by the Management and Steering Group at its third meeting. After further revision, the latest draft forms Part 2 of this report.

## Task 5 Preparation of reports

The Progress Report was delivered, in accordance with the Specifications, on 20th June 2007 and considered by the Management and Steering Group at its second meeting. An additional progress report was prepared for the third meeting of the Management and Steering Group and delivered on 20th November 2007. This report fulfils the requirement for a draft Final Report.

Task 6 Management of the study and liaison with the Commission and MSG members

The Management and Steering Group (MSG) for the study met on three occasions: on 5th February 2008, 9th July 2008 and 11th December 2008. The records of these meetings, prepared by MBS, are presented in Annex C. The presentations made by the Study Team to those meetings are available on the project Website.

MBS co-ordinated the inputs of the other Study Team members and arranged two workshops in Manchester (on 14th May 2007 and 31st October 2007) at which Team members considered draft outputs and conclusions from the study.

Regular liaison was maintained with DG ENTR and consultations took place as required with other Directorates-General.

## 1.6 Report structure

The structure of Part 1, the main report, is as follows:

Chapter 1	This introduction
Chapter 2	A discussion of the interpretation of 'voluntary arrangements for collaboration' leading to a classification of such arrangements, and discussion of other matters relevant to the scope of the study.
Chapter 3	Discussion of other aspects of the Specifications for the study, including the EU policy context
Chapter 4	Discussion of the study information base: publication references and the Country Reports.
Chapter 5	The Synthesis and Assessment Report, which provides a summary of the main findings from the Country Reports
Chapter 6	Discussion of the preparation of the Guide and associated Case Studies and of aspects of their content.
Chapter 7	Consideration of the potential benefits from wider introduction of voluntary arrangements for collaboration and of the interactions with EU policies

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Chapter 8 Discussion of the promotion of the Guide, and of collaborative

arrangements, in Member States where such arrangements are not widely

employed.

Chapter 9 Final observations

## 1.7 Acknowledgments

The Study Team wish to place on record their appreciation for the guidance and assistance provided by many individuals and organisations, notably members of the Management and Steering Group, those organisations and individuals that were consulted in the course of developing the Country Reports and the Guide, and those who supplied information and illustrations for, and commented upon, the Case Studies. Their contributions were crucial inputs to the study.

# 2. The scope of the study and the interpretation of 'voluntary arrangements for collaborative working'

This Chapter considers how 'voluntary arrangements for collaboration' and other terms used in the Specifications for the study were interpreted by the Study Team. It draws on extensive discussions, particularly at the first and second meetings of the Management and Steering Group, of the nature of 'voluntary arrangements' and their relationship with contract structures and contractual obligations. A Briefing Note prepared for MSG members after their first meeting is reproduced in Annex D. The Chapter is based on that note but expands and revises the discussion to reflect further consideration by the Study Team, informed by the Country Reports.

## 2.1 Definition of 'voluntary arrangements'

The starting point is the definition offered in the Specification for the study (paragraph 4.1.2); which states:

For the purposes of this contract, "voluntary arrangements for collaborative working" are understood as set ups of relationships, decision making and management between contracting parties, professional services, industry suppliers, and other relevant parties which enable meeting the objectives of a construction project or a series of projects in a cost-effective manner which is mutually beneficial for all parties. This set up might be agreed by the various parties involved through relevant framework agreements. It does not relate to traditional forms of partnering where construction companies have a privileged relationship with clients'

The Study Team understood the last sentence to refer to the situation found sometimes in the private sector where sometimes clients have used the same contractors and other suppliers for their construction works for periods of years or even decades, with consequent development of mutual understanding.

The Study Team recognised that a great deal of collaboration takes place in any construction project, since many different parties are involved, and further that many projects are successfully carried out without any specific measures being taken to promote collaborative ways of working. At the same time, however, there are many cases where the different interests have not worked well together, and often these have resulted in expensive legal cases.

Hence it was important that the arrangements covered in the study should represent practice other than 'business as usual', and also that there should be evidence that they resulted in benefits for those concerned.

## 2.2 Types of voluntary arrangement

Drawing particularly on a Nordic study of partnering<sup>19</sup>, the Study Team identified five types of voluntary arrangement: project partnering, strategic partnering, alliances, framework agreements and construction consortia. The characteristics of each arrangement are considered in more detail below. This was not a rigid structure and the Study Team accepted

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<sup>&</sup>lt;sup>19</sup> Gottlieb, S.C., Haugbølle, K. and Larsen, J.N. (2007) An overview of partnerships in Danish construction: State of the Art report prepared for Nordic Innovation Centre (Draft), Danish Building Research Institute.

that relationships may include aspects of different types of arrangement, but it served as a workable structure for the study and has been carried through into the draft Guide, Illustrating that the Study Team were open to other types of collaboration, two of the Case Studies associated with the Guide do not fall within this structure.

A common element in each of the types of collaboration identified above is that at least one of the parties comes to a view that they are likely achieve a superior outcome for themselves if they voluntarily give up some power or freedom or potential benefit – and if the arrangements involve more than one party giving up such a power etc then there is an expectation that each will benefit (i.e. 'mutually beneficial' as referred to in the definition above). Crucially, there is no guarantee that the chosen 'voluntary arrangement' will lead to a better outcome; at the time the arrangement is established, a better outcome is expected (e.g. on the basis of past experience) but the arrangement is founded on a belief that it will be beneficial for the parties rather than a certainty. The Danish definition of partnering 20 illustrates the role of trust and belief in the establishment of partnering relationships:

'a type of collaboration in a construction project based on dialogue, trust, openness and with early participation from all actors. The project is carried out under a mutual agreement expressed by mutual activities and based on mutual economic interests'

Each type of arrangement is now considered in more detail.

## Project partnering

This refers to arrangements entered into for a single project. Typically, the principal parties to a project agree formally to work in a collaborative manner and this may be reinforced by the signing of a 'partnering charter' and by specific measures, for example, an agreement that if disputes arise they will be settled by procedures that do not involve legal action or a provision that cost savings will be shared according to a pre-defined formula. By offering such measures, the client is giving up some powers or benefits that they might otherwise have retained, because they think that this will encourage the creation of a collaborative culture in the project, with everyone working to a common aim, and that the end result will be better. Suppliers may have financial incentives to enter into such arrangements, such as the opportunity to increase their profit through the client sharing savings in project costs. They also may consider that a more collaborative culture will lead to better communications and savings of management time. As noted above, there are no guarantees that this will happen and most of the measures taken to encourage collaboration will lie outside the contractual obligations of each party<sup>21</sup>. Some, such as the way in which savings will be assessed and distributed, may be incorporated in contractual terms.

## Strategic partnering and framework arrangements

These have strong similarities in that they both involve the selection by the client - through processes that (if the client is a public body) meet the requirements of the Public Procurement Directives - of a set of supply interests which will carry out a series of projects. The arrangements may cover a defined set of projects, or exist for a set period of time. (The Public Procurement Directives set an upper limit on the period for which a framework can be established.) These arrangements therefore imply a voluntary decision by the client to give up a power, in this case the power to exercise complete freedom in the appointment of contractors and other parties to future projects. By establishing a framework arrangement or entering a strategic partnering arrangement, the client is accepting that it will limit its choice of

<sup>20</sup> Guidelines for partnering, National Agency for Enterprise and Construction, Copenhagen (2004)

<sup>&</sup>lt;sup>21</sup> In several countries, eg Sweden and the UK, forms of contract have been developed which reflect collaborative principles. These are considered further in Section 7.4.1. But most of the experience reviewed in the Country Reports concerned projects which used conventional contract forms, with the 'partnering' aspects of the relationship facilitating the development of a collaborative environment for discharge of the parties' contractual obligations.

contractors etc for the defined set or types of works to the firms that are within the framework or partnering.<sup>22</sup>.

While different authors use the terms is different ways, the Study Team distinguished strategic partnering from framework arrangements by the latter having a secondary selection process. Thus in contrast to strategic partnering, where the same firms will be involved in a set of projects, in a framework the actual firm (or firms) that will undertake any particular project will be selected by a secondary process. The degree of pre-agreement in the framework will vary – it may include agreeing the contractual conditions, rates of payment etc – but it need not

The Study Team also distinguished between a 'framework arrangement' and a 'framework contract'. In both cases, a set of firms is selected to carry out certain types of work over a defined period, but in a 'framework contract' there are no provisions to encourage collaboration in the execution of those works. Such a contract is not within the scope of the study. In a framework arrangement, and in a strategic partnering arrangement, there is an explicit intention to work together with all the firms, in order to achieve mutually beneficial outcomes. This intention may be expressed in targets for progressive cost reductions, shorter delivery times etc. and will be addressed through joint activities, such as examination of processes, regular reviews of relationships, monitoring of out-turns in order to identify problems etc.

The benefits to the client in such arrangements include reduced procurement costs and increasing familiarity of the other parties with the clients' needs. Supply-side firms enter the arrangement because it offers them greater assurance of future work, and may also save them tendering costs.

Strictly, framework arrangements and strategic partnering are means of facilitating project partnering related to individual projects, but they are in their own right means of promoting collaborative behaviour. They are forms of commitment that assist the creation of collaborative relationships and the firms covered by the arrangements develop greater mutual understanding of the client's operations and needs.

#### Alliances

Alliances are a particularly strong form of project partnering, in which the client and the principal supply interests create a joint organisation to deliver the project. This organisation has personnel seconded to it from the various organisations involved in the alliance who then work as a single team, with the alliance having its own organisational structure, accounts etc and the client sharing risks and rewards through the joint organisation. In its strongest form, the client and suppliers each are shareholders in a jointly-owned company. Alliances have proved advantageous in complex infrastructure projects. As with project partnering, there is no guarantee that the outcome will be positive but the client has a belief that joining with the other parties in this way will lead to a more successful project.

It should be noted that 'alliance' is used in some reports as a general description of partnering-type relationships. However, in this study the term is used in a more limited context.

## Construction consortia

Construction consortia are created by firms who come to a decision to work together in order to compete for certain projects (or types of project), perhaps though offering complementary services or through the joint development of new products and services. Their goal is to improve their competitive position of the firms concerned, who by joining the consortium voluntarily limit their scope for working with other firms. As in other types of voluntary arrangement, they may express this mutual commitment in formal documents and reinforce it

<sup>&</sup>lt;sup>22</sup> There are examples where clients have established a framework arrangement and then appointed firms from outside the framework, but these are not within the spirit of 'collaboration' and understandably this practice has been subject to criticism.

through agreements on revenue-sharing etc. At its strongest, the parties may agree to form a jointly-owned company which can bid for works.

By contrast with most examples of the other types of collaboration, construction consortia are collaborations among supply interests, and do not involve the ultimate client. But one member of the consortium may be the customer for the others (e.g. a contractor working with specialist suppliers and sub-contractors). And construction consortia may also be examples of strategic partnering in that the agreements made by the firms involved may include measures to promote progressively better relationships (e.g. regular monitoring of the quality of their relationships).

Collaboration amongst supply firms is of course common; many firms work together regularly and have done so for years – even decades. Thus a construction consortium needs to have features that distinguish it from these normal commercial processes, such as an agreement limiting collaboration to the firms in the consortium or distinctive measures to promote collaboration.

These different types of voluntary arrangement are illustrated in the Case Studies that accompany the draft Guide (see Part 2 of the Report).

## 2.3 Characteristics and aims of voluntary arrangements

From the discussion above, it may be seen that the types of voluntary arrangement covered in the study fall into two groups;

- those that concern relationships between the client and supply interests
- those that are confined to the supply side.

The former category includes project partnering, framework arrangements and alliances and the latter includes construction consortia. Examples of strategic partnering can be found in both categories although the principal benefits for clients arise when the client is a party to the arrangement.

In both categories, many of the measures taken to foster collaboration (e.g. management approaches, decision-making procedures etc) are agreed outside the terms of the contract, or precede the award of a contract for specific works and provide a context for it. They aim to secure and reinforce the collective commitment of all parties to the success of the relationship and any associated projects. Broadly, therefore, there is a distinction between contractual relationships and the measures taken to promote collaboration. However, this is not a rigid distinction; payment mechanisms are likely to be incorporated in contractual documentation. Further discussion of the role of contracts in promoting collaboration is provided in Section 7.4.1.

Several other aspects of procurement and contractual practice also need to be considered in relation to the scope of the study:

#### Integrated contract structures

The use of an integrated contract structure (e.g. design-build or design-build-operate) does not of itself constitute a collaborative arrangement; it merely places a different set of responsibilities on the contractor and internalises the relationship between design and construction interests. Thus the study has not been not concerned with the use of particular forms of contract or the factors that may influence that choice.

#### Funding arrangements

The way in which project is funded (notably the introduction of private finance into public sector projects) does not of itself lead to a voluntary commitment to collaboration. However, projects undertaken with private funding can include measures that promote collaboration.

Selection of project participants

While there is much evidence to show that selecting suitable firms with which to partner is undoubtedly a factor in the success of collaborative relationships, the study does not have procurement and selection strategies as a main focus. However, both the Guide and some of the Case Studies make reference to the need for setting appropriate selection criteria and offer initial guidance on these.

## 2.4 Summing up

This Chapter has provided a structure for classifying voluntary collaborative arrangements, while accepting that in firms and clients exhibit a continuum of collaborative relationships, with some having elements drawn from several of the types identified above. The main characteristics of such relationships are:

- They involve at least one party accepting a reduction in a freedom of action, a power
  or a benefit, in the belief (but not the certainty) this will lead over time to benefits.
- The arrangement may involve more than one party giving up such freedoms etc, in which case mutual benefits are envisaged
- Many of the measures taken to promote collaboration amongst clients and supplyside firms operate alongside contractual relationships; they do not replace contracts or detract from the parties' contractual obligations.
- Some, however, may find expression within the contract

Ultimately, collaboration takes place because the individual parties to the relationship consider it in their interest to operate that way; the arrangements must, over time, produce benefits for all the parties, otherwise they will not survive.

## 3. Discussion of other aspects of the study

While the term 'voluntary arrangements for collaborative working' is central to the study, and Chapter 2 has discussed its interpretation, other terms used on the Specification also warrant discussion. This Chapter considers these, as a preliminary to presentation of the main outputs from the study.

## 3.1 The scope of 'construction'

In the Standard Industrial Classification that provides the basis for economic statistics, 'construction' (NACE category F45) covers only the firms engaging in site-based activities through which buildings and civil works are created, altered and maintained. However, such activities are intrinsically linked (a) to the activities of design and technical consultants such as architectural, surveying and engineering practices (NACE category K74.2 - construction-related professional services), (b) to the manufacture and supply of construction materials and components and (c) in some countries to other specialised interests such as cost consultants and bureaux de contrôle. From the discussion in Chapter 2, it is evident that firms operating in all these categories may be parties in voluntary arrangements, although organisations acting in a quasi-regulatory function (e.g. bureaux de contrôle) are unlikely to enter into such arrangements because of their concern to maintain professional independence. Most of the forms of voluntary arrangement covered in the study involve the client and principal members of their supply chain, normally including contractors, designers and specialist advisers. The 'construction consortium' form of collaboration is more likely to include product suppliers than the other forms.

The Study Team therefore interpreted 'construction' to include all the activities mentioned above but focussed particularly on the use of voluntary arrangements for collaboration in the construction of buildings and civil works, rather than in 'engineering construction' (i.e. the specification and construction of large and complex industrial plant in the energy, power and chemicals sectors). Engineering construction has extensive – and good - experience of partnering and other forms of collaboration, and that experience has been one of the stimuli to the promotion of voluntary arrangements in other parts of construction. However, the 'approaches' to the promotion of voluntary collaboration referred to in the Specifications for the study have been directed to firms working on buildings and civil infrastructure; and it was the experience of voluntary collaboration in the context of buildings and civil works that the Commission wished the study to investigate.

## 3.2 The competitiveness of the construction sector

The Specifications required an assessment of the potential contribution of voluntary arrangements for collaboration to the competitiveness of the construction sector and the European economy more generally. As a general statement, 'competitiveness' relates to the ability of individual firms, or of an industry sector and its associated innovation networks, to be consistently successful in winning orders in a competitive marketplace. In the European construction context, however, the concept requires some further examination and interpretation.

The MBS-led study of the impacts of EU policies on construction (Footnote 2) concluded that for contracting and design firms in the construction sector 'competitiveness' has three distinct aspects:

1. A small minority of such firms operate in international markets, and need to be competitive in those markets (as well is in their domestic market).

- 2. Most firms are in competition only with other European firms, and often only with firms in their own locality.
- 3. Firms engaged in small construction works such as housing repairs and maintenance are often in competition with the informal sector or 'grey' economy.

The materials and products supply sector within construction may show different characteristics, since includes many large, multi-national manufacturers.

That study emphasised, however, that there is a wider dimension, that of the competitiveness of the European economy as a whole. Construction provides and maintains the built facilities and infrastructures required for European economies to function effectively, including buildings and facilities for the delivery of public services. In doing so, it accounts for up to 10% of European GDP. The sector therefore has a profound influence on European competitiveness - if its processes are efficient and reliable, overall economic competitiveness will increase. The Specifications for the present study (Paragraph 4.1.1) acknowledged this by referring to the study needing to assess the impact on the 'European economy at large'.

Consideration of the impact of voluntary arrangements on competitiveness, therefore, involves an assessment of the consequential benefits to the wider economy of a higher-performing construction sector. This topic is considered further in Section 7.1.

#### 3.3 Relationship with EU policies

The Specifications identified certain policy areas as particularly relevant to the study; these included public procurement, competition, SMEs and sustainable development. Each is briefly discussed below:, with further discussion in Section 7.2.

## Public procurement

Public clients account for around 40% of construction turnover, and a higher proportion of infrastructure works and non-domestic buildings. European policies on public procurement as expressed in the public procurement Directives <sup>23</sup> therefore form a key element in the regulatory framework for the sector. The study of the impact of European policies on construction revealed general satisfaction with the way that latest texts treated the subject but also found evidence of a need for greater awareness and training in using the more sophisticated procurement routes and selection criteria permissible under the Directives. The Study Team were aware that in some Member States there were reservations over the use of voluntary arrangements because of concerns over their compatibility with the procurement Directives and therefore sought comments through their consultations on this aspect of the study.

## Competition

Some forms of collaborative arrangement may have implications for competition policy. For example, the development of framework arrangements may serve to reduce opportunities for new entrants to a market and thus reduce potential competition, or the initial competition may have criteria that again restrict opportunities for some firms. In particular, creating longer relationships that cover several types of work may reduce market opportunities for SMEs. Thus the study sought evidence on such consequences for competition in the marketplace.

#### SMES

The additional administrative effort required by the client to negotiate and establish collaborative arrangements means that such arrangements tend to be found in larger projects, where the anticipated level of savings will justify that investment. Such projects are not likely to have SMEs in leading roles. By contrast, the 'construction consortium' form of collaboration

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<sup>&</sup>lt;sup>23</sup> Directives EC 2004/17 and EC 2004/18...

can offer SMEs enhanced market opportunities and the study identified examples to confirm this.

Another aspect of voluntary arrangements relevant to SMEs is the depth of collaboration down the supply chain. Many partnering arrangements concern relationships between the client and the 'Tier 1' suppliers; often the collaborative culture does not extend further, leaving relationships between larger firms and their SME suppliers unchanged. While firms and clients without experience in collaborative forms of working may be expected initially to concentrate on improvement in top-level relationships, the study looked for examples of where a collaborative culture had extending further down the supply chain, and measures that would support this.

## Sustainable development

Voluntary arrangements such a strategic partnering, that promote longer term relationships, should in principle facilitate the refinement of design and construction processes, resulting in reduced waste, greater efficiency in the use of human and material resources and the better matching of outputs to user and client requirements. All these benefits are relevant to the achievement of a sustainable construction sector and to sustainable development.

In particular, achieving high environmental performance in buildings requires optimisation during design of the overall performance of the fabric and services, taking into account usage patterns and the convenience of users, followed by on-site construction which does not compromise the intentions of the designers this through inadequate understanding or attention to detail. A collaborative project culture facilitates the interactions among different parties to the design and construction processes which are essential for a high performing final output.

In several ways, therefore, voluntary arrangements for collaboration serve to promote a built environment that is consistent with the aims of sustainable development. However, if the arrangements at the same time inhibit opportunities for SMEs, this will have a detrimental effect on sustainable economic and social development at the local level. The study sought evidence to illuminate these policy impacts.

## 3.4 Other policy implications

It is arguable that the use of voluntary arrangements for collaboration will have other impacts relevant to EU policies. In particular, those which give firms more assurance of workload, such as framework arrangements and strategic partnering, may stimulate firms to invest in training and skills development, to meet anticipated requirements, to a greater extent than if they were wholly reliant on success in future tenders.

Arrangements that encourage and reward the offering of new ideas for improving project performance should also have a beneficial impact innovation and some 'construction consortia' have been created precisely in order to be able to offer innovative products.

The Study Team examined the information collected on the use of voluntary arrangements to see if there were evidence of support for these and other EU policy interests.

#### 3.5 Approaches to the promotion of voluntary arrangements

The Specifications called (paragraph 4.1.3) for a critical review of 'national approaches' to the development and promotion of voluntary arrangements for collaboration. The Study Team drew a distinction between 'national approaches' and the details of the voluntary arrangements as they affected individual firms and organisations. Hence the Team's interpretation of 'national approaches' was that this term described the various ways in which

governments and other bodies had sought to promote collaborative ways of working, while the 'voluntary arrangements' were the different types of collaboration that were the subject of such 'approaches'.

The Country Reports in Part 3 review the background to the use of partnering and other voluntary arrangements in the countries covered, and summarise the key organisations, documents etc that have promoted new practices. They show, however, that only a few countries have had an identifiable 'national approach' to the promotion of voluntary arrangements; elsewhere, what has happened has been the result of initiatives by individual firms and clients. The experience in those countries has been taken into account in the discussion in Chapter 8 of the wider promotion of voluntary collaborative arrangements, which responds to this part of the Specifications.

# 4. The study information base: reference documentation and the Country Reports

## 4.1 Assembly of reference documentation

In the early months of the study, the Study Team assembled a set of reference documentation for the study from a wide range of sources. These included:

- The knowledge of Team members, who have all published academic and policy articles on the subject of voluntary arrangements, partnering, collaboration, innovation and construction policy generally;
- The Institute of Scientific Information (ISI) / Thomson-Reuters citation database. This
  was used to identify, through suitable search strings / keywords, relevant articles
  which were not immediately known to the Study Team members;
- Google Scholar, although this is a less systematic mode of searching for references;
- Searches of government and parliamentary Web sites for policy documents and reviews, supplemented by Web searches for relevant consultancy studies published by governments;
- Reviews of relevant government legislation identified by experts associated with the Study Team, including a significant number of documents from Member States;
- Enquiries of academic and other contacts of Study Team members, and of members of the MSG.

A shared information database was established, which was maintained during the study, with new items being added as they appeared.

Annex E presents the current information database, categorised by type of documentation. Some features of this database should be noted:

- The documentation reflects the focus of the study on European experience of collaborative arrangements. The database is not globally comprehensive; in particular it does not include documentation from the USA or Australia, where collaborative forms of project organisation have been employed and (particularly in Australia) much useful guidance has been issued. However, from other studies the Study Team are confident that the experience in those countries is consistent with that in Europe and that the inclusion of documentation from outside Europe would not lead to different conclusions concerning the nature of collaborative arrangements, or the factors relevant to success.
- Much of the material stems from 'practitioner' sources, in that the documentation originates from accounts of experience of different forms of collaboration, or seeks to provide guidance to those intending to implement collaborative arrangements. While there have been academic studies of collaboration, these have not necessarily concerned construction. The theoretical foundation for collaborative practices as found in the construction sector is not always evident but the Study Team offer in Annex F (see below) an initial appraisal.
- The preponderance of English language material reflects the availability of such material owing to the use of English in academic publishing and the fact that the UK has been amongst the leaders in the use of collaborative arrangements. However, it

is not helpful for the wider dissemination of collaborative concepts, and the Study Team revert to this again in discussion of the Guide (Section 6.6).

## 4.2 Review of rationales for voluntary arrangements

Annex F presents a draft of a review of the theoretical grounds for firms becoming parties to voluntary arrangements for collaboration based on the academic papers included in Annex E. This has been prepared to inform later discussion of measures and activities that could be taken to promote such arrangements. It makes reference, for example, to theories of organisational change which are relevant to the introduction of new says of working in an industry sector.

## 4.3 Preparation of Country Reports

Central to the information base developed for the study were the Country Reports prepared by each member of the Study Team These covered their country's experience with voluntary arrangements for collaboration and other aspects of the subject that were relevant to the issues raised in the Specifications for the study and fulfilled the requirement for the study to review experience in at least the six Member States named in the Specifications. While the reports each differed in approach, reflecting the different experience of the countries, each broadly covered the following topics:

- Basic data concerning the country and its construction sector
- Distinctive characteristics of the construction sector and recent developments
- Events or other stimuli which had led to the adoption of the types of voluntary arrangements for collaboration covered in the study
- Measures taken to promote such arrangements and/or more general 'change programmes' in construction, with observations on their effectiveness
- The extent to which voluntary arrangements had been used, distinguishing among the various types identified
- Evidence, based on experience on the benefits of such arrangements, of the factors that led to success.
- Observations on the interactions between such arrangements and EU policies
- Overall conclusions on the country's experience of voluntary arrangements
- Key documents, such as reports and guidance documentation

In parallel with preparing the report, each member of the Study Team identified individuals and organisations that were able to provide informed comment on voluntary arrangements, either because of direct experience or (in the case of representative bodies) because they were aware of others' experience and had needed to develop views on the introduction of such arrangements. In accordance with the study Specifications, these individuals and organisations were invited to comment on the Country Reports, to ensure that they accurately reflected experience in the country and provided a sound base for the development of advice and guidance. The same consultees were later invited to comment on the draft Guide and Case Studies (see Chapter 6). Annex G lists the organisations invited to comment on the Country Reports.

Because of the volume of text, the Country Reports are presented in a separate document which is Part 3 of this Final Report.

The information gained through the Country Reports was summarised in a 'Synthesis and Assessment Report' presented in draft to the second meeting of the Management and Steering Group This report, updated to reflect further information gained since that meeting, forms Chapter 5 to this report.

#### 4.4 Information from other Member States

The Study Team invited members of the MSG to bring forward information on experience with the use of voluntary arrangements for collaboration in other Member States, and similarly, when consulting on the Guide in Members States not represented in the Study Team (see Section 6.4) sought examples from those countries.

As a consequence, some information came forward on the use of partnering in Germany and a discussion took place with a senior member of one of the German representative bodies for construction. This indicated that while there was awareness of collaborative approaches to project delivery, there was as yet little experience in Germany. Documentation on partnering published by the Hauptverband der Deutschen Bauindustrie (HDB), the representative body for larger German contractors, was added to the information database.

Several examples of construction consortia in other countries were also notified to the Study Team; these were included in the Case Studies.

These contributions represented the total information offered on the use of voluntary arrangements of the types covered by the study in countries outside the Study Team.

# 5. Synthesis and Assessment Report

#### 5.1 Introduction

This chapter presents the Synthesis and Assessment Report prepared on the basis of the Country Reports produced by members of the Study Team and additional information gained on practice in other Member States. These reports cover seven countries (Belgium, Denmark, Finland, Netherlands Norway, Sweden, UK). The information obtained by the Study Team indicates that these countries have the great majority of experience within the EU in the application of voluntary arrangements for collaboration in construction.

The Report provides an overview of the use of voluntary arrangements for collaboration and their expected and achieved benefits. It also discusses in some detail the factors that are considered to lead to success in such arrangements and how these may be promoted. More specifically, it:

- a) summarises the construction context in the countries covered
- b) presents an overview of the use of voluntary arrangements for collaboration
- c) considers the stimuli that have led to their introduction and, in some Member States, to the active promotion of such arrangements
- d) reviews the 'approaches' used to promote such arrangements and comments on their relative influence
- e) discusses the expected benefits and the evidence that these are secured
- f) reviews the success factors identified in the Country Reports, together with the measures recommended in the countries to achieve good project outcomes through the use of voluntary arrangements, and
- g) examines the relationship between voluntary arrangements and EU policies and priorities, notably public procurement, competition and SME policies

#### 5.2 National construction contexts

To provide a context for the discussion of how voluntary arrangements have been adopted in the study countries, the Synthesis and Assessment Report first considers the nature of construction relationships in each country.

#### 5.2.1 Aspects of the Construction Business System in each country

Traditional construction project structures in Denmark, the Netherlands and UK are characterised by fragmentation, lack of integration across project participants (design, construction, product supply etc) and the extensive use of sub-contracting. However, there has been a growth of more integrated forms of project structure, with design-build now commonly used in these countries. The traditional separation of design from construction responsibilities in the UK has led to strong professional groupings in architecture and engineering design, and such strong 'horizontal' groupings are also noted in the Netherlands.

In Belgium, contractors have often taken more responsibility for design, with project insurance arrangements facilitating collaboration amongst the different parties. Some forms of design-build are used, consistent with statutory responsibilities placed on architects.

The other countries included in the study also exhibit a traditional separation of responsibilities, but with inherently more cooperation among the parties. Design-build forms of contract organisation are employed in each. In Norway and Finland, independent consultants/managers are often used to advise on the selection of contractors and suppliers and to manage the construction process. These appointments have sometimes employed collaborative forms of relationship with contactors/suppliers.

Reverting to the UK, over the last 20 years, there has been a discernible change in the way that UK construction projects are procured. While the traditional method of separate design and construction remains an important part of construction, design-build and other integrated forms of procurement are now well established. Surveys indicate that the proportion of work undertaken using design-build has remained constant at slightly over 40% of the total workload based on value. Moreover, design-build is one of only three procurement routes sanctioned by the Office of Government Commerce (OGC) for government construction works. (The others are: PPP/PFI (Public Private Partnerships/Private Finance Initiative) and Prime Contracting.)

More generally, the use of more integrated forms of procurement has been influenced by the growth of private financing of public sector projects. This varies across the countries, with PPPs being still quite rare in Denmark but of increasing interest in Belgium, where they are viewed as genuine partnerships and a seen as the only way forward for some types of project. In the UK by as long ago as 2003, more than 750 projects, with a total value in excess of £55bn, had been let using the PPP approach.

Specific aspects of practice revealed by the Country Reports include:

- In Finland, clients and their advisers do not normally alter or amend the standard forms of construction contract - unlike, for example, the UK where such amendments are common.
- A performance-based regulatory system is applied in the Netherlands, with 'life-time' costs and quality indicators increasingly used in the selection of suppliers.
- In Sweden, industrial construction has for many years been carried out through longer-term relationships. Such long-term relationships in the private sector are noted in a number of the Country Reports
- In Belgium, it is a legal requirement that all building permit applications are submitted by architects. Also, there are relatively few statutory technical regulations and decennial insurance policies are used to protect clients against defects on public and major private projects. Technical approval bodies provide advice to the contracting parties and insurers for significant projects. Consequently, contractors are able to exercise design functions and offer alternative design proposals in the course of a tender or to redesign after award of contract. This arrangement is sometimes formalised as in a *Bouwteam*, where an appointed contractor undertakes work for a fee, developing the design in association with the architect and engineer who continue to be responsible for the design. Public sector procurement practices, however, separate design and construction and prevent the same organisation participating in both, but there are some exceptions for PPPs.
- The *Bouwteam* concept is also found in the Netherlands, with early appointment of a contractor to work with designers.
- In some countries (Belgium, France and Germany being examples), the concept of a 'temporary company' (or, in Belgium, 'temporary partnership') is recognised in law.

This provides a means under which firms may collectively tender for and undertake a particular project.

#### 5.2.2 Distinctive features of national construction sectors

While the general picture in each country is that the construction sector has a wide range of types of firm and many SMEs, some countries' construction sectors have distinctive aspects. Examples include:

- in order to be internationally competitive, the Danish construction industry exhibits horizontal integration of consultancies and contractors;
- the Netherlands has world-class specialist expertise, for example, in dredging and civil engineering for flood defence work;
- the Swedish construction market is dominated by three large contractors, with no significant middle tier of contracting.
- the UK has developed world-class design expertise, but its domestic market for construction works is increasingly served by contractors owned outside the UK

### 5.3 Use of voluntary arrangements

There is wide variety in the extent to which voluntary collaborative arrangements have been employed, and the reports show that the same words carry different meanings in different countries. A discussion of how some of the terms are interpreted, with an overview of the extent of experience, is presented below:

#### **Partnerships**

The Study Team have not employed this term in describing voluntary arrangements since generally it implies a specific legal relationship concerned with the creation of a legal entity. As noted earlier, in Belgium the term 'temporary partnership' is used to describe, a legal structure (but not a legal person) connected with tendering for individual projects.

#### Partnering

Many countries recognise 'partnering' as a general term to describe collaborative relationships aimed at overcoming the adversarial attitudes that can be found within the construction sector. However, there is variation in the depth of relationship implied by the term. In Denmark, for example, there is a formal definition of partnering and clear guidance as to its use, at least in pubic projects. By contrast, in Finland the term is used more loosely to indicate a more open form of relationship. Similarly, the use of such measures as 'Partnering Charters' varies widely; these constitute well-understood practice in the UK but have not been employed in Finland. The Country Report from Finland cites a survey which, on the surface, indicates a high level of partnering experience but in reality reflects the existence of long-term relationships which may or may not have specific 'partnering' attributes. Some care is therefore needed in examining reports of 'partnering' in construction.

#### Project partnering

Project partnering has been widely used in the public sector within the UK, and it is most common form of voluntary collaborative arrangement in Denmark and Sweden. However, there appear to be no comprehensive data on the extent of use in any of these countries. Elsewhere, there are few examples.

## Strategic partnering

In Sweden, there are examples of strategic partnering in both the public and private sectors. Partnering has been widely adopted in the municipal rental housing sector, while examples of trust-based relationships for other forms of construction can be found in some municipalities, where firms serve local markets. In the UK, many frameworks (see below) included partnering elements and therefore have attributes of strategic partnering.

In every country, private sector clients often use the same contractors and their supply chains but these arrangements are not normally formalised in 'strategic partnering' agreements.

#### Alliances

Overall, alliances are not common. They have been used in major infrastructure projects such as the creation of new transport links in the Netherlands. In Belgium, some PPP projects take the form of alliances and this form of voluntary arrangement is being studied in Finland, with guidance due to be published.

#### Frameworks

Frameworks are utilised in most countries, particularly for maintenance and minor works, but the extent to which these include collaborative elements varies widely. Local authorities in the UK, particularly, have sought to include collaborative elements in such arrangements, with issues being addressed jointly and incentives for performance improvement. These therefore constitute framework arrangements as defined in this study. An attempt to establish a framework in Denmark in 2003 failed to attract any tenders because of its unattractive contract conditions in, at the time, a buoyant market.

#### Construction Consortia

In all countries, firms form consortia to bid for larger projects or for PPP or DBFO projects. This is normal commercial practice and not specifically covered by this study. Consortia with longer term aims include those which develop and promote particular types of construction, notably for housing (Finland, the Netherlands), those formed in order to expand aimed the market opportunities for their individual members (Italy, France) and those formed in the UK to compete for selection for a framework which covers a range of construction needs in the health sector (the National Health Service ProcCure21 programme).

The Country Reports demonstrate that it is difficult to quantify the extent to which voluntary arrangements have been implemented:

- In Finland, for example, informal collaboration is common within small communities, while major public infrastructure clients are required to consider using some form of collaborative processes, and private sector clients (as is found in other countries) repeatedly use the same firm. One estimate is that voluntary arrangements possibly account for only 2-3% of new construction work.
- the Danish Benchmarking Centre identified 122 'partnering' projects that were commenced prior to 2005
- in Belgium it was reported in 2007 that around 16% projects undertaken by major clients utilised an 'integrated' form of contract – this increased to 20% where a Bouwteam approach had been adopted.
- in the UK, there are no overall data on the extent to which partnering approaches have been adopted. A survey of contracts in use in 2004 indicated that partnering forms of contract accounted for 6.6% of the total UK construction workload based on value. The volume of work undertaken using all forms of 'voluntary collaborative arrangement' is likely to be significantly higher than this, particularly as public authorities adopt frameworks.

# 5.4 Stimuli for the introduction of voluntary arrangements

The stimuli for the introduction of voluntary arrangements for collaboration vary across the countries studied, but fall essentially into three groups:

- Client pressure: This has been most marked in the UK and Denmark. Notably, in the UK the stimulus came from major clients responsible for recently privatised infrastructure networks and from other private sector interests such as retailers, while in Denmark the government wished to have better performance in housing and other public projects. However, in Norway and Sweden also there was a desire for better co-ordination and increased productivity, with concerns over budget overruns and rising costs, defects and quality, uncertainty and delays in delivery, and the occurrence of disputes. These pressures were particularly relevant to the introduction of partnering forms of collaboration. A different type of client pressure stemming from the desire to reduce procurement costs and to establish better mutual relationships was important in the stimulation of framework arrangements in the UK.
- Political pressure: This was most evident in the Netherlands where a parliamentary enquiry into price-fixing in 2002/3 resulted in severe criticisms of the construction industry, relating to the high fragmentation of the sector, low levels of trust, poor communication, short-term relationships, poor understanding of the clients' requirements and inefficient working practices. These concerns overlapped strongly with those of clients. A similar overlap was a contributory factor in the UK where in 1997 the government wished to expand investment in social housing but had concerns over the value for money offered by the construction sector. In Denmark, there were concerns over the industry's dependence on public sector projects and a desire that it should be more internationally competitive.
- Contractor initiatives: Some voluntary arrangements have come about through the initiative of contractors. In Sweden there was a perception by the infrastructure contractors that they were expected to bear too much risk, leading to refusal to tender for work and a desire to create new forms of relationship. In Denmark, there was international transfer of information and experience, for example, through mergers, which resulted in the creation of larger construction companies with different ideas. Similarly, in Norway, momentum has come from the major contractors, again owing to their awareness of international practice. German contractors have similarly taken partnering initiatives. Construction consortia invariably stem from an initiative of a contractor or of another supply side interest.

# 5.5 Approaches to the promotion of voluntary arrangements

Over the past decade, there has been concerted action on the part of some governments, with the UK government being a notable example, to promote longer-term relationships and collaborative arrangements and partnering among clients and firms in the construction industry. But such national initiatives are by no means universal. Of the countries studied; only Denmark, the Netherlands and the UK demonstrate national approaches to the promotion of collaborative ways of working.

From the Country Reports, a range of approaches to the promotion of voluntary arrangements can be identified and these are outlined below.

#### 5.5.1 High level enquiries and reports

These have played a role in many of the countries studied. Examples are to be found in the Country Reports from Sweden, Denmark and the UK (for example the *Constructing the Team* and *Rethinking Construction* reports stemming from studies established by the UK

Government). The Parliamentary Enquiry established in the Netherlands similarly resulted in a significant report. In 2002, the Finnish government issued general aims for construction, which included increasing the level of co-operation in the industry, and similarly the high-level report *Vision 2010*, produced by the Finnish Real Estate and Construction Cluster, made reference to the need for more co-operation. Such reports focus attention on the need for change and help to generate a commitment to work in new ways. When endorsed by government, they also provide a clear guide to government's intentions.

#### 5.5.2 Creation of promotional bodies

In the UK and the Netherlands, particularly, promotional bodies (the Movement for Innovation and the *Reigeraad Bouw*, respectively) were created to provide a national focus for industry improvement. These held events and developed and promoted relevant guidance. With both government and industry interests represented on their governing councils, they were tangible expressions of the jointly held view of the need for change.

#### 5.5.3 Public procurement

The power of public procurement has been used to promote adoption of collaborative ways of working. Public procurement regulations in Denmark require that all construction projects let by public bodies or projects with more than 50% public funding should consider partnering. In the UK, central guidance to government departments promoted collaborative ways of working in government construction contracts and the same message was promoted through guidance prepared for local authorities and other public bodies. The new ways of working were often associated with the adoption of new, integrated forms of contract and with private-sector funding. In countries where there has been no national initiative, some individual public sector clients have embraced collaborative arrangements; for example, the Swedish Roads Administration has been prominent in project partnering.

# 5.5.4 Audit body endorsement

Public authorities require the support of audit bodies for their policies and practices. In the UK, the National Audit Office gave early endorsement to the use of collaborative approaches in government projects and this was matched by the Audit Commission which audits local authorities and health service bodies. The Country Reports do not explicitly refer to other audit bodies but it may be presumed that where public clients have used voluntary arrangements, these have been endorsed.

#### 5.5.5 Research Programmes

While some research relevant to collaborative ways of working has been conducted in all the countries studied, some have had programmes specifically aimed at supporting the development of such arrangements. Notably, in the Netherlands, the *PSIBouw* programme has focussed on develop tools and measures to support new ways of working, and their adoption by industry (through programmes such as *BouwBeter, Topbouw*, and *Slimbouwen*). In Finland also, the research agency TEKES has funded research programmes aimed at the development of tools to support more collaborative forms of working.

# 5.5.6 Demonstration projects

In order to provide evidence of the benefits to be derived from different relationships, projects have been selected as 'demonstration projects' and their outcomes monitored. The results obtained from these projects were then promoted though the preparation and distribution of Case Studies. This has been a particularly prominent strategy in the UK, where the

Movement for Innovation and its counterpart bodies in housing identified some hundreds of demonstration projects. Not all concerned with collaboration but many of them did include this as an aspect of the new approach to project delivery. There were also demonstration projects in Denmark and in Norway (where they were referred to as 'openness and collaborative projects').

### 5.5.7 Measurement tools

Promotion of voluntary arrangements through demonstration projects has to be founded upon an objective and accepted comparison of outcomes between projects that have used new ways of working and those that have not. Such a comparison requires the development of agreed measures of performance. This was achieved in the UK through the development of national Key Performance Indicators (KPIs); similar indicators are under development in the Netherlands. In Denmark the Construction Benchmarking Centre has been established; while the Centre is particularly orientated towards providing data relevant to the selection of contractors and other suppliers to public projects, the data that it collects may be used to show the benefits of different ways of working.

#### 5.5.8 Promotional material and Guidelines

Central promotional bodies and public authorities have published promotional material and guidelines to assist the adoption of collaborative ways of working. Thus the Danish government published Guidelines on Partnering in 2004 while in the Netherlands Codes of Practice were developed as the basis for new commercial relationships, and a guide to teamworking was published by the Regieraad Bouw in 2007. In Sweden, the FIA initiative of the Roads and Rail Administrations resulted in the publication of a manual Co-operating for greater efficiency, while the Swedish Construction Clients' Forum has produced templates for partnering agreements and provide training courses (e.g. for partnering leaders). The Forum has also created a network to enable the exchange of experience. In Belgium, promotion of collaborative arrangements has involved a number of bodies which provide advice on PPP, social housing etc. The Finnish Construction Quality Association (RALA) has published questionnaires to be used during a project to facilitate good relationships and higher quality. In the UK, many publications produced by industry bodies have provided guidelines for the use of partnering and the creation of long-term relationships while the government, through, the Office of Government Commerce, has published a comprehensive set of guides to new ways of working in including one on the principles and processes of team working and partnering.

# 5.5.9 Summing up

A broad conclusion from this analysis is that a combination of approaches is required in order successfully to promote voluntary collaborative arrangements. In particular, market-related incentives for changes in practice need to be introduced – exhortation alone will not achieve change. Hence the power in the market of public procurement is particularly relevant. Supply interests need to have clear signals that clients wish to work in a particular manner, and will be expecting their suppliers to respond. The public sector is significant in construction markets, and can thus have influence on the practices of the sector. But it is also diverse, and may be conservative. Thus high-level promotion – backed by audit bodies - needs to be complemented by promotion at lower levels, and evidence that will help to persuade staff in public client bodies that different ways of working will provide benefits to their employers and the public. In turn, those staff require guidance and assistance in the adoption of new ways of working.

These observations reflect the view expressed in the Country Report from the Netherlands that government support is crucial when attempting to introduce these new arrangements. Complementing this, the report from Sweden emphasised the role of the client (including the

public client) in instigating and sustaining changes in working practices. And the client in turn requires support and training in order to be able to discharge their functions effectively.

These considerations lead to the conclusion that, once the need for change has been established, most of the approaches identified above will in some way or other need to be brought into play for the effective promotion of voluntary arrangements.

### 5.6 Benefits of voluntary arrangements

One aim of the study is to provide a view on the scale of benefits that might be obtained by the wider use within the EU of voluntary arrangements for collaborative working. The Country Reports have shown, however, that there are few national data on the extent of usage or on benefits that could provide the foundation for such an assessment. Most of the data relevant to an assessment of benefits come from individual projects and, while these provide some indication of the nature and scale of benefits that might be obtained, it is clear that many of the benefits are intangible - they might be manifest in more effective operational practices, greater productivity and ultimately a higher performing built environment but they cannot be expressed in terms that can be related to construction turnover or economic activity.

Further, those national data that do exist do not provide clear pointers. A recent analysis of the UK Key Performance Indicators, quoted in the UK Country Report, showed that in 2006 the industry's performance against many of the indicators, including on cost and time, was not as good as in 2000, despite the spread of the measures that are the focus of this study. Many factors could contribute to this, such as pressures on the industry caused by the high level of demand over that time, additional complexity in projects because of new regulatory or sustainability requirements, or even that better relationships have encouraged clients to request extra works which are not reflected in the indicator outcomes. Whatever the reasons, the data provide no clear evidence at national level that the adoption of new ways of working has had significant impact on the sector's performance.

However, although the data do not exist at national level, the Country Reports provide many insights into the expected and actual benefits to be gained at project level from the adoption of collaborative practices. These include:

- Fewer disputes or instances of conflict (Denmark, Netherlands, Norway, Sweden, UK). The aim that there should be no disputes was in many cases underlined by hierarchical dispute resolution arrangements through which differences could be resolved at the lowest 'working' level. These had the effect of reducing the number of formal disputes. But more generally the participants in collaborative projects considered that the working environment was improved and this was one of the factors in improved productivity. While there are few quantitative studies on this point, a Norwegian pilot study of productivity in housing projects demonstrated a correlation between participants' view of conflict levels and efficiency in production.
- Cost savings (Denmark, Netherlands, Sweden, UK) A Danish demonstration programme reported savings of 5-20% in design and construction costs while UK guidance indicates that savings of up to 30% may be obtained in partnering projects. Frameworks lead to savings in tendering costs and the opportunity to refine processes. Sometimes, these savings are taken in the form of higher quality or greater volume of outputs rather than as cash savings. The Netherlands reported reduced lifecycle costs.
- A more efficient construction process and higher quality output (Belgium, Denmark, Sweden, UK). The enhanced communications and greater understanding associated with collaborative forms of project execution led to higher efficiencies, with problems being identified at an earlier stage. A Swedish study demonstrated a relationship between quality failures in projects and 'lack of engagement' of project participants.

• Higher levels of innovation, improved design and a reduction in design changes (Netherlands, UK) To this may be added Improved problem solving and problem avoidance (Denmark, Netherlands, Sweden UK) These are again consequences of improved communications and the creation of a project environment that supports the collective development of proposals. The early involvement of key parties to the project in the Bouwteam model facilitates the production of designs that take into account construction issues, while risk management measures such as project insurance can remove barriers to novel ideas.

- Better use of knowledge and knowledge transfer from previous projects (Denmark, Netherlands, UK) With greater continuity in project teams in framework or strategic partnering arrangements, the experience and mutual learning gained on a project is not dispersed but can be applied to the next project. The Norwegian study referred to above demonstrated a correlation between higher efficiency and having individuals in the project teams who had previously worker together.
- Greater reliability in delivery to budget and programme (Netherlands, UK) The
  concept of a Guaranteed Maximum Price, found in many partnering arrangements,
  gave clients an assurance on costs while the better planning that was possible with
  all key members of the team working together led to greater assurance of delivery
  and, when required, shorter delivery times.

Overall, projects in which collaborative ways of working were used were thought to lead to *higher client satisfaction and fulfilment of the client's needs* and greater satisfaction for the supply-side partners. A Swedish study found that although clients could not necessarily point to cost savings, the great majority would not revert to traditional ways of working.

On whether the arrangements were more profitable for firms, the evidence was mixed. The Country Reports from Denmark and the Netherlands indicated that they were thought to lead to higher profit margins but in Norway there was a view from some contractors that they took away some of the opportunities for profit. However, they may make the profit more secure either by assuring levels of future work or through prior agreement on the level. The UK Demonstration Projects have similarly over the years provided a mixed message on profitability, while showing the other benefits outlined above.

Finally, the Country Report from the Netherlands noted that collaboration would improve the image of the industry which was a particular aim in that country. While other countries might not have that explicit aim, better delivery of high-profile projects undoubtedly serves to counter any negative image caused by the inevitable disruption to the public caused by construction works and is in the interests of the industry, as it seeks to attract a high quality workforce.

Taken together, the reports show a considerable degree of consensus about the benefits to be obtained from adopting collaborative arrangements. But some cautionary comments should also be noted:

- Not all the not 'openness' projects' projects in Norway were reported to be successful
- The Netherlands noted that as yet there was no clear information on performance improvement although an increasing view that voluntary arrangements generated benefits.
- Danish views were primarily those of clients; contractors' views on partnering had not been sought in previous studies.
- Several reports (Norway, Denmark, UK) included comments to the effect that voluntary arrangements were more suited to the more complex projects since simpler projects could be undertaken without the investment necessary to establish collaborative ways of working.

The report from Finland highlighted several other concerns, for example that
participation in strategic partnering can involve some risk to the partners because of
the inherent obligation to maintain the arrangement and consequent reduction in
influence and control.

- It similarly notes the need for assurance concerning financial data provided under 'open book' accounting arrangements.
- And, not surprisingly in Finland, it notes that the development of collaborative relationships is more difficult where the relationship concerns projects which are widely separated geographically.

It must also be borne in mind, however, that voluntary arrangements also involve costs – primarily of the time of managers and others who establish the relationships, but also in new information systems and other supporting measures. These costs are relevant to discussion of the types of project that will be most suited to the implementation of collaborative forms of working.

Moreover, the benefits cited relate primarily to those types of voluntary arrangement that involve partnering and particularly those where the client is party to the arrangement. In the case of the 'construction consortium' type of collaboration, the benefits are inherently linked to success in the marketplace. The Country Reports include some examples where this was achieved, although they also illustrate that their continued existence needs to be justified in the market place and that as a consequence not all the consortia are still operational.

#### 5.7 Aspects of voluntary arrangements that contribute to success

As with the previous discussion of benefits, the guidance cited in the Country Reports generally relates to arrangements which involve some form of partnering, without distinguishing between the different forms of partnering that have been identified for the purposes of this study. The reports have not identified guidance on success factors for construction consortia although some of the factors cited in relation to partnering, such as the selection of appropriate partners, can of course be carried over into the consortium form of collaboration.

They show that there is a broad consensus on the factors which will tend to lead to the successful implantation of collaborative ways of working on projects, and these are discussed below.

### 5.7.1 Systems of risk and dispute management

The creation of formal and appropriate systems of risk management which underpin the interactions of the project parties is recognised to be important in encouraging firms to collaborate. As a particular example, the collective insurance of risk which takes place in Belgium, and which has been employed in some major projects elsewhere (e.g. the UK) appears to contribute to and support collaborative behaviours. Such arrangements carry with them the possibility of 'moral hazard', i.e. 'innocent' parties bear a cost as a consequence of the faults of others, but the overall effect appears to be beneficial.

Another approach to the generation of a collaborative project culture is a declaration that there will be no recourse to litigation in the resolution of disputes and the establishment of suitable adjudication or other processes to deal with disputes. The Swedish report recommends the adoption of joint processes for risk and conflict management, which incorporate a 'staircase' model for conflict resolution. Such measures are again intended to facilitate the introduction of new ideas into the project process, and to encourage openness in

the identification and discussion of risks and problem areas. They therefore support other measures such the creation of effective communication channels and the early contribution of all parties to be project (discussed below).

These types of measure lead to a paradox in that the more open discussion of risks and problems, which may previously have been internalised in the participating firms, may serve to reduce the mutual confidence of the partners in each others abilities and may therefore create more tensions. While this does not appear to be the experience in the countries studied, it implies that maturity of approach and acceptance of openness over uncertainties and risks are also important factors in successful partnering. Such 'human' success factors are considered further below.

#### 5.7.2 Early involvement of key parties

There is general consensus that the early engagement of key parties in a project is important for its success. This is advocated strongly in UK government guidance, and found also in Denmark ('early' partnering), the Netherlands and Belgium (*Bouwteam*). Some of the parties (notably a preferred contractor) may be engaged on a fee basis while the design is still underdevelopment, preceding a formal appointment.

Normally, these parties – and not others - are those that come within the scope of the partnering arrangement. The Country Report from Sweden goes further in suggesting that as wide as possible engagement with the various actors involved in the project is desirable in order to achieve the benefits of partnering. While practical considerations may limit the coverage of some measures (e.g. pain/gain sharing) within partnering arrangements, the desirability of extending partnering principles down supply chains has been recognised and some studies (in the UK) have drawn attention to the contrast between partnering at the highest level of a supply chain and traditional relationships with sub-contractors. The Swedish study referred to earlier that noted that 'engagement' was a factor in achieving quality construction supports the general conclusion is that 'inclusiveness', i.e. extending collaborative practices to as many parties as possible, will increase the prospects of success in the project.

#### 5.7.3 Effective communications

The evidence from strategy and management literature is that success in complex tasks rests upon involving all actors, and this is undoubtedly the case in complex construction projects where there will be many interfaces between the different parties. Creating effective structures of communications is therefore a factor that is identified in a number of the Country Reports (the Netherlands, the UK, Norway and Sweden). Measures that can contribute to this include the use of shared offices, the introduction of common IT systems, and the creation of project communications tools while other measures such as team building activities clearly facilitate mutual understanding and more effective dialogue amongst team members.

In particular, establishing a shared understanding of the objectives of the project, and defining agreed responsibilities and milestones at an early stage, are noted as key requirements in some reports (UK, Denmark). A 'kick-off' workshop, where these matters can be decided and which is also the opportunity for team-building is a recommended way of addressing this need. This may be followed by further workshops at key stages of the project.

Supplementing formal communications, the generation of trust, a collaborative culture and commitment to the project may be assisted by social events, celebrations of project success, the creation of project identities (logos, newsletters) etc. The value of 'pride in the project' is referred to in the reports from the Netherlands and Sweden.

#### 5.7.4 Performance monitoring

Several reports (Netherlands, Sweden, UK) note that the development of agreed performance measures and the regular monitoring of performance against these was important to maintaining the health and vitality of a collaborative relationship, and the commitment of senior managers to that relationship. This was particularly important in relation to frameworks and strategic partnering where in the absence of regular monitoring and review of performance there could be a risk of poor performance. Having SMART targets against which project performance and partnering outcomes can be measured and monitored, and defining targets for improvement in communications and the quality of relationships, will assist the achievement of high performance and will help to assure clients that the relationship is continuing to provide the anticipated benefits. The data produced by such monitoring are therefore important inputs to communications processes.

#### 5.7.5 Financial incentives

Offering parties the opportunity for financial benefits is clearly an incentive for them to enter and remain within voluntary arrangements for collaboration and these may also provide clients with financially-related benefits, such as greater certainty of outcomes. Some approaches were mentioned frequently in the Country Reports; these included:

- Cost transparency open-book accounting (Norway, Sweden, UK)
- Target pricing with pain/gain sharing (Finland, Norway, Sweden and UK)
- Guaranteed Maximum Price (Sweden, UK)

The report from the Netherlands referred to 'the use of compensation agreements that reflect collaborative approach'. Alliances (as in the Netherlands) clearly embody these mutual financial incentives.

The financial incentives can of course include the prospect of future work opportunities. The Country Report from Finland noted that unless there were clear, continuing benefits to be derived through the prolongation of collaborative working practices, such as the emergence of new projects, there would be a reversion to traditional practices.

### 5.7.6 Leadership

Paradoxically, in a topic which is characterised by mutuality and recognition of the contribution of all parties, leadership is identified in several of the country reports (Belgium, Norway, Sweden, UK) as a key factor in success. This refers particularly to the leadership provided by the client through setting clear common objectives for the project and expressing only in words but in behaviours and actions their commitment to work in a collaborative manner. The client is seen as an essential and active player in collaborative arrangements, and this requires them to have appropriate management capacity and attitudes, such as willingness to compromise while not prejudicing the objectives of the project. Several reports (Norway, Sweden) note that ideally, the client should be closely involved not only with the main parties but with suppliers, key specialist installers etc.

This form of leadership is essentially persuasive rather than through command processes. As the report from the Netherlands commented, voluntary arrangements may not be voluntary if they are required by the client. The training in client leadership offered in Sweden is apposite.

This identification of leadership – which is embodied in individuals – as a success factor underlines the importance of human dimensions in collaborative relationships. It is sometimes said that the right individuals can make any system operate effectively, and conversely that the wrong individuals will not achieve success even in a project which encourages and rewards collaboration. Hence some reports have identified the **partner selection process** as a key factor in success. The Swedish report suggested that the process should include an in-

depth examination of the parties' problem-solving experience while in Norway this has been taken a stage further in that there was an examination of the suitability of consortia rather than individual firms to undertake a high-profile project. Further concern with the human dimension is evident in references to training for partnering (Sweden, Denmark, Norway, Netherlands) and in particular training for clients (Sweden).

One significant omission from the evidence base at present appears to be on the role of previous experience of voluntary arrangements. The literature on business processes and management indicates that learning takes place and that the more experience a practitioner or team of practitioners have of a technique, the more likely it is that they will make a success of it in the future. There is certainly evidence that some organisations have now evolved their forms of partnering, moving from project to more strategic types partnering, and some accounts of frameworks (e.g. from the UK) indicate that clients have sought to address issues experienced in early frameworks when establishing later ones. However, there is little information on how individuals improve their performance in establishing collaborative relationships and in some countries these approaches have not been employed for long enough for that experience to develop.

#### 5.7.7 Other measures

Some other aspects of collaborative relationships mentioned in the Country Reports may contribute to their success although their use is by no means universal. These include:

- The use of 'partnering charters' These express the mutual aims and commitments
  of the parties to the project; they provide reference points in cases of dispute or
  inappropriate behaviour and a means of communicating the nature of the new forms
  of relationship. They have been used in many UK projects and in Sweden, but are not
  mentioned elsewhere.
- The use of collaborative forms of contract. It is accepted, and explicitly stated (UK report) that partnering arrangements do not replace the need for a contract. Some forms of contract have been developed (UK, Sweden) which incorporate collaborative elements, for example dispute resolution procedures that are consistent with collaborative ways of working) and many projects have used these. Equally, though, many collaborative arrangements have been established in projects which have employed more conventional forms of contract. There is no clear evidence that different forms are required, although it may be desirable to have a contract which is based on collaborative principles.
- The use of professional facilitators and partnering advisors Organisations
  employing collaborative ways of working for the first time, or entering such
  relationships with different partners, may find (UK report) an independent facilitator of
  advisor helpful in the development and maintenance of effective relationships.
- Redesign of the project process The Country Report from the Netherlands noted
  that changes to the project process, allowing design to take place in parallel streams,
  may help reduce the scope for conflict (and possibly the level of interaction required).
  Such redesign could come out of early discussions involving all parties.

# 5.7.8 Concluding comments

It could be argued that many of the factors considered above, and the associated measures, are not unique to voluntary arrangements but are expressions of good practice in the management of projects and relate to the behaviour of the parties involved on a project. In

terms of the generic transaction governance model<sup>24</sup>, they can be described as a decrease in opportunistic behaviour on the asset specificity dimension, brought about by an increase in the frequency of transactions between the parties. A more accessible summary is provided in the Norwegian report which sums this up the factors contributing to collaboration as 'old fashioned behaviour' which comprises:

- Openness
- Honesty
- Confidence creation
- Mutual respect

Similar terms are used in other reports: trust (Denmark, Netherlands, Sweden); dialogue (Denmark, Netherlands); transparency (Denmark, Sweden)

Direct measurement of these qualities is of course not easy, and few reports offer any insight into whether the arrangements described have actually had impact on them. But there are indications that individuals who are involved in projects where these aims are espoused do consider that the general working environment of the project has been improved, leading to beneficial outcomes for the various parties.

#### 5.8 Relationship with EU policies

The two areas of EU policy that featured explicitly in the Country Reports were those of public procurement and of competition (with particular reference to SMEs), the former being much more prominent in the reports.

#### 5.8.1 Public Procurement

The reports demonstrated a range of views. In Finland and Norway, public procurement regulations have been seen as a barrier to the introduction of the principles of partnering. There has been a view, stemming from legal cases, that the final price or a close estimate of it should be known at the time the contractor was selected, with contractor selection based often on the lowest-price criterion although sometimes with a quality element also. These views were now being modified, but there was still little sign that procurement processes were changing significantly.

In both Denmark and Sweden, when collaborative relationships were first introduced there were also concerns about the compatibility of collaborative arrangements with EU and national procurement regulations (particularly with regards to the use of non-price factors when selecting contractors). However, it is now recognised that the latest Directives facilitate systematic procurement of partnering projects. Official guidance states that procurement requirements must be fulfilled through open competition prior to the appointment of project partners or framework contractors

The same statement is to be found in UK guidance, where guidance on public procurement emphasises the need for fully competitive processes in the selection of contractors and suppliers. In contrast to some other countries, however, the UK had not regarded previous versions of the Public Procurement Directives as incompatible with frameworks and partnering, and so has a longer history of using such arrangements in the public sector.

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<sup>&</sup>lt;sup>24</sup> Winch G M (2001) Governing the project process: a conceptual framework. *Construction Management and Economics*, **19**, 799-808.

### 5.8.2 Competition and SMEs

The reports reflect some concerns over the impact of collaborative arrangements on competition, with fears in Denmark and the Netherlands that the adoption of partnering principles could result in the creation of barriers to the use of SMEs, with small firms not being able to form consortia to bid for projects. Similar concerns were expressed in the UK, particularly in relation to frameworks, and these have led to the development of reports and guidance on the issue, with examples of successful development of frameworks aimed at SMEs and their participation in them. In the Netherlands a new Procurement Act is under discussion, which will address 'unnecessary clustering' of works that results in contracts of a size that may inhibit SMEs from bidding.

In Sweden, it was though that partnering could result in the more general reduction of competition, owing to the establishment of long-term relationships. To address this, a new Swedish Public Procurement Act permits collaboration arrangements to function for a maximum of four years, even if they concern contracts below the EU procurement thresholds

The Country Report from Denmark acknowledges that there can be high initial set-up costs associated with partnering (because of workshops, procedure development etc) and that these inhibit participation by SMEs. However, it concludes that these costs should, with experience, diminish over time, so that benefits can extend to smaller projects, involving smaller firms.

#### 5.8.3 Other policy areas

While the reports do not directly link voluntary arrangements with other EU regulatory requirements, they make some connections with other policy areas. These include:

- Training, workplace conditions, health and safety etc. The UK report notes that firms
  operating within frameworks have had the confidence to invest in training facilities
  and generally to seek to enhance the skills of their workforce. Interactions between
  the contractor and designers can also reduce the safety risks of construction.
- Environment Some of the examples citied in reports (Netherlands, Belgium) concern buildings with high energy and environmental performance, where the greater level of interactions amongst members of the project team has assisted the development of design solutions to provide such performance. Reduction in site-generated waste through more efficient designs is also mentioned as a benefit of collaboration
- Innovation The benefits discussed earlier include the creation of conditions that
  encourage project team members to bring forward novel ideas for addressing
  challenges in the project. While is difficult to assess the extra project-based
  innovation that results, it is thought that there is some benefit of this nature. Some
  construction consortia are also created in order to promote innovative products and
  approaches.

# 5.9 Concluding comments

From the summary presented above of the main points in the Country Reports, the principal conclusions are:

Countries show wide diversity in their use of voluntary arrangements. This is summed
up in Table 5.1 and seems to be related (a) to the degree of cooperation that is
embedded in their normal project structures or 'construction business system' (see
Annex I) and (b) to views taken by public authorities on the appropriateness of such
arrangements for public sector clients. However, even in countries with apparently

extensive application, there are few data on overall usage or on financial or other benefits.

	Type of voluntary arrangement				
	Project	Strategic	Alliance	Framework	Construction
Country	partnering	partnering		arrangement	consortium
BE	X		X	X	
DK	XXX			X	
FI	X			X	X
NL	X		X	X	X
NO	Χ			X	
SE	XX	X		X	
UK	XXX	XX	X	XXX	X

Table 5.1 Comparative use of voluntary arrangements

- Some counties have considerable experience of project partnering, with participants viewing this as a more desirable and effective means of delivering projects than traditional relationships with many examples of successful individual projects.
- Frameworks with collaborative elements (in contrast to framework contracts) and strategic partnering arrangements are less well established, but the UK in particular has extensive experience of frameworks. The risk that these can reduce opportunities for SMEs has been recognised and guidance on this point has been prepared.
- Few construction consortia or of alliances have been identified, but there appear to be some successful examples.
- Not every country has distinct 'approaches' to the promotion of voluntary arrangements; the clearest sets of approaches have stemmed from enquiries stimulated by dissatisfaction with the industry's performance and have involved some or all of: high-level reports; national promotional bodies; revised public procurement guidance; audit body endorsement; training initiatives; the development of performance indicators etc. These have operated in combination; the role of governments and the public sector in bringing market influence to bear is particularly important.
- There is considerable consensus on the measures that managements can take to promote the creation of collaborative relationships. These include: early involvement of key parties; payment systems with 'pain/gain' sharing; adoption of dispute resolution procedures that avoid litigation; clarity in objectives; workshops to ensure communication and understanding of these; setting and monitoring of performance targets. Openness and appropriate behaviours are considered crucial.
- There is also consensus that such arrangements can lead to improved delivery of projects, with final outputs that better satisfy clients needs, more assurance on costs and timescales, fewer disputes and a generally more satisfying and acceptable working environment for all participants. Overall, the evidence for cost savings or higher profitability is more mixed but individual projects have shown significant savings.
- Public procurement requirements are seen in some countries as a barrier to the
  adoption of more collaborative ways of working or the creation of longer-term
  relationships. But other countries have successful developed such relationships
  within the framework of the Public Procurement Directives. Some of the perceived
  barriers are the clearly result of national rules, in that they relate to policies that apply
  to contracts below the EU threshold.

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 Voluntary arrangements for collaboration can support other EU policy objectives such as those related to skills and training, sustainable construction, and innovation.

### 6. 'Best Practice' Guide and Case Studies

This chapter summarises the process through which the Best Practice Guide and its associated Case Studies were prepared and considers issues connected to the aims and content of the Guide. The present text of the Guide, with the Case Studies, forms Part 2 of the Final Report and should be read in conjunction with this chapter.

# 6.1 Fulfilling the requirements for the Guide, as set out in the Specifications

#### Intended audience

The Specifications for the study required the preparation of an 'an EU guide to good practice which would facilitate the setting up of voluntary arrangements for collaborative working in construction projects and related services'. The Study Team interpreted this to mean that the guidance would be addressed primarily to organisations (client bodies, firms etc) which engage in construction projects and to their advisers and, as appropriate, their representative bodies; it was not guidance on the 'approaches' that governments and other bodies (such as the European Commission) might use to promote the use of voluntary arrangements. This would be contained in the Final Report from the study.

# Relevance to SMEs and Life Cycle Costing

The Specifications further stated that 'It [the EU Guide] needs to provide practical guidance on contractual, management and insurance arrangements which are particularly suitable for SMEs and which enable or facilitate the observance of sustainable construction methods and the inclusion of Life Cycle Costing.' In the light of the information provided in the Country Reports, these aspects of the proposed Guide required further consideration and discussion at the second meeting of the MSG.

The five types of voluntary arrangement identified in the study impact on SMEs in different ways. The Country Reports showed that those voluntary arrangements which involve the creation of partnering relationships have tended to be employed in larger, more complex projects, and it is clear that the benefits of such arrangements are greatest when the parties to the project have most scope for collaborating to address the challenges posed by difficult site conditions, demanding technical specifications etc. Such projects do not in general have SMEs in leading roles, although situations could occur when, for example, an SME supplier or installer of a specialist product was crucial to the project and was therefore included in the main partnering arrangement. Hence the guidance on partnering developed in the countries covered by the Reports does not in general refer specifically to the inclusion of SMEs in such arrangements.

This led the Study Team to the conclusion that the principal audience for the Guide would not be individual SMEs but:

- Significant clients who can benefit from voluntary arrangements
- Larger firms that undertake projects of a size that justify the learning processes involved
- · Representative bodies of construction interests, including of SMEs
- Policy-makers and legal advisers

However, the Country Studies also showed that the Guide needed to make specific reference to the place of SMEs in collaborative arrangements, particularly in relation to:

• the risk of inconsistency between relationships at the top of the project hierarchy ('Tier 1'), where partnering might have been established, and relationships at lower levels, where most SMEs will operate. Most guidance in the countries studied focuses on understanding and successfully implementing partnering at the Tier 1 level but SME representatives have asserted that the creation of partnering at the top level of a project does not necessarily cause any change in relationships at the lower levels. Hence SMEs may continue to operate in traditional, adversarial contract frameworks. This view has been supported by academic studies (e.g. in the UK).

- the risk that framework arrangements may limiting market opportunities for SMEs by restricting competition to firms that can handle larger volumes of work. The Country Reports showed that this is recognised in several countries and that there was guidance on measures to address this which could be drawn upon.
- The way that the 'construction consortium' form of collaboration could widen market opportunities for SMEs.

The relevance of voluntary arrangements to sustainable construction methods and Life Cycle Costing (LCC) was discussed in Section 3.3. Collaborative forms of project delivery – notably those with early appointment of the project team - encourage the interactions required to minimise waste and to integrate the performance of different aspects of a building or other form of output so that it can achieve high environmental standards. Those interactions, early in the project timescale, can be informed by LCC assessments and therefore collaborative arrangements provide a context in which LCC assessments can exercise real influence on the eventual design.

These conclusions were reflected in the Guide.

Relevance to different types of project and to different countries

The Specifications further stated that 'The approach [ie the EU Guide] would outline any special requirements to adapt the mechanism according to the type of project and/or construction assets concerned, and to different national contexts'.

The Country Reports provided pointers to the kinds of projects where the benefits of a collaborative approach were most evident, and these have been alluded to in the discussion of SMEs above. This guidance has been reflected in the Guide.

Adaptation to different national contexts presented greater difficulties. Since the Guide was intended to be relevant across the EU, it would be inappropriate for it to provide detailed information (eg in statutory or other requirements relating to procurement) relevant to any individual country, except through extensive annexes which would need correspondingly detailed research. This was impractical within the scope of the study. The Study Team therefore took the view that the Guide would of necessity provide general advice, but would emphasise the need for local requirements, practices etc to be taken into account when considering the introduction of voluntary arrangements, with local advice being sought.

#### 6.2 Aims of the Guide

The discussion above led to a view that the Guide should aim to provide an introduction to the benefits of collaborative arrangements and basic guidance on how they might be established which it was hoped, would raise awareness and stimulate further enquiry, particularly in Member States where such arrangements are not currently practised bur also in others where collaborative principles may be employed in the largest projects but where there is much scope for further understanding and application.

The aims of the Guide were therefore restated; it aimed to:

- Create awareness that collaborative arrangements exist and have proved beneficial in some Member States
- 2) Outline the forms that these take and the nature of those benefits to the various parties in construction, as a stimulus to further investigation
- Provide initial advice on how they may be established, and factors that influence their success
- 4) Remind readers that implementation of voluntary arrangements for collaboration needs to be consistent with national and EU requirements and policies, and particularly should not present market barriers to SMEs
- 5) Suggest sources of further information

#### 6.3 Format of the Guide

As part of the process of developing proposals for the Guide the Study Team, following advice from the Project Officer, examined previous examples of guidance material originating from EU-funded projects. These concerned Corporate Social Responsibility (CSR) within SMEs<sup>25</sup> and the use of Life Cycle Costing (LCC)<sup>26</sup>. The former was a short professionally designed booklet essentially encouraging SMEs to take account of CSR issues, and accompanied by a set of short Case Studies. The latter was a much more detailed document which, while well presented, clearly stemmed from a consultancy report rather being a professionally designed publication. It also included Case Studies, but these were inserts ('boxes') in the text.

To be consistent with the Specification for the study, the guidance offered should not just encourage firms and client bodes to adopt collaborative relationships, but should offer at least basic guidance on how these can be created and maintained. Hence it should be more similar in content to the LCC guidance than that on CSR. However, in view of the range of construction contexts in which such arrangements might be employed, the Case Studies needed to be more extensive and prominent. Finally, while the Study Team expected to produce a final text for the document, subsequent professional design (outside the scope of the study) would add significantly to its attractiveness and potential impact.

Bringing these various considerations together, the Study Team proposed to the second meeting of the MSG that the Guide should take the form of a booklet with 10-20 pages of introductory text followed by a set of 20 or more Case Studies, each of around two pages, some originating from material in the Country Reports. It would also include selected references as sources of further information.

An outline structure and set of contents for the Guide, consistent with this concept, was prepared and is shown in Annex  ${\sf G}$ .

#### 6.4 Consultations on the Guide

Following the MSG meeting, the Study Team prepared a draft text for the Guide and invited comments from the individuals and organisations that had been involved in the preparation of the Country Reports.

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<sup>&</sup>lt;sup>25</sup> http://ec.europa.eu/enterprise/csr/sme.htm

<sup>&</sup>lt;sup>26</sup>http://ec.europa.eu/enterprise/construction/compet/life\_cycle\_costing/guidance\_case\_study.pdf.

The consultation process, however, extended further. It is notable that the countries which have been most prominent in the promotion of voluntary arrangements demonstrate Anglo-Saxon or Corporatist construction business systems<sup>27</sup> and the relevance to other construction business systems needed to be explored through the consultation process. The Study Team therefore considered it important to have wide consultation including with construction interests in countries not represented in the Team which had different construction traditions and some of which might be possible target recipients of the Guide.

Accordingly, the Team made arrangements for consultation on the Guide in four additional countries: France, Germany, Greece and Poland. The consultations were co-ordinated by the following organisations:

France: Alphéeis (Energy and Environment)

Germanv: University of Kassel

Athens University of Business Greece:

Poland: ASM Market Research and Analysis Centre Ltd, Kutno

The Study Team recognised that conducting the consultations on the basis of an English text of the Guide was not ideal, but resources did not permit its translation into all the languages of the countries concerned. To assist the consultations, two documents that consultation Coordinators could translate into their own language were prepared:

- a draft covering letter for use when sending out the draft guide for comment, which included some key questions for consideration, and
- a short summary of the draft Guide, which MBS arranged to be translated into French.

These are reproduced in Annex I.

Each consultation coordinator identified appropriate organisations, obtained responses to the questions and prepared a summary of the views obtained, sending to the Study Team in addition the individual responses that they had obtained in English.

Annex J lists the organisations consulted in those four countries. It also lists the European representative bodies and Directorates-General of the Commission that were invited to comment on the Guide.

Following receipt of views from consultees, the Guide was revised and the revised text considered at the third meeting of the Management and Steering Group. Some further revisions have been made to reflect comments at that meeting and additional comments received by the Study Team.

#### 6.5 Outcome of the consultations

Overall, the draft Guide attracted positive comment, notably from countries such as Germany, Poland and Greece which are examples of Member States where collaborative arrangements are not yet widely used. Further, through FIEC, there were positive responses from contractors' organisations in Portugal and Slovakia, where also there has been little use of voluntary arrangements. It was considered to be a clear and useful introduction to the subject.

Similarly, responses from countries represented in the Study Team (eg Sweden) indicated that it would be a useful document, since many organisations had not yet taken up collaborative ways of working and it would serve to widen awareness. Indeed, the Swedish

<sup>&</sup>lt;sup>27</sup> 'Construction business systems' is the term used to sum up the system of relationships and responsibilities through which construction projects are effected. They differ across the EU. Annex L provides an overview of construction business systems in Europe.

member of the Study Team has stated that they are already planning to translate it for use in training courses.

There were a good number of detailed comments, all of which were considered by the Study Team, but three themes ran through a number of the comments. These are discussed below.

#### Presentation

First, a number of responses indicated considered that the amount of text was rather offputting; they wished it be presented more attractively. The Study Team acknowledge that the draft circulated for consultation did not incorporate sufficient devices for breaking up the text and have taken steps to remedy this. Professional design will also make the eventual presentation of the Guide more attractive. In part, however, these comments probably reflected the challenge for some of reading the document in English and underline the need for the Guide to be made available in local language. This is discussed further in Chapter 8 as an aspect of promotion of the Guide.

#### Depth of treatment

Secondly, and in contrast to the first theme, a number of comments indicated that the Guide was too superficial – they looked for more detailed guidance on matters such as achieving trust, managing risk, establishing dispute resolution procedures etc. Some also asked for a discussion of legal aspects of collaboration in different Member States. In other words, the Guide in their view was a useful introduction, but anyone wishing to implement collaborative arrangements would need to look elsewhere.

Some comments on these lines came from countries (and individuals) with experience of voluntary arrangements and it is not surprising that they found the Guide rather simple. But others came from countries where such arrangements are not common and reflected a desire for the Guide to be a more comprehensive source of advice.

These comments relate to the discussion of in Section 6.1 which concluded that a Guide that aims to be relevant at the European level has to relate to a wide range of business, legal and social contexts, which vary across Member States. Increasing the level of detail would risk parts of the Guide becoming irrelevant, or even misleading, for some readers. The Guide Includes suggestions for further reading and detailed advice relating to local requirements should stem from bodies in individual Member States. This again is further discussed in Chapter 8.

#### Value to SMEs

Thirdly, some respondents wished the Guide to be particularly aimed at encouraging SMEs to become party to collaborative arrangements, and for that reason asked for it to be changed in two possibly incompatible ways: that it be both (a) simpler and (b) more comprehensive. Again, this was discussed in Section 6.1 above; some parts of the Guide and specifically orientated to the interests of SMEs and one of the ways in which it might be made available would be through the production of a short summary aimed at SMEs and their representative bodies.

#### Conclusions from the consultations

The consultations gave the Study Team confidence that the Guide, suitably presented and in made available in a range of languages, would be a useful introduction to the topic, and that it had the potential to fulfil the aims set out in Section 6.2. The responses also underlined the need for detailed advice also to be available to those who wished to take steps to implement collaborative ways of working.

#### 6.6 Comment on the sources of further information

The Guide includes (in Section 5) a short list of further sources of information. For reasons of accessibility, these are predominantly in English and originate from the UK. Some sources in other languages have been added but several of these are in languages (e.g. Danish) that are

not widely accessible within the EU. This imbalance detracts from the European nature of the Guide since the main sources of further information stem from one social and cultural perspective and do not reflect the diversity of European cultures and business practices. The Study Team have sought to address this by inviting MSG members and others to propose suitable material in a wider range of European languages, for inclusion in the list, but this has not been forthcoming. The present list reflects the geographical distribution of experience with voluntary collaborative arrangements and it is perhaps inevitable that it will have geographical and language biases.

#### 6.7 Case Studies

Part 2 of the Guide consists of a set of Case Studies which illustrate how voluntary arrangements have been applied in a wide range of circumstances, and the outcomes. The second table at the start of Part 2 shows that the Studies cover most of the possible combinations of construction context and type of voluntary arrangement, and also illustrate some other forms of collaboration.

The gaps in the Table reflect the fact that some of the possible combinations are unlikely to occur in practice; thus:

- Framework and strategic partnering arrangements are most effective when there is some degree of continuity in the work requirements. Further, the works need to be within the scope of the firms covered by the framework. This is less likely to be achieved in infrastructure works which may be large and very varied.
- By contrast, the complexity of large infrastructure projects makes them suited to the alliance form of collaboration; smaller and less complex projects are unlikely to justify the investment of management resources required to establish the alliance organisation.
- Construction consortia generally involve SMEs, which will be more likely to be taking a principal role in housing or new building than in infrastructure works.

Broadly, each Case Study contains an introduction giving the context for the collaboration, an outline of its main features, and a summary of principal outcomes, together with lessons where appropriate. There is reasonable uniformity in structure; complete uniformity would not be appropriate since the Studies vary considerable in subject-matter and in their main areas of interest. It is envisaged that when finally produced each Case Study will include one or two photos or other illustrations.

While all the Case Studies demonstrate benefits from collaboration, some also illustrate problems and in some the relationships have ended. Thus they reflect the realities of collaborative relationships and underline the need for these to be founded in good appraisals of market or project requirements.

Some early texts for Case Studies were included with the draft Guide that was circulated for consultation. As with the main Guide, there was overall a positive response to the Case Studies but with some calls for them to be more detailed. Again, this raises issues of overall length and relevance and in the view of the Study Team it is preferable to keep the Case Studies reasonably short and then offer pointers to further information. It should be noted also that some of the publications listed in Section 5 of the Guide themselves include Case Studies illustrating the use of voluntary arrangements for collaboration.

There were also requests for Case Studies from a wider range of countries. With the assistance of MSG members, the Study Team have been able to include two from other Member States. However, requests for further proposals, for example from the consultation Co-ordinators in France, Germany, Greece and Poland, have not resulted in suitable suggestions.

# 7. Impact of voluntary arrangements and interactions with EU policies

This Chapter considers a set of issues identified in the Specifications for the Study which relate to the wider introduction for voluntary arrangements for collaboration. These include:

- The scale and nature of the potential benefits to be obtained from such wider implementation
- The transferability of voluntary arrangements to other Member States
- the relationship between voluntary arrangements and EU policies, notably those concerned with competition and SMEs
- aspects of the commercial context (e.g. insurance) which impact on the ability of firms to introduce such arrangements

#### 7.1 Benefits arising from the use of voluntary arrangements

#### 7.1.1 Direct benefits

The Synthesis and Assessment Report which forms Chapter 5 of this report noted (Section 5.6) that the absence of national data in the countries studied meant that it was not possible to come to conclusions over the national impact of the adoption of voluntary arrangements in terms of 'hard' performance measures, such as out-turn costs and adherence to scheduled completion dates. Even in the UK, where such arrangements have been taken up over the past ten years and where annual Key Performance Indicators for the construction sector are compiled, the reported data do not provide a clear view about the effect on the industry of such measures. In the UK also, a recent Parliamentary report drew attention to the variability in performance of government projects, in terms of cost and delivery, even though more integrated and collaborative forms of procurement and project delivery have been promoted for some years.

On the other hand, there is both direct and indirect evidence that clients and firms consider that such arrangements do provide benefits, both through surveys of client attitudes (eg in Sweden) and data for the UK which indicates that such arrangements now cover a considerable proportion of construction output. And there is strong evidence from individual projects, including some of the Case Studies, that the adoption of more collaborative forms of project delivery can result in significant cost savings, through the better planning of works, reduced tendering costs, and more reliable delivery.

Any estimate of the potential benefits to be obtained through the wider adoption of voluntary arrangements must take account of the fact that these in general will concern larger projects or at least projects for clients with regular needs for construction works. The overwhelming majority of construction projects are small and, particularly in the domestic sector, are carried out for clients who have only an intermittent requirement for construction works. They will continue to be accomplished through traditional mechanisms. The main applications of voluntary arrangements are likely to be in infrastructure works and in some parts of the market for new buildings, although has the Case Studies show there are also applications in social housing and in repair and maintenance. The Country Reports provide distributions of the proportion of construction output in each sector. While any judgement must be tentative, consideration of these various factors leads to a conclusion that perhaps 40% of total construction output is potentially amenable to the implementation of collaborative ways of working.

Similar caution needs also to be applied when considering the financial benefits that might accrue from such arrangements. While some of the guidance issued on collaborative ways of working refers to 'savings of up to 30%', the evidence from the Country Reports is that this is not a typical figure. One Case Study indicated that individual tasks within a framework showed savings of 25%, but overall the savings were in the 5-10% range. This appears a more typical figure, although a good number of projects have claimed savings of 10-15% by comparison with traditional ways of working.

Taking the lower range as a conservative estimate of direct savings, and combing this with the proportion of the market which might be open to the introduction of collaborative arrangements, the conclusion is that overall savings of 3-4% of total construction output might be achieved – possibly more as experience is gained.

While this may seem a small percentage, in a sector which accounts for around 10% of EU GDP, it is certainly not insignificant at the European level. There can be few initiatives which have the potential to affect the GDP of the whole of the EU at even a level of a few tenths of one percent.

#### 7.1.2 Indirect benefits

Collaborative ways of working can potentially lead to a much wider range of benefits than just the 'hard' benefits considered above. Improved levels of client and workforce satisfaction, higher construction quality, innovation and greater investment in skills development and training will indirectly translate into economic benefits. While such benefits are likely to be unquantifiable, there are some indicators from Case Studies and from documents cited in Country Reports, thus:

- A contractor involved in a UK framework invested £1m in a new training centre for its own employees and those of its supply chain partners
- In another UK framework, collaboration with boiler manufacturers led to identification of the cause of failures and substantial reductions in tenants' energy costs
- The collaborative arrangements established for construction of the Øresund Link (Case Study 5) enabled high safety standards to be achieved, thus addressing safety issues experienced with a previous infrastructure project.
- A similar impact on site safety has been achieved by the North West Gas Alliance (Case Study 15), and there is additional safety benefit through the Alliance enabling more rapid replacement of aging gas mains.

And the downside of traditional ways of working – delays and cost overruns - can impose severe social and economic costs on communities, for example when schools, health facilities or transport links are not delivered on time. The extensive set of Constructing Excellence Case Studies in the UK offer examples of the way in which collaboration has enabled projects to handle severe constraints imposed by time and site factors, or to overcome unexpected difficulties. Thus for example:

- Extensions to a school which involved constructing over existing buildings while they
  were in use were designed in detail and then programmed so that critical works were
  carried out in holiday, and other construction carried out to a tight timescale with the
  schools in operation. Senior school staff participated in the management group for the
  project established under the collaborative form of contract.
- A school redevelopment was completed on time despite construction having to be suspended for a period because pupils from another school had to be temporarily accommodated, owing to a fire<sup>28</sup>.

<sup>&</sup>lt;sup>28</sup> Constructing Excellence Case Studies 252 and 287

The Case Studies in Part 2 offer examples where complex infrastructure projects have been delivered on time or even, as with the Øresund Link in advance of schedule. The Waardse Alliance (Case Study 14) invested in detailed analysis of risks and as a consequence delivered a major transport link on time.

Thus even if there are no identified cost savings, collaboration helps to secure the expected benefits on time and to avoid costs that might otherwise be incurred through late delivery. If a project is delayed by a year, the whole-life value is reduced by the discount rate used, which in public projects may typically be 6%. The financing costs of the project will also increase; depending on the profile of expenditure, this could add several percent to the overall cost of the project. Hence this simple example shows that avoiding late delivery can bring whole-life benefits which are of the same order as direct cost savings.

#### 7.1.3 A cautionary note

The preceding discussion of benefits, with its estimate of the potential impact if voluntary arrangements were more widely adopted, has been based on experience in countries where traditional construction business systems have been criticised for leading to fragmentation of responsibilities, antagonistic relationships and poor overall performance. It is possible that the same level of benefits would not be achieved in countries with inherently more integrated and collaborative construction sectors and perhaps the fact that voluntary arrangements have not so far been adopted across the EU is in indication that the benefits are less clear in those countries.

However, the Country Report from Belgium identified projects where the adoption of a collaborative approach resulted in savings compared with conventional ways of working even though a recent study of comparative construction costs<sup>29</sup>, commissioned by DG ENTR, concluded that the Belgian construction sector was amongst the most efficient in the EU. This might indicate that even in countries with more integrated construction business systems, there is scope for improvement.

# 7.2 The transferability of practices from one country to another

Consideration of the transferability of practices from one Member State to another involves issues of *relevance* to clients and construction suppliers and of *compatibility* with legislative and other requirements.

On the question of relevance, it could be argued that in principle all the forms of collaboration that have been studied are relevant in that all offer, at least in theory, scope for improving the performance of the sector or the market position of firms within it. As part of the consultations on the draft Guide in the four additional countries, information was sought on which types of collaboration seemed most relevant. The results varied; construction consortia and project partnering appeared to be the types that attracted most interest, perhaps because these seem the simplest arrangements in which to gain experience. But the construction consortium form of collaboration was also, in some countries, recognised to be a conventional way of operating for SMEs.

As noted in the previous section, the benefits to be obtained from the different forms of collaboration will depend upon the effectiveness of the conventional arrangements for delivery of construction works. Thus project partnering may not appear as relevant an innovation if there is already a good degree of integration.

Much more significant to the discussion of transferability is the issue of compatibility. Here the consultations, both the countries represented in the Study Team and in the additional countries, showed that there were substantial perceptual and regulatory barriers to the

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<sup>&</sup>lt;sup>29</sup>Benchmarking of construction efficiency in the Member States (Pilot Study). Available from http://ec.europa.eu/enterprise/construction/compet/benchmarch\_activities/index\_benchstudy\_en.htm

adoption of collaborative forms of project organisation. A respondent from Greece perhaps presented the starkest picture:

'The Guidelines take for granted the following aspects:

- The companies/organisations which [the Guide] addresses have the organisational maturity and the preconditions necessary to enter these modes of cooperation (quality control, internal structure allowing external cooperation, quality criteria for partner selection etc)
- The public sector is sufficiently flexible to adopt new technologies and innovative solutions and it is willing and able to become itself a member of such a cooperation scheme (in many European countries it is easy to have the Ministry of Transport, local authorities and construction companies joining forces under one scheme for the construction of roads or their maintenance and upgrading).
- There is an initial scale of operations which is sufficiently high (all examples start with millions of Euros)

All these preconditions do not apply in Greece, the lack of flexibility of the public sector being the most significant problem. Hence, for the diffusion of the Guidelines in Greece it would be important to make reference to the important preconditions for the creation of this type of cooperation, their potential benefits and their prospects for construction in the Balkan countries and Europe.'

Other responses from Greece similarly emphasised the high degree of regulation to which public procurement of construction was subject in that country.

Reflecting other concerns, a respondent from France similarly noted:

- '....[partnering] forms of agreements of seem to me to be dangerous on the legal side, in the construction sector. The actors may indeed face three types of risks:
- between contractors : risk to be accused of forming a "cartel",
- between a contractor and a client: risk of suspicion of collusion and/or of corruption or of fraudulent use of corporate property.'

These comments illustrate that any initiative to promote wider use of voluntary arrangements for collaboration in any particular Member State would need to be very carefully prepared, with full account taken of the local legislative framework for construction. This is further discussed in the next Chapter. The draft Guide stresses that local advice on such matters must be sought before implementation of collaborative relationships.

There is also, of course, potential for transferability of practice within the countries covered by the study. Several of the Country Reports noted that there was as yet only partial implementation of voluntary arrangements for collaboration, and as Table 5.1 showed, the extent to which different forms of arrangement were used varied considerably across the countries studied.

Where there are institutional arrangements for promoting voluntary arrangements, there will be more immediate scope for bringing the experience of other countries to the attention of clients, public authorities and supply interests. In the Netherlands, for example, the *Regieraad Bouw* has produced many guidance documents on collaborative practices and is intending to hold 12 regional conferences to promote best practice in project relationships. In Sweden, the Clients Forum has taken the preliminary step of translating into Swedish the text of the Guide presented in Part 2 translated, with the intention that it should be used in the Forum's training and educational programmes.

Complementing any promotion by the Commission, the individuals and organisations that have contributed to the study will be informed by the Study Team partners of its outcome and encouraged to consider how its findings might influence their own activities. And even in

Member States where there has been application of voluntary arrangements, there is likely to be scope for implementation of some of the supporting measures identified in the study including in projects where there are no formal agreements concerning collaboration. These supporting measures include:

- the concept of the pre-project workshop (Case Study 21)
- legal arrangements that might facilitate collaboration, such as the 'temporary company'
- the use of hierarchical dispute resolution procedures, which avoid recourse to litigation.
- collective insurance arrangements (see Section 7.4.3)
- project bank accounts

#### 7.3 Compatibility with EU policies on procurement, competition etc

#### 7.3.1 Public procurement

Perceptions of the Directives

The study has revealed a dichotomy between EU policies as set out in Public Procurement Directives and the interpretation of these policies in practice On the one hand, there is clear evidence that all the forms of collaboration considered in the study are being employed by pubic bodies in at least one, and in most cases several, of the Member States studied. On the other hand, comments from a good number of the countries, from consultations on the Country Reports and the draft Guide, showed that EU public procurement requirements were considered to be a barrier to the establishment of collaborative arrangements.

It must be said that these comments did not go into further detail on exactly how the Directives inhibited collaboration, and the Study Team have not had the opportunity to probe further.

There are strong parallels with the findings of the MBS-led study of the impact of EU policies on the construction sector<sup>30</sup> which also noted that construction interests in some countries regarded the Public Procurement Directives as useful frameworks and had no problems in working within them, while others considered that they gave rise to over-bureaucratic procedures and inhibited innovation in procurement. A suggestion from that study was that the Commission might publish 'good practice' Case Studies. The Case Studies to be included with the Guide go some way to responding to this suggestion; although they are not focussed directly on procurement issues, a number do provide some information about criteria for selection etc.

In the light of the evidence from the Country Reports, the Study Team's main conclusion in this area is that present EU policies on public procurement and competition do not present fundamental barriers to the adoption of collaborative ways of working. However, the perception that there are barriers cannot be ignored. The need to extend information and advice on voluntary arrangements to include procurement issues is considered in the next Chapter.

<sup>&</sup>lt;sup>30</sup> Analysis and assessment of the elements of certain Community policies that impact on the Construction Sector, Contract No 30-CE-0043801/00-12, University of Manchester led consortium, 2006

The perceived barriers seem to relate much more closely to national interpretations of the Directives, or to additional requirements introduced by Member State administrations. This is illustrated by the response from Greece quoted above. The Study Team reiterate that local rather than EU requirements provide the regulatory framework for construction in any Member State and that understanding these is a first step in the promotion of voluntary arrangements for collaboration.

### Avoiding risks

However, while the Study Team are clear that the use of voluntary arrangements is consistent with EU public procurement policy, the comment from France reported above needs also to be considered. The issue is whether the adoption of voluntary arrangements for collaboration increases the risk of collusion of other forms of inappropriate or illegal activities in the procurement and delivery of construction projects.

It must first be noted that this issue was not raised in the consultations related to the preparation of the Country Reports and the fact that a number of EU national administrations and major public bodies have endorsed the use of voluntary arrangements indicates that any associated risk, if it exists, is considered small and manageable.

The openness and high level of communications associated with voluntary arrangements – extending to 'open book' access to project accounts – constitute powerful means of addressing such concerns. But other steps can be taken, for example:

- Works undertaken outside the scope of frameworks and other longer-term relationships provide clients with current information on market conditions and prices.
   Some clients as a matter of policy exclude a proportion of their requirements from these relationships in order to have such independent verification of value for money.
- External reference points can be used. These may include price and quality benchmarks provided by national measurement systems (eg in Denmark through the outputs of the Danish Benchmarking Centre for Construction). Rigorous monitoring of longer-term relationships to ensure that they continue to provide value for money is recognised as an important aspect of their management.
- Independent auditing of project processes and costs can be conducted as part of the normal auditing of clients' expenditures or as a specially commissioned exercise, in order to provide assurance that these are appropriate.

Another type of risk can be involved where early appointment of the parties to a project takes place. In such circumstances, the contractor may be appointed specifically for the period leading up to the development of a final design. A second tendering process may then be instituted. A contractor that has been involved in the preparation of the design is likely to have greater understanding of the project and there is clearly a judgement to be made that weighs the advantages of having a contractor's perspective at that early stage, against the risk that the resulting design in some way favours their capabilities. This judgement has to be made as part of the procurement process and in the case of public authorities it is open to challenge and audit in the same way as other aspects of procurement. There is no doubt that many projects benefit from contractor input, particularly where site conditions present logistical and technical difficulties, and many authorities have therefore accepted that the balance of public benefit lies with early appointment. But clearly the client representatives in the project team and their professional advisers have to be assured that the design is appropriate and for major projects an independent design review may provide that assurance.

#### 7.3.2 Small and Medium Enterprises

The Small Business Act<sup>31</sup> represents the latest overview of EU policy towards SMEs. It notes that

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<sup>&</sup>lt;sup>31</sup> Think Small First - a Small Business Act for Europe (COM(2008)394)

'The EU and the Member States should adapt public policy tools to SME needs. They should make use of the Code of Best Practice providing guidance to contracting authorities on how they may apply the EC public procurement framework in a way that facilitates SMEs' participation in public procurement procedures.'

The Synthesis and Assessment Report noted that there are concerns in some Member States over the implications of some forms of collaboration for SMEs' access to markets and that both guidance and, in some countries, legislation has been introduced to address this. In particularly, the introduction of framework arrangements may reduce opportunities for SMEs in local public sector markets, such as building and maintaining municipal facilities. However, there are ways of safeguarding the interests of SMEs in these markets and indeed there is evidence to suggest that SMEs which are able adjust to new arrangements find that they provide a supportive business environment which encourages investment in human resources. The draft Guide provides advice on this point and several of the Case Studies illustrate how the interests of SMEs have been taken into account in framework arrangements.

In addition, the construction consortium form of collaboration generally has the aim of improving the market competitiveness of its member firms and these are generally SMEs.

Smaller firms do not in general take leading roles in partnering and similar arrangements because these normally involve larger projects. There is a risk that such arrangements provide them with no benefit, because relationships between main suppliers and their subcontractors are unaltered. Some voluntary arrangements have extended to include different tiers of suppliers and the desirability of extending the scope of collaboration in this way is noted in the draft Guide. Some features of collaborative arrangements, such as project bank accounts, serve to address small firms' concerns over payment delays. With increasing experience of voluntary arrangements, the extension of collaborative practices to smaller suppliers may be expected to increase – particularly if clients take note of the need for collaboration throughout their project teams. But it is not realistic to expect this to happen when firms are gaining their initial experience of partnering relationships.

Overall, there is no inherent incompatibility between the introduction of voluntary arrangements for collaboration and the aims of EU policy towards smaller firms. But care is undoubtedly required to safeguard their interests when establishing collaborative and longer-term relationships.

#### 7.3.3 Sustainable development and sustainable construction

Sustainable development embraces social, economic and environmental objectives. Sustainable construction is particularly focussed on environmental objectives, particularly the environmental impacts associated with the use of raw materials and other natural resources in the construction process and the energy and water consumption of buildings.

Voluntary arrangements for collaboration can promote these objectives, as outlined in the discussion of benefits from such arrangements in Section 5.8.3:

- Communications among project team members improve. This facilitates reduction of waste, both through optimising designs, and reducing errors on site. Moreover, achieving high environmental performance in buildings requires the envelope, structure and services all to contribute to maintaining the desired environmental conditions, with minimum use of external energy. This again requires good communications between specialists in the design phase, and the involvement of construction interests so that site works are undertaken with full understanding of the design principles and to quality standards consistent with the performance aims.
- Improved communications also facilitate the use of Life Cycle Costing (LCC) techniques because different parties can contribute from their experience to the data required for the application of an LCC approach to design.

Innovation to create more sustainable construction will in principle be fostered by the

sharing of risks which is a common feature of collaborative ways of working. Suppliers have more incentive to propose innovative approaches. Thus collaborative ways of working are consistent with the application of the EU Lead Market initiative to construction.

 Social development is encouraged through the more secure business environment offered by frameworks and strategic partnering. This is turn encourages investment in training and skills development.

# 7.4 Contractual, management and insurance issues

The Specifications indicated that the study should consider contractual, management and insurance issues relevant to the introduction of Voluntary arrangements for collaboration, particularly as they affect SMEs.

#### 7.4.1 Contractual

In the earlier discussion (Section 2.3) of the characteristics of voluntary arrangements, it was emphasised that these are not substitutes for a contract and that one of their main benefits is to provide a project environment which facilitates effective discharge of contractual obligations. The Country Reports show that collaborative arrangements have been successfully established in a range of countries, without special contractual arrangements, and this underlines the complementary relationship that exists between contracts and voluntary agreements.

At the same time, if the parties to a contract wish to operate in collaborative manner it is clearly desirable for their contractual obligations and conditions requirements to be consistent with collaborative principles. This could lead to some aspects of conventional contracts (e.g. those dealing with payment mechanisms) being amended and more radically has led in some countries to the development of new contract forms which incorporate provisions aimed at encouraging a collaborative approach to project delivery. It is generally accepted in Member States with an Anglo-Saxon culture that forms of contract that are based on collaborative principles provide a better basis for collaboration in projects, although traditional forms of contract continue also be employed.

Contractual practice is a matter for individual Member Sates. It reflects local legal traditions, culture and business systems. Some Member States have inherently more collaborative contractual structures than others. The study cannot therefore provide a detailed overview of the ways in which the contracts employed in all Member States might influence the implementation of voluntary arrangements. However, as a pointer to the kinds of measures that might be introduced to facilitate collaboration, Annex K summarises the ways in which three 'collaborative' forms of contract developed in the UK in recent years aim to foster a culture of collaboration amongst members of the project team.

### 7.4.2 Management

Management practices and styles are at the core of collaborative arrangements and permeate the advice provided in the draft Guide. There are challenges for managements seeking to more towards collaborative ways of working; as such ways become more established, the overall impact is to introduce significant 'culture change' which some individuals may find difficult to accept. These may be particularly challenging for leaders of SMEs, who often bear personal responsibility for the commercial interests of their firms and may, at least initially, find a collaborative environment unsettling. Experience suggests that appropriate guidance can be provided, and that SMEs can adjust well. However, clients may need to take the

initiative in identifying the management needs and making provision for such guidance, in order to help SMEs to accommodate to and take advantage of new market frameworks.

#### 7.4.3 Insurance

They way in which insurance cover is provided for the parties to a project is a matter of local practice. The great majority of collaborations in the UK and Scandinavia have been established under conventional insurance arrangements where each party carries their own insurance. Hence, as with contractual provisions, current insurance arrangements cannot be a fundamental barrier to collaboration. Individuals with experience of collaborative arrangements, however, regard the introduction of project-based insurance where this has not previously been available as a useful development. There is experience to draw upon in countries where this form of insurance is well established, such as France and Belgium.

The introduction of longer term relationships such as strategic partnering will assist the development of forms of insurance that are not based upon single firms since these will enable insurers to come to a view on the track record of the firms dealing with a certain range of projects and also will give insurers the opportunity to adjust premiums for a set of projects in the light of experience. A single project, by contrast, does not provide scope for such adjustment.

The Study Team note that the Commission have instituted a study of insurance for construction in the EU<sup>32</sup>. This will undoubtedly cover the subject in much greater depth than has been possible in this study and will perhaps point to a need for greater use of project insurance. The Study Team would be pleased to assist the consultants on that study on any issues which relate to the introduction of collaborative ways of working.

<sup>32</sup> ITT ENTR08/007 - 28th May 2008

# 8. Promotion of voluntary arrangements for collaboration

#### 8.1 Overview of promotional context

The Synthesis and Assessment Report (Chapter 5) showed that in those Member States where there had been national initiatives to promote voluntary arrangements for collaboration, these had (a) stemmed from dissatisfaction, on the part of clients or government, with the performance of the construction sector and (b) had involved a range of policy and organisational measures including, crucially, changes to public sector procurement practices. In several other countries, contractors had been the original instigators of collaborative ways of working. However, these new practices could not be introduced unilaterally; the active cooperation and support of clients was required. In both situations, therefore, the introduction of collaborative approaches needed to chime with client perceptions of directions for change and to satisfy client requirements, such as those embodied in public procurement legislation.

To achieve such a change in practice requires many different interests first to become engaged with the change process and in time sufficiently convinced of the benefits that they become committed and make the necessary changes in their own sphere of responsibilities, whether those are policy, regulatory or operational. And since public sector practices are central to change in this field, political commitment to change is essential.

The exact ways in which such as process may be accomplished in any Member State will depend upon the starting point (perceptions of the need for change etc) and its institutional arrangements. The change models referred to in Annex F may be useful Guide to the actions needed. But a common initial step would be the creation of awareness that industry improvement may be brought about through the adoption of alternative ways of working. Promotion of the Guide will contribute to this process, but it must be recognised that many more actions will be required for the successful introduction of collaborative arrangements.

This chapter therefore considers how the Guide might be promoted and suggests some supporting actions that might be taken by the Commission which would help to create a climate conducive to change in countries where voluntary arrangements for collaboration are not widely employed. There is no suggestion that the Commission should support the whole change process in any Member State but in view of the potential benefits to European competitiveness form the wider adoption of voluntary arrangements, some pump-priming funding, going beyond financial support for publication of the Guide, might be appropriate. The Study Team first offer a set of suggestions which could extend the impact of the Guide, thereby capitalising on the investment in the study and the preparation of the Guide. These are then extended into a second set of suggestions, in which the Commission assists the initial studies on which any action in Member States would need to be based. Finally, there are some observations on the promotion of voluntary arrangements through links with other EU policy areas.

#### 8.2 Raising awareness: promotion of the Guide

#### English text

Making the Guide readily available and drawing attention to it is clearly the first step in raising awareness. On the assumption that the final, professionally designed and illustrated Guide would first be published in English, this might be sent by the Commission to:

National administrations

- Representative bodies at the European level
- Construction media

Through EU offices in Member States, there might be additional distribution to other bodies such as:

- Public authorities responsible for significant construction projects
- Audit bodies
- National representative bodies (including for SMEs)
- Major individual firms in contracting, design and materials supply

This, however, would depend upon a judgment in each Member State about the usefulness of distributing a document in English.

These distributions would of course be complemented by making the Guide available through the DG ENTR Website and the European Enterprise Network. The local centres of the Network in Member States are particularly well placed to bring it to the attention of clients and supply interests in their regions.

# Other languages

Many respondents to the consultations commented that the Guide should be made available in other languages; the impact of a Guide available only in English will be limited. The straightforward first stage would be to arrange for its translation into some of the more widely spoken EU languages – this would undoubtedly increase its accessibility.

#### Local editions

Readers of the Guide will be evaluating its content in the light of their local circumstances and many respondents indicated that they would wish it to include advice on local regulations, financial arrangements, sources of advice etc that would influence the creation of collaborative relationships. Thus the production of 'local editions' might be encouraged. These would need to be produced in individual Member States. The Commission might offer financial assistance for their preparation, or perhaps for a local launch event (see below).

One form of 'local edition' might be a publication orientated to SMEs and clients for SMEs. This could focus on such matters as the creation of frameworks which offered opportunities for SMEs, and the ways in which clients could offer expand market opportunities for SMEs by contracting with construction consortia.

### 8.3 Providing additional advice and guidance

### Making existing guidance more available

The Guide is an introduction the subject of voluntary collaborative arrangements; national administrations, firms and clients wishing to go more deeply into the subject will need to turn to other publications. Some are referenced in the Guide but may not be accessible owing to language limitations. One measure which could be taken to increase the range of guidance material available, and in particular to broaden the industry and cultural backgrounds from which this material originates, would be to arrange for translation in to English of some of the more significant texts that have been produced in different Member States, such as those of the *Regieraad Bouw* (Council for Reform in Building and Construction) in the Netherlands or the Agency for Enterprise and Construction, Denmark, and perhaps also the translation of some material into other languages also.

#### Widening the scope of guidance

The Country Reports underline the importance of public procurement practices in the promotion of new ways of working. The consultations showed extensive concern that these – as implemented at Member State level - inhibited the introduction of collaborative arrangements. The Case Studies prepared for the Guide touch on some of the issues concerned but their main focus is on mechanisms of collaboration and outcomes, once project parties have been selected. They need to be complemented by advice and examples relating to the procurement process – the identification of suitable supply partners, the use of 'soft' selection criteria, the extent to which public procurement can be conducted in a collaborative manner etc. Events held to promote collaborative practices would need to draw on this wider guidance, as well as the more focussed material in the Guide and supporting publications.

#### Facilitating international liaison

Networks of public sector construction clients could be used to promote understanding of voluntary arrangements and to enable international exchange of experience. These operate both at the level of national bodies and of municipalities – some are the legacy of previous EU Framework research projects. The Commission might support exchange of information through such networks.

The Lead Market Initiative provides scope for such support. The recent Call for network proposals<sup>33</sup> under that initiative would provide funding for exchange of experience amongst public sector construction clients, with the aim of promoting sustainable construction. Voluntary arrangements for collaboration can contribute to the achievement of a more sustainable construction sector, as discussed in Section 7.3.

# 8.4 Taking the next step - generating the motivation for change, and assessing the barriers

As discussed above, distributing or publicising the Guide will not of itself lead to the adoption of voluntary collaborative arrangements; it may raise awareness and cause some clients and firms to consider how they might adopt collaborative relationships, but they will not be able to change their practices unless there are supporting changes in regulatory etc systems. This will require commitment and complementary action from many interests.

One way of starting the change process would be to arrange one or more launch conferences for the Guide. These would provide opportunities for clients and supply interests with experience of collaborative working to present that experience, and show how they were able to satisfy regulatory requirements. The conference(s) could be seen as the start of a cascade process, in which debate over the merits of collaboration, and appraisal of the barriers, would take place at progressively more local levels.

The Country Reports show that an enquiry or study, commissioned at national level, often provides the initial focus for discussion of the need for change. Such an enquiry might be an outcome of a conference or other event in an individual Member State. It would need to be planned and managed locally, but the Commission might offer support, perhaps through offering financial support for inputs from Member States with experience of collaborative ways of working.

# The study might consider:

• The nature of the construction market

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<sup>33</sup> http://ec.europa.eu/enterprise/leadmarket/public\_procurement\_networks.htm

- Clients' perceptions of the industry, and significant events and issues which may have shaped these perceptions
- The regulatory framework for construction, and its impact on different forms of collaboration
- Conventional procurement practices by clients (particularly public clients)
- The role played by audit bodies and their views on collaborative ways of working
- The scope for introduction of collaborative ways of working, with and without legislative change
- The benefits that might be obtained through such changes

It would conclude by proposing a strategy for achieving change, drawing as appropriate of the approaches used in other Member States which were outlined in Chapter 5, the Synthesis and Assessment Report.

## 8.5 Promotion through other Commission policies and initiatives

Collaborative ways of working might be promoted through linking such approaches with other Commission schemes and initiatives. Such a link might most clearly be made when these involve major construction projects – eg the in the development of strategic transport links or the creation of an energy grid. These demanding projects are exactly those where collaborative arrangements are most likely to result in financial and other benefits. There could be encouragement for collaboration, coupled with support for the development of relevant skills and competences in the firms concerned. Thus Structural Funds and the European Investment Bank could be instruments for the promotion of collaborative approaches to project delivery.

At a much smaller scale, programmes aimed, for example, at reducing energy consumption in housing require inputs from a range of skills which will often be found in separate SMEs. There might be some encouragement for them to form strategic partnerships and consortia, in order to increase their effectiveness in helping to meet the challenges of climate change.

An examination of EU funding schemes might reveal other opportunities for supporting the development of voluntary arrangements for collaboration.

## 9. Final observations

#### 9.1 The need for long-term commitment

This report has reviewed the study commissioned to assess the experience of certain Member States in their use of voluntary arrangements for collaboration and the processes that have led to the present draft of the Guide and associated Case Studies. But the last chapter has made clear that publication and subsequent promotion of the Guide can only be an initial step in the process of stimulating change in the way that construction projects are procured and delivered in Member States. It is a starting point for raising awareness of different ways of working, but the experience of countries where national initiatives have been taken in this field is that the pressure for change needs to be sustained for years if not decades. Construction is a very large and diverse industry, and the culture change implied by the adoption of collaborative ways of working will diffuse only slowly through the sector.

This underlines the key role of public procurement in the change process. Public clients can continue to influence the sector, through the adoption of collaborative principles, long after specific promotion initiatives have ceased. And the changes that have taken place in European construction markets during 2008 have underlined the importance of establishing the principles of collaboration in public procurement. Economic pressures have caused some client and supply interests to revert to traditional procurement practices, with price-based tendering and in some cases arbitrary price reductions imposed on suppliers. Such practices will create again the distrust that is the basis of poor industry performance. Public sector clients – although always under pressure to secure value for money - can take a longer-term and broader view of the value that can be obtained through the types of collaborative relationships considered in this report.

But even in the public sector there is a risk that intense price-based competition will be equated to long-term value; monitoring bodies such as national audit bodies can help to ensure that guidelines which encourage collaborative practices are followed.

#### 9.2 Creating the business case for voluntary arrangements – the role of agreed indicators

Collaborative ways of working will be adopted only when the parties involved see good prospect of benefit from them. Publication of the Guide will help to foster that perception but data on the performance of local projects will be more compelling. This requires the development, at national level, of agreed performance measures and reliable means of data collection. The process of developing agreed measures of performance will itself help to bring various interests together.

A strategy for the promotion of voluntary arrangements would need to include proposals for the development of data that will help to convince construction and client interests of the prospective benefits. This has been the role of demonstration projects in several of the countries studied. The Commission might assist the process by facilitating international exchange of experience on such projects and their associated data collection and promotional processes.

#### 9.3 European performance indicators

However, having multiple sets of national indicators will not assist the development of a European perspective on construction competitiveness. Construction has a significant role to play in the achievement of many European policies and it would be helpful if there were a means of monitoring the performance of the sector – both in terms of delivery and

sustainability - at the European level. This would be facilitated by the development of a core set of indicators that could be used in any Member State. There is now considerable experience to call upon, in the Member States covered by the study, both in the construction of indicators and in data collection processes. Sets of construction 'Key Performance Indicators' are, for example, published annually in the UK. Basic indicators would enable monitoring of trends in costs and delivery times, and in the ability of firms to adhere to estimates and delivery schedules. The performance data could then be used to analyse the influence that procurement and project management processes had on project outcomes. A more comprehensive set of indicators would include measures of client and user satisfaction, and environmental performance.

The core set of European indicators could be a starting point for any Member State wishing to establish, through pilot projects, whether collaborative processes actually lead to tangible benefits in their situation and the extent of such benefits. They could then be expanded as necessary through local initiative to reflect local needs and priorities.

The European indicators would also support the long tem commitment to change. They would facilitate comparisons of performance across Member States, enabling national administrations to identify shortfalls in performance in their construction sector and to take appropriate action. Surveys at 5 or 10 year intervals would reveal comparative progress.

#### 9.4 A catalyst for change

The discussion above represents a further widening of the context for this study and the Guide. As Chapter 8 showed, promotion of the Guide is but a starting point in the promotion of voluntary arrangements. But if the experience of some Member States is any guide, voluntary arrangements are themselves only one aspect – albeit an important aspect – of a wider industry change process that is needed in order to meet clients' current and future needs. This embraces also the sector's approaches to assessing and responding to operational requirements, its use of new technologies and its care for and development of its workforce. As the study has shown, collaborative practices can contribute to progress in these dimensions, and indicators can monitor that progress.

Production and promotion of the Guide, therefore, could be a catalyst for much wider change, to the benefit of all the stakeholders in construction – not only clients and supply interests but also the communities and individual who are the ultimate beneficiaries.

# **ANNEXES**

- A. Technical Specification for study (from Invitation to Tender)
- B. Summary of study
- C. Record of meetings of the Management and Steering Group
- D. Explanatory Note on voluntary arrangements for collaboration
- E. Information database: Publication references
- F. Voluntary Arrangements Rationales and Responses
- G. Organisations in Study Team Member States consulted on the Country Reports and draft Guide
- H. Outline of Guide presented to second meeting of MSG
- I. Guide consultations: documents
- J. Organisations outside Member States of the Study Team consulted on the draft Guide
- K. A comparison of three forms of contract developed in the UK to support the principles of collaborative working
- L. Construction Business Systems

# Annex A Technical specification from ITT ENTR/07/008

#### 4. TECHNICAL SPECIFICATIONS

#### 4.1 DESCRIPTION OF THE TASKS

#### 4.1.1 Objectives

This contract forms part of the initiatives which the European Commission, in close cooperation with the stakeholders concerned, wishes to support in the context of improving the competitiveness of the construction industries. The specific aim of this action is to define a framework concerning the promotion of voluntary arrangements for collaborative working in construction projects.

The proposed action should clarify the overall benefits/effects of applying collaborative working methods on the competitiveness of the construction sector and the European economy at large and whether this is compatible with the objectives set in other EU policy fields (competition, public procurement, etc.). It should also look at the potential role that the EU could play in promoting voluntary arrangements for collaborative working, in particular for SMEs.

### 4.1.2. Subject of the services

The Commission invites tenders for carrying out a study which provides the basis for developing an EU wide framework for the promotion of voluntary arrangements for collaborative working in construction projects which complies with EU policies and establishes the feasibility of EU guidelines for SMEs to enter into such schemes, including relevant contractual, management and insurance provisions.

# 4.1.3. Work programme

For the purpose of this contract, "voluntary arrangements for collaborative working" are understood as set ups of relationships, decision making and management between contracting parties, professional services, industry suppliers and other relevant parties which enable meeting the objectives of a construction project or a series of projects in a cost-effective manner which is mutually beneficial for all parties. This set up might be agreed by the various parties involved though relevant framework agreements. It does not relate to traditional forms of partnering where construction companies have a privileged relationship with clients.

The study should critically review a sufficient number of national approaches towards voluntary arrangements for collaborative working and analyse their overall benefits/effects on the competitiveness of the construction sector in comparison with a traditional set up of the construction process and of the various services related to it. The analysis would also consider how well these concepts are compatible with other EU policies, in particular in the fields of public procurement, competition and Small and Medium-sized Enterprise (SME) policy, and identify any possible adverse effects.

The contractor should identify relevant contractual, management and insurance arrangements which are compliant with EU legislation and propose accordingly an EU guide on good practice which could help SMEs entering into a collaborative working scheme.

The work programme will include at least the following elements:

- a) To critically review schemes identifiable in Europe towards developing and promoting voluntary arrangements for collaborative working in construction projects. The review will cover a representative number of cases in Europe. These cases need to include those identified in Belgium, Denmark, Finland, the Netherlands, Norway and the United Kingdom, as well as up to four further examples identified by the contractor and/or the Monitoring and Steering Group mentioned below. It will explain the scope and the key features of the different approaches, and assess their effectiveness especially in terms of achieving common goals and objectives, integrating competencies, raising mutual trust, improved transfer of knowledge/communication between parties, better project and risk management, as well as resolution of conflicts. Particular attention should be paid to assessing these factors in the light of SME participation in such arrangements.
- b) To analyse on the basis of the results of the above-mentioned review the key success factors and constraints for the deployment of voluntary agreements for collaborative working in the EU and the likely benefits/effects on the competitiveness of the construction sector and the economy at large, and on the EU internal market for construction and related services. This would also include an assessment of the potential transferability of some experiences originating from a specific country to other national contexts and of the legal, contractual and cultural barriers to overcome.
- c) To examine the fitness and compatibility of voluntary arrangements for collaborative working in relation to and with other EU policies, in particular in the fields of public procurement, competition, SME competitiveness and sustainable development. In particular, the contractor should address the following issues:
  - To what extent are the various practices related to voluntary arrangements compatible with the EU rules for public procurement? What are critical points and how can they be solved?
  - What are the risks that some firms or categories of enterprises would be locked out or encounter difficulties of market access by such arrangements, in particular when those concern more than a specific project or are concluded very early in the project development process<sup>34</sup>? Is there a risk of reducing competition and, over time, even an increase in costs?
  - What types of project would be most / least suited for voluntary arrangements and why? What is the suitability with regard to the size of organisation and the complexity of projects? Would SMEs be able to obtain a sufficient margin of manoeuvre when negotiating such schemes with partners?
  - How does this concept affect issues such as sustainable construction and life cycle costs?
- d) To develop based on the above mentioned analytical work an EU guide on good practice which would facilitate the setting up of voluntary arrangements for collaborative working in construction projects and related services (financing, insurance, etc.). It needs to provide practical guidance on contractual, management and insurance arrangements which are particularly suitable for SMEs and which enable or facilitate the observance of sustainable construction methods and the inclusion of Life Cycle Costing. The approach would outline any special requirements to adapt the mechanism according to the type of project and/or construction assets concerned, and to different national contexts.

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<sup>&</sup>lt;sup>34</sup> Within the scope of the study, the competition concern could be possible foreclosure effect that might result from arrangements concluded between undertakings that manufacture products or provide services which are considered by the clients as complements and are, on the whole, necessary to realize a construction project.

- e) To draw conclusions on the way and the extent to which voluntary agreements for collaborative working in construction projects and related services could expand in the EU and on the value that might be derived from further measures to be initiated or undertaken by the Commission and, as appropriate, to make recommendations for the scale and approach of such measures.
- f) To contact a representative range of public and private stakeholders of the construction sector<sup>35</sup>, at relevant levels<sup>36</sup>, in order to know their views under b), c) and d). The results of these contacts will be assessed and presented in a well structured way in a specific part of the final report or annex to it.
- g) To participate before the end of the 15-month duration of the tasks in a one-day evaluation and validation workshop to present the draft results of the work undertaken. The contractor would ensure the participation of 2 representatives in the workshop, and draw up and forward to the Commission detailed minutes of the workshop within one week following it.
- h) To provide a progress report and a final report as specified in point 4.2.

The Commission will ensure general supervision and guidance of the study through a Monitoring and Steering Group chaired by the Commission and including representatives of relevant Commission services, Member State representatives and other stakeholder experts invited by the Commission. It is planned to hold three meetings of the Group. The contractor shall ensure the participation of two representatives in these meetings and draw up detailed minutes to be forwarded to the Commission, within two weeks following the meeting in question.

#### 4.1.4. Methodology

For the work to be undertaken, the contractor will apply the methodological tools and format that he proposes and develops in his bid, including a clear timetable and resource plan. The contractor should foresee appropriate resources for linguistic purposes (bibliographic search, translation, local interviews, etc.).

#### 4. 2. REPORTS AND DOCUMENTS

The Contractor must provide the required reports and documents in accordance with the conditions of the standard service contract appended in Annex 5.3.

All numbers of pages refer to a paper version of A4 size. The reports, their summaries, and the manuscript and material for publishing have to be submitted in electronic version as Word (.doc) documents.

- A progress report must be submitted no later than six months after the signature of the contract.
- The **draft EU guide** on good practice to set up voluntary arrangements for collaborative working no later than **eleven months** after the signature of the contract.
- The **final report and final version of the EU guide** must be submitted no later than **13 months** after the signature of the contract.

<sup>35</sup> e.g. public authorities in charge of issues related to the construction sector, industry associations (there exist more than 200 of such organisations at European level, see http://www.eurafedac.com), single enterprise.

<sup>&</sup>lt;sup>36</sup> International, European, national, regional and local

The reports and the guide must be submitted in English, together with a 10-page summary in English, French and German.

The length of the progress report shall not exceed 60 pages, and that of the final report 150 pages, including illustrative material; the main supporting documents are to be attached as annexes.

The contractor shall provide five copies of the final report and its annexes and of the three language versions of the executive summary, together with all materials necessary, ready for reproduction. In addition, these documents must be forwarded by e-mail, on floppy disk or on CD-ROM. The same rules apply to the guidelines for public procurement.

#### 4.2.1. The progress report

- must present the general framework for the study and a glossary describing the relevant terms that are to be used;
- describe the methodology used, including details on the references and information that are utilised and on their sources, on measures taken to ensure quality of the work, and on consultation made or foreseen:
- specify how the work was undertaken in respect of the agreed work programme;
- adequately present the results of the work undertaken with regard to the element as well as first significant results of the elements b) and c), and an advanced approach to the remaining items of the work programme set out under point 4.1, and explain the work undertaken and the approach chosen for the work ahead.

#### 4.2.2. The final report

shall provide the Commission with the results of the study and information for internal evaluation purposes, a part or all of which the Commission may want to disseminate. The contractor must address the following points:

- Background to the study, terms of reference and understanding of the work to be performed;
- The methodology used, including details on the references and information that have been utilised and the sources of these, on measures taken to ensure quality of the work, and on consultation made;
- How the work was undertaken in respect of the work programme;
- The characteristics of the work undertaken (ideas; innovative elements; technical feasibility and likelihood of findings resulting in successful further work, positive and negative aspects experienced);
- The collaboration established during the course of the work (for example, involvement of Commission services and national administrations, public and private bodies in the sphere of construction; industry associations and authorities at local, regional and national level; experts and special knowledge bodies; etc.).
- The comprehensive results of the work undertaken with regard to all elements of the work programme set out under point 4.1.3.

# Annex B Summary of study

# Voluntary arrangements for collaborative working in the construction sector

Unit ENTR I5 (Construction and Pressure Equipment) within DG Enterprise and Industry of the European Commission have commissioned a European research consortium to undertake a study of the use of 'voluntary collaborative arrangements' in construction. The study commenced in January and will run through 2008.

The partners in the consortium are:

Manchester Business School (lead) Belgian Building Research Institute Danish Building Research Institute Technical University of Delft, Netherlands Technical Research Centre of Finland (VTT) SINTEF Building and Infrastructure, Norway Swedish Association of Construction Clients

By 'voluntary collaborative arrangements', the Commission refer to such arrangements as: project partnering; strategic partnering; framework arrangements; alliancing, etc. Amongst the aspects to be covered in the study are:

- The extent of use of such arrangements in the countries represented in the consortium, and more widely in Europe
- The benefits gained
- How such arrangements have been promoted
- Compatibility with EU policies, notably on procurement, competition (especially the implications for SMEs) and sustainable development
- Success factors and problems

The study will aim to assess the potential contribution of such arrangements to the competitiveness of the European construction sector, and to the European economy more generally. It will result in advice on the wider promotion of such arrangements in the EU and 'good practice' guidance which might be used in such promotion, together with recommendations for policy changes which would support the wider implementation of collaborative arrangements.

The study will be conducted through the development of:

- a. A set of 'country reports' from the consortium members
- b. A 'synthesis and assessment' report drawing together the lessons from the country reports
- c. The Good Practice guidance and associated recommendations, which will be the subject of EU-wide consultation

DG ENTR have established a Monitoring and Steering Group for the study with membership from national administrations, construction representative bodies and other DGs. A consultative Panel will also be established in each country to provide insights and comments for the various reports.

Contacts: L

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1st February 2008

# Annex C Record of meetings of Management and Steering Group

# Annex C(1)

# Record of the first meeting of the Management and Steering Group – Brussels - 5th February 2008

#### **Present**

Antonio Paparella (Chair) DG ENTR I5 Claes Andersson DG ENTR I5 George-Marian Isbasoiu DG ENTR E4

Alain Sagne Architects' Council of Europe

Agnes Thibault EBC
Geert Herbots CEETB

Christine Beunen CEPMC/ECCREDI
Christine Marlet EuroGypsum

Christine le Forestier FIEC John Haynes UEPC

Vincent Detemmerman
Marietta Driva
Construction Confederation, Belgium
Ministry of Public Works, Greece
Liam O'Connell
Iveta Putine
Ministry of Economics, Latvia

Karel Valk Department of Housing, Spatial Planning and the

Environment, The Netherlands

Katarina Bzouska Ministry of Construction and Regional Development,

Slovakia

Adriana Čegec Ministry of the Economy, Slovenia

Bülent Yalazi Ministry of Public Works and Settlement, Turkey Akatan Yigit Ministry of Public Works and Settlement, Turkey

Roger Courtney University of Manchester (Study Team)
John Rigby University of Manchester (Study Team)

Georges Klepfisch Belgian Building Research Institute (Study Team)

# **Apologies**

David Lowe University of Manchester (Study Team)

### Introduction

Mr Antonio Paparella (DG ENTR) welcomed the members of the MSG to its first meeting and invited those present to introduce themselves. He then outlined the Commission's reasons for establishing the study, noting that the Commission were aware that new types of relationship, going outside purely contractual obligations and with actors in construction projects departing from their traditional roles, were regarded in some countries as significant contributors to improved performance by the construction sector. The Commission therefore wished to examine the advantages and the problems in such voluntary arrangements, and the way that they related to European policies, with the aim of providing practical guidance on how they might be established and operated, with a particular focus on the participation of SMEs. A range of voluntary arrangements would be studied, and the Commission would be open to proposals for approaches that should be included, although it was important that these should be applicable across a range of countries. The Commission had asked the contractors to investigate the experience of voluntary arrangements in a number of countries, to consider

their relevance to Member States in general and their potential impact on the competitiveness of the EU, and to produce a set of guidelines for clients and firms in the construction sector which the Commission could promote

#### **Presentations**

Professor Courtney and Dr Rigby of the Study Team then presented the membership of the Study Team, the Team's interpretation of the remit from the Commission, their intended work plan and the management arrangements for the study. They also provided a timetable for reports from the study and indicated approximate dates for future meetings of the MSG. Their PowerPoint slides accompany these minutes.

The Study Team explained how industry experience of voluntary arrangements would be input to the study. In each of the countries studied, there would be a panel of consultees drawn from a range of backgrounds who would be invited to give views on the issues covered in the study and would be asked to comment on draft reports and the Good Practice guide. It was expected that there would be some 20 to 30 consultees in each country represented in the Study Team. There would also be consultations on the Good Practice guidance in other MS and it was envisaged that organisations represented on the MSG would also invite their members to provide comments.

The Study Team representatives invited Members of the MSG to communicate with them:

- to seek clarification of any aspects of the study
- to suggest reports and analyses relevant to the study, and
- to propose individuals and organisations who could contribute to the study from their experience of voluntary arrangements.

Discussion of different aspects of the study took place during the presentations. For convenience, the discussions are summarised in one section, below.

#### **Discussion**

Meaning of 'voluntary arrangements'

There was considerable discussion of the term: 'voluntary arrangements'. Amongst the points made were:

- Voluntary arrangements were not defined by any particular form of contract. The term related to the ways in which actors in a project or set of projects interacted with each other how their behaviours and responsibilities might change and the incentives put in place to promote and reward actions and behaviours that led to success in the project. Hence voluntary arrangements helped to create an environment or 'culture' for the project in which the contractual obligations were effectively discharged. They were not a substitute for contractual obligations but assisted the effective discharge of those obligations.
- For this reason, well-understood forms of undertaking projects (e.g. sub-contracting, co-contracting, long-term contracts, public-private partnerships) were not good descriptors of forms of voluntary arrangement. Projects undertaken through any of these forms could involve voluntary arrangements aimed at improving outcomes, but this was not a requirement. (It was also confusing that the English word 'partnership' did not have the same meaning as 'partnering' see discussion below.)
- Similarly, changes noted in some countries in the way that the technical aspects of projects were specified – to provide earlier full specification – did not necessarily involve voluntary arrangements although they represented a move towards greater integration of project teams.

Participation in voluntary arrangements

Points made in the discussion included:

- The Study Team had placed considerable stress on the role of the client in stimulating and playing a full part in voluntary arrangements. This was because the client had a key role in setting the project environment or 'culture'. However, voluntary arrangements did not need to include the client they could describe the way in which principal contractors related to sub-contractors or to materials suppliers. Studies indicated, though, that the main benefits came when the client participated fully. Commitment to the collaborative behaviour promoted by voluntary arrangements was an aspect of the business strategy of participants.
- Most of the voluntary arrangements that had been documented in previous studies concerned clients, designers and contractors (including sub-contractors). The Study Team were aware that suppliers and distributors of products and materials also participated in such arrangements and, with the aid of the MSG, wished to identify examples where firms in the products and materials sector had entered into such arrangements.
- Because the creation and negotiation of voluntary arrangements required an investment of time, they had tended to be found in larger, more complex projects where the benefits were greater. For that reason also, they had tended not to involve SMEs. It had been claimed that some forms of voluntary arrangement, such as frameworks, inhibited participation by SMEs in projects. The role of SMEs would be a focus of the study, but not to the exclusion of considering arrangements that involved larger firms and providing guidance on these. The study would aim to provide guidance on arrangements that were suitable for smaller projects as well as those for larger projects

*Scope of the study* 

The MSG noted that the Study Team had put forward five categories of voluntary arrangement. In discussion of the possible inclusion of additional types of arrangement, the following points were made:

- In some MS, governments had made agreements with the construction sector as a whole, e.g. on greenhouse gas emissions. These were not intended to be covered by the study, which focussed on arrangements relevant to the delivery of projects. For the same reason, networking unless directly related to project delivery would be considered to be outside the study remit.
- Firms often carried out activities that were not part of their contractual obligations; for example product suppliers trained installers and provided advice services. And firms collaborated on projects to address issues such as health and safety obligations. However, these could be considered part of normal commercial activities.
- SMEs in Austria and Switzerland had cooperated in developing capabilities in order to be able to tender collectively (as a 'virtual enterprise') for projects. This could be an example of the 'project consortium' category identified by the Study Team.
- As noted previously, public-private partnerships were a form of contractual relationship although they could include incentives for collaborative behaviours. In English, 'partnership' described both a form of legal entity (i.e. a type of firm) and a way of co-operating; it was preferable to use 'partnering' in the context of the study.
- Some small clients co-operated in order to bring about construction works; an example was when a group of households decided to construct new housing. The focus of the study was, however, on arrangements that influenced the delivery of the works.

The study would examine the experience of at least seven MS and it was possible for more to be included, especially if these represented different traditions in the organisation of construction works. However, it was important that any additional country should have relevant experience of the types of arrangements that had been outlined, or of other types relevant to project delivery.

Other aspects of the study

Amongst other points made in discussion were:

- The study appeared to be focusing purely on the processes of construction (e.g. by its use of the term 'construction services') without attention to the outcomes and in particular the quality and sustainability of the final constructed product. In response, the Study Team pointed out that the benefits that had been found from voluntary arrangements included higher technical quality, less waste and greater satisfaction by building occupants and by those concerned with the whole project process. Thus quality and sustainability aspects would certainly be included.
- The increasing complexity of projects, and of the requirements that had to be met (e.g. on thermal performance) was promoting closer working amongst all the actors in construction. Voluntary arrangements were a way of encouraging such closer working.

Voluntary arrangements that involved clients often included non-traditional forms of dispute resolution procedure and this would be examined in the study. In the same manner, different types of insurance arrangements had at times been introduced and the remit of the Study Team included consideration of the influence of insurance on the arrangements. It was noted, however, that other studies were in progress that concerned insurance.

# Summing up

Antonio Paparella thanked the members of the MSG for their inputs. The discussion had helped to clarify the concept of 'voluntary arrangements for collaboration' and the Study Team should now digest the points made and produce a short note which discussed voluntary arrangements and in particular set out the relationship of contracts to such arrangements. This would help everyone to understand the concepts involved and would clarify the scope of the study.

Several suggestions had been made for additional countries (e.g. Switzerland and Austria) to be included in the study and he invited all members of the MSG to consider this question and, more generally, whether there were additional forms of voluntary arrangement that should be included – bearing in mind the points made in discussion.

Finally, he reiterated that he and the Study Team would be pleased to receive comments and proposals for study topics from members of the MSG following the meeting.

Date of next meeting

The second meeting of the MSG will take place in early July, possibly in Week 28.

Manchester 7th February 2008

Annex C(2) Record of the Second Meeting of the Monitoring and Steering Group (MSG) - Brussels – 9th July 2008

#### **Present**

Antonio Paparella (Chair) DG ENTR I5

Agnes Thibault EBC

Christine Beunen CEPMC/ECCREDI

John Haynes UEPC John Faraday FIEC

Josiane Camilleri Ministry for Resources and Rural Affairs, Malta

Robert Wakeling DG Markt Magda Kopczynska DG Markt

Roger Courtney University of Manchester (Study Team)
John Rigby University of Manchester (Study Team)

Georges Klepfisch Belgian Building Research Institute (Study Team)

# **Apologies**

Christine Marlet EuroGypsum

Marietta Driva Ministry of Public Works, Greece

#### Introduction

Mr Antonio Paparella welcomed members to the second Monitoring and Steering Group Meeting for the study and noted the apologies. He then invited the Study Team representatives to make a presentation of the work which had been undertaken so far during the project, and which had been reported in the Progress Report delivered to the Commission on Friday 20<sup>th</sup> June.

# Presentation by the Study Team

Professor Courtney (RC) and Dr Rigby (JR), for the Study Team, gave an overview of the Progress Report, Professor Courtney covering the aims and organisation of the project (Chapter 1), Dr Rigby covering Definitions and links with EU policies (Chapters 2,3) and the Information base (Chapter 4) and then Professor Courtney covering the Country studies and Synthesis Report (Chapter 5), the outline of the proposed Guidance and the Case Studies (Chapters 6, 7), with Dr Rigby completing the presentation with a summary of future work and deliverables and issues for the MSG to consider (Chapter 8). The PowerPoint slides for these presentations accompany these minutes.

Discussion of different aspects of the study took place at the conclusion of each individual presentation. For convenience, these separate discussions are brought together and summarised below.

#### Discussion

Definition of Voluntary Arrangements

The MSG noted that an Explanatory Note had been prepared following discussion at the first meeting of the MSG and that this, somewhat revised, was the basis of Chapter 2 of the Progress Report. There had been no comments from MSG members on the Explanatory Note, and it seemed that it had succeeded in clarifying the subject matter of the study.

Amongst the points made in further discussion of the definition of voluntary arrangements were:

- The boundary between contractual matters and voluntary arrangements was at times blurred; the Report noted that some measures that supported voluntary collaboration were often reflected in contractual terms. The distinction between a voluntary arrangement and a contractual obligation might not be the same in all legal systems, and while the study would explore legal aspects, it could not provide detailed analysis at the national level.
- There was a risk that voluntary arrangements could lead to anti-competitive practices, However, the Study Team were aware of this; most of the arrangements covered in the study concerned the way in which parties carried out a project following selection processes that complied with EU rules and the reports from the countries studied had emphasised the need to comply with those rules.
- Voluntary arrangements were not an alternative to a contract there was always an
  explicit or implied contract in the relationship between parties to a construction
  project.
- The arrangements reported in the Progress Report appeared to be confined to collaboration amongst firms from the same country, but there were examples of international collaboration on projects. The Study Team representatives noted that in general in the study there needed to be a careful distinction between the voluntary arrangements covered in the study and 'normal business practice' in which firms collaborated to undertake projects, sometimes across national boundaries. They had not so far identified distinctive forms of collaboration which involved firms from different countries and perhaps this was a reflection of that fact that trust and confidence were more easily generated if firms shared a common culture and business environment.
- A new standard on life-cycle costing (EN15686 Part 5) might be relevant to voluntary arrangements and the work of the Study Team.

The Study Team invited MSG members to come forward with examples that would illustrate the different types of voluntary arrangement that were being studied. In response, the representative of EBC referred to co-operatives of SMEs which had been created in France and Italy to compete for public contracts and offered to provide further information. The Study Team welcomed this offer.

# National approaches and experience

The MSG noted that not all countries had identifiable national 'approaches' to the promotion of voluntary arrangements but that there were common elements where such approaches existed. In some countries, individual firms and clients had taken a lead in promoting collaborative ways of working. Each country exhibited a different pattern of use of voluntary arrangements and even in countries (such as the UK) where there were indications of extensive use, data on usage was incomplete. Consequently, estimation of overall benefits was not straightforward.

It was suggested that benefits might be projected from the experience of individual projects; moreover, the case for adoption of voluntary arrangements would be strengthened if the benefits could be related to the objectives of the parties when adopting such measures. For example, if the principal concern was poor quality of outputs, did quality actually improve?

The different contexts for implementation of voluntary arrangements (summarised in the discussion of national Construction Business Systems) would affect the benefits obtained and would need to be considered in the study. The Progress Report had noted that some countries

(eg Belgium) had more collaborative Business Systems. Even there, however, there was evidence that the explicit adoption of collaborative ways of working provided benefits.

Proposed Guidance and Case Studies

The MSG considered the format for the proposed Guide and Case Studies. Amongst points made in discussion were:

- The proposals were sound in principle, but the Guide would need to be carefully orientated to its intended audience. A very practical 'Toolkit' approach should be taken
- It was important that the Case Studies should be compliant with public procurement rules and it might be helpful if the relevant Directorate General examined them at draft stage.
- There should be encouragement and advice for SMEs and some of the Case Studies should illustrate SME involvement in voluntary arrangements.
- While detailed guidance for national implementation would not be possible, the Guide should recognise that implementation should respect the requirements of different national regulations and practices.
- The Case Studies should where possible include estimates of costs and benefits.
- The Case Studies should be drawn from as wide a range of countries as possible, to illustrate that voluntary arrangements were not confined to the principal study countries. The Study Team noted that explicit consultation on the Guidance would take place in four countries not included in the original reports and, with the aid of MSG members, in others also.
- Ultimately, however, firms and clients would adopt voluntary collaborative arrangements because they considered that these would provide benefits, taking this business decision in the light of all circumstances. The Guide could not cover every matter that they would need to consider.

#### Summing up

Summing up the discussion, Antonio Paparella thanked MSG members for the inputs and invited them to continue to contribute to the study. He would particularly like to see examples of voluntary arrangements from a wide range of countries reflected in the study outputs and estimates of benefits based on the experience of the use of such arrangements in individual projects.

At the next meeting of the MSG, the Group would consider a draft of the Guidance and a preliminary report on the findings of the study.

Date of next Meeting

The third meeting of the MSG would was arranged for Thursday 11<sup>th</sup> December 2008.

Manchester 16th July 2008

# Annex C(3) Minutes of the Third Meeting of the Monitoring and Steering Group (MSG) - Brussels – 11th December 2008

#### **Present**

Antonio Paparella (Chair) DG ENTR I5

Tim Krogel EBC

Christine Beunen CEPMC/ECCREDI

Rudi Klein Specialist Engineering Contractors Group, UK

John Haynes UEPC
Adrian Joyce ACE
Christine Le Forestiere FIEC

Josiane Camilleri Vassalo Ministry for Resources and Rural Affairs, Malta

Robert Wakeling DG Markt D3 Giacomo Gattinari DG Markt D3

Roger Courtney (RC) University of Manchester (Study Team)
John Rigby (JR) University of Manchester (Study Team)

**Apologies** 

Georges Klepfisch Belgian Building Research Institute (Study Team)

#### Introduction

Mr Paparella welcomed those attending the Third Monitoring and Steering Group Meeting for the study of voluntary arrangements in construction. He then invited the Study Team representatives to make a presentation of the work which had been undertaken so far during the project, and in particular that carried out since the previous meeting of the Group which had been reported to the Commission in a Progress Report delivered on 20<sup>th</sup> November accompanied by a draft Guide and Case Studies.

# Presentation by the Study Team (1): Introduction, Guide and Case Studies

The PowerPoint slides from the presentations are available from the MSG Website]

Dr Rigby briefly reminded members of the MSG of the aims and structure of the study and summarised progress since the previous meeting.

Professor Courtney then presented the Draft Guide and Case Studies, noting that these followed the structure and content that had been endorsed by the MSG in July. He outlined the consultations that had taken place, including in four additional countries not represented in the Study Team, and reviewed the main themes in the comments received. Overall, however, the responses had been positive, with the Guide being considered a useful document for stimulating consideration of voluntary collaborative arrangements. There had been requests for greater detail, but the Guide was intended to be relevant at the EU level. This limited the degree to which it could go into detail, since national requirements and practices would influence the application of collaborative arrangements. Similarly, some consultees had wished the Guide to be more directed towards SMEs; it did discuss types of collaboration that were relevant to SMEs but the main benefits of partnering, alliances etc were found in larger projects where SMEs might not be principal parties although they would be in the supply chain. Hence he thought that groupings of interest representing SMEs, rather than individual enterprises, were a more relevant audience for the Guide. The third theme in comments received from the consultations was for the document to be more accessible, with less 'solid text'. The Study Team accepted this and had made changes to improve readability. But the comments also underlined the need for the Guide to be translated – if it were only available in English its value would be limited.

Professor Courtney noted that all the suggestions for 'Further information' in Section 5 of the Guide were English language documents and indeed those in the current list all originated from the UK. This was unfortunate since it detracted from the European nature of the Guide. As a result of a discussion with the Project Officer, the list would be expanded to include material produced in other Study Team countries but the Team were open to suggestions from a wider range of Member States.

He went on to introduce the Case Studies, which illustrated a wide range of applications of voluntary collaboration. Not all types of collaboration were relevant to all construction contexts – for example alliances were most suited to complex infrastructure projects - and therefore some 'boxes' in Table 2 of Part 2 of the Guide were blank. Two Case Studies were drawn from outside the Study Team counties and the Team would be pleased to widen the range of countries represented in the Case Studies.

#### **Discussion of Guide and Case Studies**

Amongst the points made in subsequent discussion were:

#### Guide

- There was considerable scope for involvement of SMEs in voluntary arrangements and the Guide was very relevant to them. SMEs were flexible, without the management rigidities of larger firms, and could adapt to different organisational frameworks. They might lack the skills needed for collaboration, but these could be learned. In the UK, over 90% of construction firms were SMEs and this was typical within the EU.
- The Guide was welcome because the kinds of collaboration that it discussed improved communications within a project team and this contributed greatly to the achievement of sustainable construction.
- Collaboration also helped firms to enter new markets, and this was potentially
  valuable in present difficult market conditions. Competitors in home markets could be
  collaborators in international markets.
- A report on Integrated Project Delivery by the Architects Institute of America might be referenced; this included detailed advice and good examples of the benefits of integrated project teams.
- The Guide appeared to focus on collaboration during construction but should recognise that collaboration needed to be established during procurement.
- The Guide might give greater emphasis to the role of advanced IT systems in supporting collaboration.
- DG MARKT had some reservations about the present text which they would communicate to the Study Team; it would be important to avoid giving the impression that the Commission endorsed all the examples of collaboration that were cited; it was possible that some might give rise to legal action.

#### Case Studies

- It was unfortunate that the Case Studies were not drawn from a wider range of countries. RC commented that the Study Team had consistently requested examples of voluntary arrangements when communicating with MSG members and others but had not received suitable examples.
- The UK had a large body of experience in partnering and other forms of collaboration and there was less reference to this than might be expected. Similarly, the reference to project bank accounts might be illustrated by reference to their use in a Defence Estates project, reported as a Case Study in a National Audit Office Report. RC responded that the Study Team had sought to present examples from a range of countries, and the inclusion of more from the UK would have made the Guide

unbalanced. Section 5 made reference to the many UK Case Studies available from the Website of Constructing Excellence.

• The Case Studies appeared to be in random order; it would be preferable to group them by type of collaboration.

Mr Paparella said that the MSG endorsed the general approach taken in the Guide and Case Studies as being appropriate to the aims of the document and agreed that the final printed version should include both Parts, thus facilitating cross-reference between the main text of the Guide and the Case Studies. He asked the Study Team to take the points made into account; particularly that the Case Studies might be presented in a more logical order. He would consider with colleagues the proposal that the Guide have a Foreword by a senior representative of the Commission.

# Presentation by the Study Team (2): Promotion of Guide and other issues

Professor Courtney then reviewed issues that would be discussed in the Final Report, including an assessment of the overall benefit to be derived from the wider introduction of voluntary collaborative arrangements, which would need to be constructed from the experience of individual projects, and the relationship with EU policies, notably on competition and procurement. The consultations had revealed a view in some countries that EU procurement rules were a barrier to the use of voluntary arrangements, while national regulations were also a barrier in other countries. While in the view of the Study Team the procurement regulations were not a fundamental barrier to the adoption of collaborative ways of working, the perceptions revealed by the consultations were relevant to the promotion of the Guide. The Study Team had put forward preliminary proposals for such promotion; these included the preparation of the text in different languages, and the production of local versions incorporating national and other requirements. But the Guide was a tool in the wider issue of the promotion of voluntary arrangements for collaboration, and this needed to be founded upon an understanding of the circumstances in each country and whether conditions were conducive to the sorts of changes in practice that were discussed in the Guide; it was notable that initiatives for change had been most marked in countries where there was dissatisfaction with traditional ways of working. The Study Team had suggested that there be preliminary studies at national level, leading to targeted promotion, which would need to address also local interpretations of procurement rules.

#### Discussion

Amongst the points raised in discussion were:

Promotion of the Guide

- The Final Report should discuss the target audiences for the Guide, and consider which organisations had the power to achieve the kinds of changes involved.
- Clients were crucial to change, and their advisers (eg surveyors) might also be amongst the target groups. A clients' conference might be held.
- The consultation responses should be drawn upon to illustrate the significance of national requirements. Understanding these was crucial there could be no 'cut and paste' of approaches from one Member State to another. It would be essential to think through the promotional process and its implications in each country; presenting a plan that was not fully worked through would create negative responses. The development of local versions of the Guide would therefore be important to its promotion. And it would be essential to translate the Guide. The cost was not great probably less than €lk to translate Part 1 into another language.

 As part of the process of developing such a national approach, a workshop for national authorities, clients, supply firms etc could be help with the aim of contributing to a national strategy.

- Promotion should be positive, stressing the benefits to be derived through collaboration; it was not necessary to have dissatisfaction for change to be possible. The benefits to Society should receive particular attention.
- Promotion of collaboration might be difficult in the current downturn but the need to be flexible and to work outside existing market areas might lead construction firms to engage in more collaborative working.
- Collaboration also enabled projects to be initiated more quickly. With Member States
  wishing to increase investment in construction in current circumstances, this was an
  advantage and could be reflected in the promotional activity. But of course this
  should not be at the expense of other policies proper procedures needed to be
  followed.
- The Commission could invite Member States where collaboration was not widespread
  to review the Guide and to indicate how they intended to benefit from the experience
  of Member States where such approaches were well established. This might be
  followed up through monitoring.
- Promotion of collaborative approaches might be linked with other EC initiatives such as the Lead Market initiative on sustainable construction or the funding of European strategic projects. Collaboration could help such initiatives to be more effective.

#### Other issues

- Current procurement arrangements tended to lead to sequential appointment of different members of the project team, with consequent fragmentation of responsibilities and approaches. The Guide would help to address this.
- The Study Team were correct to identify insurance as an important factor in the development of collaboration and the new study instituted by DG ENTR would address this.
- While the contracts used in collaborative projects varied, it was important for there to be consistency between the contract and the collaborative intentions of the parties.
   Traditional contracts had elements – such as performance bonds and retentions – which reflected a lack of trust by participants.

Mr Paparella invited the Study Team to take the proposals and comments of the MSG into account, noting that there was currently no budget for translation of the Guide, but that, following receipt of the final text and accompanying material, it was envisaged that it would be designed professionally.

#### **Next Steps and Evaluation Workshop**

JR and RC outlined the remaining stages of the project and the associated delivery dates, and noted that the next opportunity for discussion of the Guide and other outputs would be the Evaluation and Validation Workshop.

Mr Paparella said that the Commission would invite a wider range of stakeholders to the Workshop – he hoped that some public authorities and contracting bodies would attend. The Workshop would take place on 3<sup>rd</sup> February 2009.

He thanked all participants for their contributions and closed the meeting at 5.15pm.

Manchester 18<sup>th</sup> December 2008

# Annex D Explanatory note: voluntary arrangements for collaboration

At the first meeting of the Management and Steering Group for this study, there was considerable discussion of the nature of 'voluntary arrangements' and their relationship with contract structures and contractual obligations. At the conclusion of that discussion, the Chairman asked the Study Team to prepare a briefing note on the matters discussed. This note fulfils this remit.

#### Definition of 'voluntary arrangements'

The starting point is the definition in the specification for the study (paragraph 4.1.2) which was provided to the MSG. This states:

'For the purposes of this contract, "voluntary arrangements for collaborative working" are understood as set ups of relationships, decision making and management between contracting parties, professional services, industry suppliers, and other relevant parties which enable meeting the objectives of a construction project or a series of projects in a cost-effective manner which is mutually beneficial for all parties. This set up might be agreed by the various parties involved through relevant framework agreements, It does not relate to traditional forms of partnering where construction companies have a privileged relationship with clients'

The Study Team understand the last sentence to refer to the situation found sometimes in the private sector where there are examples of clients using the same contractors and other suppliers for their construction works for periods of years or even decades.

The key word in the definition of 'voluntary arrangements' is 'voluntary'. Of course it can be argued that a firm's decision to tender for a project and, if successful, to enter into a contract with the client or customer is a voluntary decision – it is not compulsory to bid for a particular contract. But that is not a particularly helpful approach to the question of 'voluntary arrangements'. Rather, we look for an interpretation of the phrase in terms of the context in which the contract is awarded or fulfilled. 'Voluntary' refers to arrangements (relationships, decision-making procedures etc) that are agreed outside the terms of the contract, or which precede the contract and provide a context for it.

### Types of voluntary arrangement

The Study Team have identified five types of voluntary arrangement: project partnering, strategic partnering, framework agreements, construction consortia and alliances. The MSG discussion did not reveal serious objections to this classification, although there were suggestions that other types of voluntary arrangement might exist and these could, after further examination, be included in the study.

In each case, there is a voluntary decision by at least one of the parties to the project to give up some power or freedom or benefit because in their view this will lead, on balance, to a superior outcome for themselves – and if this decision involves more than one party then there is an expectation that each will benefit (i.e. 'mutually beneficial' as referred to in the definition above).

In <u>project partnering</u>, the parties typically agree formally to work in a collaborative manner and this may be reinforced by the signing of a 'partnering charter' and by specific measures, for example, an agreement that if disputes arise they will be settled by procedures that do not involve legal action or an undertaking that cost savings will be shared according to a predefined formula. By offering such measures, the client is giving up some powers or benefits that they might otherwise have retained, because they think that this will encourage the

creation of a collaborative culture in the project, with everyone working to a common aim, and that the end result will be better. There are no guarantees that this will happen and in most cases the arrangements lie outside the contractual obligations of each party<sup>37</sup>. The Study Team quoted the Danish definition of partnering which illustrates the role of trust and belief in the establishment of partnering relationships:

'a type of collaboration in a construction project based on dialogue, trust, openness and with early participation from all actors. The project is carried out under a mutual agreement expressed by mutual activities and based on mutual economic interests'

Strategic partnering and framework arrangements similarly involve a voluntary decision by the client to give up a power, in this case the power to have complete freedom in the appointment of contractors and other parties to future projects, By establishing a 'framework', the client is accepting that it will limit its choice of contractors etc for the defined set or types of works to the firms that are within the framework.<sup>38</sup> The degree of pre-agreement in the framework will vary – it may include agreeing the contractual conditions, rates of payment etc – but it need not. It may also include the types of collaborative behaviour that were discussed above under 'project partnering'; thus there might be an agreement covering all the works carried out under the framework that there would be no recourse to legal action in case of disputes. The benefits to the client in such arrangements include reduced tendering costs and greater familiarity of the other parties with the clients' needs.

<u>Construction consortia</u> are created by firms who come to a decision to work together in order to compete for certain projects (or types of project) and who therefore voluntarily limit their scope for working with other firms in these projects. As in other types of voluntary arrangement, they may express this mutual commitment in formal documents and reinforce it through agreements on revenue-sharing etc. At its strongest, the parties may agree to form a jointly-owned company which can bid for works. This is commonly the case for consortia bidding for public-private- partnership projects.

When the client also becomes a shareholder in such a company – following award of the contract – the result is an <u>alliance</u>. The client is in this case entering an arrangement in which they will share risks and rewards with the other members of the consortium. As with project partnering, there is no guarantee that the outcome will be positive but the client has a belief that joining with the other parties in this way will lead to a more successful project. Some alliances are 'virtual' in that there is no legal entity which is the jointly owned company but all parties operate as if they were in a single company.

Characteristics and aims of voluntary arrangements

The essential features of voluntary arrangements are therefore:

- They normally exist outside contractual structures and do not replace contracts or detract from the parties' contractual obligations
- They involve at least one party accepting a reduction in a freedom of action, a power
  or a benefit, in the belief (but not the certainty) this will lead over time to benefits.
- The arrangement may involve more than one party giving up such freedoms etc, in which case mutual benefits are envisaged

The key aim in project partnering and similar arrangements is to secure and reinforce the commitment of all parties to the success of the project or projects, with any unforeseen problems (as frequently occur) being addressed collectively. An important aspect is how

<sup>37</sup> There are, at least in the UK, examples of 'partnering contracts' where responsibilities are defined in a more collaborative manner than in conventional contracts. But most projects use conventional contract forms, with the 'partnering' aspects facilitating the development of a collaborative environment for discharge of the parties' contractual obligations.

<sup>&</sup>lt;sup>38</sup> There are examples where clients have established a framework arrangement and then appointed firms from outside the framework, but these are not within the spirit of 'collaboration' and understandably this practice has been subject to criticism.

responsibilities and risks are defined managed in such arrangements, which is why issues such as insurance are included in the study.

Similarly, the use of frameworks and strategic partnering is designed to create a stronger relationship between the client and other parties, and therefore to strengthen commitment to the success of the projects undertaken under the framework.

Of course a great deal of collaboration takes place in any construction project, since many different parties are involved. At the same time, there are many examples of projects where the different interests have not worked well together, and often these have resulted in expensive legal cases. The introduction of arrangements that provide everyone with a clear stake in the success of a project as a whole has been shown to reduce the chance of this happening. The study will explore the experience of such arrangements in different countries, with a view to their being promoted more widely.

#### The study

The minutes of the MSG Meeting on 5th February and the accompanying presentation by the Study Team contain further information about voluntary arrangements and the way that the study will be conducted.

The Study Team welcome comments form MSG members on this note and look forward to their contributions to the study.

Manchester 15th February 2008

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# Annex E Information database: publication references

The references have been organised according to main themes. These reflect principally the purposes of the study – relevant context, review of arrangements, types of benefits and key factors – and the characteristics of the documents themselves, such as the types of voluntary arrangements. The themes are:

- Construction Competitiveness
- Economic and Organisational Theory
- Guide to Practice
- Industry Reaction
- Innovation Theory
- News journal Coverage
- Official Policy Paper
- Partnering in Management and Construction
- Policy Implementation Theory
- Review of Policy
- · Review of Practice
- Review of Procurement and Innovation

#### **Construction Competitiveness**

Flanagan, R., Lu, W., Shen, L. and Jewell, C. (2007) Competitiveness in construction: a critical review of research, Construction Management and Economics, 25:9, pages 989 – 1000.

Kao, C. C., Green, S. D., Larsen, G. D. and Elmualim, A. A. (2006) Construction competitiveness: a dynamic capabilities perspective in Pietroforte, R., De Engelis, E. and Polverino, F. (eds.) Construction in the XXI century: local and global challenges, Edizioni Scientifiche Italiane S.p.A, Napoli. Joint CIB W065/W055/ W086 Symposium Proceedings, October 18-20, Rome, Italy.

Larsen, G. D., Green, S. D., Kao, C.C. and Elmualim, A. A. (2006) Sustained competitiveness: polarized perspectives and the search for the middle ground in Pietroforte, R., De Engelis, E. and Polverino, F. (eds) Construction in the XXI century: local and global challenges, Edizioni Scientifiche Italiane S.p.A, Napoli. Joint CIB W065/W055/ W086 Symposium Proceedings, October 18-20, Rome, Italy.

#### **Economic and Organisational Theory**

Coase, R. (1937) On the nature of the Firm, Economica, Volume 4, No. 16: 386-405.

Hamel, G. and Prahalad, C.K. (1990) The Core Competence of the Corporation, The Harvard Business Review.

Howarth, R.B. and Sanstad, A.H. (1995) Discount rates and energy efficiency, Contemporary Economic Policy, Volume 13, No.3 (July): 101(9), Western Economic Association International.

Lambsdorff Johann Graf (2002 "Making corrupt deals: contracting in the shadow of the law", Journal of Economic Behavior & Organization, Volume 48, Issue 3, July 2002, Pages 221-241.

Lambsdorff, J. and Teksoz, S.U. (2004) "Corrupt relational contracting" in Johann Graf Lambsdorff, Markus Taube and Matthias Schramm (eds.) The New Institutional Economics of Corruption, London: Routledge.

Lewin, K. (1947) Group decision and social change In: Readings in social psychology, by T. M. Newcomb and E. L. Hartley (eds.) New York: Holt.

Macneil, I.R. (1974) The Many Futures of Contract, Southern California Law Review 47: 691–816.

Macneil, I.R. (1978) Contracts: Exchange Transactions and Relations, Northwestern University Law Review 72: 854–905.

Merton, R.K. (1957) Social Theory and Social Structure, Glencoe Illinois: Free Press.

Teece, David J., Pisano, G. & Shuen, A. (1997) "Dynamic Capabilities and Strategic Management" Strategic Management Journal, Vol. 18, No. 7, (Aug., 1997), pages 509-533.

#### **Guide to Practice**

Appel Me Partnering (1993) New Dimensions In Dispute Prevention And Resolution, Arbitration Journal, Volume 48, Issue 2 (June): 47-51.

British Standards Institution (BSI) (2006) Collaborative business relationships. A framework specification, PAS 11000, November 2006.

Cain, C.T. (2003) Building down barriers: A guide to construction best practice, London: Spon.

Construction Industry Council (CIC) (2002) A Guide to Project Team Partnering. Second edition, London: CIC.

Courtney, R. (2007) Enabling Clients to be Professional, Paper For CIB TG58 Meeting – Salford, January 2007.

Courtney, R., Ismail, S. and Winch, G. (2005) International Review of Procedures for Selecting Procurement Routes for Construction Projects, Final Report.

Danish Ministry of Housing (1992) General Conditions for the provision of works and supplies within building and engineering, 10 Dec, 1992.

Flanagan, R. and Jayes, S. (1998) Seven Pillars of Partnering, Reading Construction Forum ISBN 0-7277-2690-0.

Girmscheid, G. (2004) Win-Win Situations by Partnering Project Delivery Forms – Case studies conducted in Switzerland in Proceedings of the CIB World Building Congress 2004: Building for the Future, Toronto 01-07/05/2004, Hrsg.: CIB and National Research Council of Canada (2004), Paper no. 56: pages -10.

International Construction Clients Forum (ICCF) (2005) Client Best Practice - an International Perspective. A Position Paper, Input to the discussions at the second meeting of the ICCF Port Elizabeth, South Africa, 17-18 October 2005.

Local Government Task Force (2007) Taking Advantage. How SMEs can become successful framework contractors, 19 September 2007.

The Manchester Centre for Civil and Construction Engineering Project Management Division UMIST (2004) A benefits analysis of partnering: a case study of The Valley Community Primary School in Bolton, A report prepared for Bardsley Construction Ltd.

Bennet, J. and Peace, S. (2006) Partnering in the Construction Industry, Elsevier.

#### **Industry Reaction**

UEAPME (2007) Administrative rules a key obstacle to SME-friendlier public tenders, Press Release, Brussels, 8 May 2007

#### **Innovation Theory**

Hobday, M. (2000) The project-based organisation: an ideal form for managing complex products and systems? Research Policy, Vol. 29: 871-893.

#### News journal coverage

McMeeken, R. (2008) Egan Ten Years On, Building, 8 May, Issue 18.

#### Official Policy Paper

Commission Of The European Communities (COM) (2007) Commission Staff Working Document: Guide On Dealing With Innovative Solutions In Public Procurement. 10 Elements Of Good Practice, Brussels, 23.2.2007, Sec(2007) 280.

Commission Of The European Communities (COM) (2007) A Lead Market Initiative For Europe. Explanatory Paper On The European Lead Market Approach: Methodology And Rationale, Com(2007) 860 Final; Sec (2007) 1729, Brussels, 21.12.2007.

## **Partnering in Management and Innovation**

Amin A. and Cohendet, P. (1999) Learning and adaptation in decentralised business networks, Environment And Planning D-Society & Space, Volume 17, Issue 1: 87-104.

Bar, F. and Simard, C. (2006) From Hierarchies to Networks Firms in Lievrouw, L. and Livingstone, S. (eds.) Handbook of New Media, London: Sage.

Blayse, A.M. & Manley, K. (2004) Key influences on Construction" Construction Innovation, Vol. 4, No. 3 pages 1-12.

Bradach, J.L. and Eccles, R.G. (1999) Price, authority and trust: from ideal types to plural forms in Thompson, G. Frances, J., Levacec, R. and Mitchell, J. (eds.) Markets, Hierarchies and Networks, the Coordination of Social Life, Chapter 23, pages 277-292, London: Sage.

Bresnen, M. and Marshall, N. (2000) 'Motivation, commitment and the use of incentives in partnerships and alliances', Construction Management and Economics, 18:5: 587 — 598.

Bresnen, M. and Marshall, N. (2000) 'Partnering in construction: a critical review of issues, problems and dilemmas', Construction Management and Economics, 18:2: 229 — 237.

Carassus, J. (2004) Construction Sector Systems: Innovation and Services, CIB. CIB – Conseil International Du Bâtiment, 2004 Toronto Congress. Canada.

Cheung S.O., Yiu K.T.W. and Chim, P.S. (2006) How relational are construction contracts, Journal Of Professional Issues In Engineering Education And Practice Volume 132, Issue 1: pp 48-56, ASCE.

Couto, J.P. and Cardoso Teixeira, J (2006) Reasons for the lack of competitiveness of the Portuguese construction industry, Joint 2006 CIB W065/W055/W086 Symposium.

Cox, A. and Ireland, P. (2006) Strategic purchasing and supply chain management in the project environment – theory and practice in Lowe, D., and Leiringer, R. (eds.) The Commercial Management of Projects, Oxford: Blackwell.

Daly, J.P. and Geyer, P.D. (1994) The Role of Fairness in Implementing Large-Scale Change: Employee Evaluations of Process and Outcome in Seven Facility Relocations, Journal of Organizational Behavior, Volume 15, No. 7, Dec. 1994: 623-638, John Wiley & Sons.

De Valence, G. (2006) Competition and the Characteristics of Construction Markets in Proceedings of Construction in the XXI century: Local and global challenges, Joint 2006 CIB W065/W055/W086 Working - Commissions International Symposium 68-69.

Emsley, M. W. (2005) A benefits analysis of partnering: a case study of a community primary school in the UK, Journal of Financial Management of Property and Construction, Volume 10, Issue 1 (March) pages 69-79.

Eriksson, P. E. and Pesämaa, O. (2007) Modelling procurement effects on cooperation, Construction Management and Economics, 25:8: pages 893 – 901.

Fenn, P. (2006) Conflict Management and Dispute Resolution in Lowe, D., & Leiringer, R. (eds.) The Commercial Management of Projects, Oxford: Blackwell.

Gray, C. & Richardson, R.J. (2007) Perspectives on experiences of innovation: the development of an assessment methodology appropriate to construction project organizations, Construction Management and Economics, Issue 12: 1251-1268.

Hakansson, H. and Ford, D. (2002) 'How should companies interact in business networks?', Journal of Business Research 55: 133–139.

Hagedoorn, J. (2002) Inter-firm partnerships: an overview of major trends and patterns since 1960, Research Policy, 31(4): 477-492.

Hughes, W. (2006) Contract Management in Lowe, D. and Leiringer, R. (eds.) The Commercial Management of Projects, Oxford: Blackwell.

Ive, G. and Chang, C-Y. (2007) The principle of inconsistent trinity in the selection of procurement systems, Construction Management and Economics, 25:7, 677 – 690.

Kennedy, A. (2004) Construction Supply Chain Integration. Some practical examples, COMPASS (Construction Manufacturers Partnering Association) July 2004.

Lai, J.H.K. and Yik, F.W.H. (2006) Critical contractual issues of outsourced operation and maintenance service for commercial buildings, International Journal of Service Industry Management. Volume 17, No. 4: 320-343, Emerald Group Publishing Limited.

Larsen, J.N. (2008) 'Partnerships and partnering – Voluntary integrated buyer-supplier collaboration in Nordic building industry', Danish Building Research Institute, February 2008.

Li, H. Cheng, E.W.L., Love, P.E.D. and Irani, Z. (2001) Cooperative benchmarking: a tool for partnering excellence in construction, International Journal of Project Management, Volume 19: 171-179.

Lowe, D.J. and Parvar, J. (2004) A logistic regression approach to modelling the contractor's decision to bid' Construction Management and Economics, 22:6, 643 – 653.

Lowe, D.J., Emsley, M.W. and Harding, A. (2006) Predicting Construction Cost Using Multiple Regression Techniques, Journal Of Construction Engineering And Management, July 2006: 750-758.

Mason, J.R. (2007) The views and experiences of specialist contractors on partnering in the UK', Construction Management and Economics, 25:5, 519 – 527.

Mason, R. (2007) The views and experiences of specialist contractors on partnering in the UK, Construction Management and Economics.

Phua, F. T. T. (2004) The antecedents of co-operative behaviour among project team members: an alternative perspective on an old issue, Construction Management and Economics, 22:10:1033 – 1045.

Phua, F.T.T. (2006) When is construction partnering likely to happen? An empirical examination of the role of institutional norms, Construction Management and Economics, Vol. 24 pages 615-624.

Pryke, S.D (2005) "Towards a social network theory of project governance", Construction Management and Economics (November 2005) 23: 927–939.

Pryke, S.D. (2004) Analysing construction project coalitions: exploring the application of social network analysis, Construction Management and Economics (October 2004) 22: 787–797.

Wong P.S.P., Cheung S.O. and Ho P.K.M. (2005) Contractor as trust initiator in construction partnering - Prisoner's dilemma perspective, Journal of Construction Engineering and Management, Volume: 131, Issue 10: 1045-1053.

Yeung, J. F. Y., Chan, A.P. C., Chan, D.W. M. and Li, L.K. (2007) Development of a partnering performance index (PPI) for construction projects in Hong Kong: a Delphi study, Construction Management and Economics, 25:12: pages 1219 – 1237.

Yin K.T.W. and Cheung S.O. (2007) A study of construction mediator tactics - Part II: The contingent use of tactics, Building and Environment, Volume 42, Issue 2 (Feb): pages 762-769.

#### **Policy Implementation Theory**

Hill, M. & Hupe, P. (2002) Implementing Public Policy, London: Sage.

Hogwood, B.W. and Gunn, L.(1984) Policy Analysis for the Real Word, London: Oxford University Press.

Kaeding, M (2008) Necessary conditions for the effective transposition of EU legislation, Policy & Politics, Volume 36 no 2: 261—81.

Pressman, J.L. and Wildavsky, A.(1973) Implementation, Berkeley: University of California Press

Sabatier, P. (1986) Top-down and bottom-up approaches to implementation research: a critical analysis and suggested synthesis, Journal of Public Policy, Volume 6: 21-48

Yanow, D. (1987) Toward A Policy Culture Approach To Implementation, Policy Studies Review, Autumn 1987. Volume 7, No. 1: 103-115.

#### **Review of Policy**

Adamson, D. and Pollington, A. (2006) Change in the Construction Industry - an account of the UK Construction Industry Reform Movement 1993-2003, Routledge.

#### **Review of Practice**

Davies, E., Fenn, P., and O'Shea, M. (1998) Dispute Resolution and Conflict Management in Construction, London: Taylor and Francis.

Eschenbruch, K., Racky, P. (Hrsg.): Partnering in der Bau- und Immobilienwirtschaft - Projektmanagement- und Vertragsstandards in Deutschland. Kohlhammer Verlag, Stuttgart, 2008, ISBN 978-3-17-019861-6.

Gottlieb, S.C., Haugbølle, K. and Larsen, J.N. (2007) An overview of partnerships in Danish construction: State of the Art report prepared for Nordic Innovation Centre (Draft), Danish Building Research Institute.

Lahdenperä, P. (2009) Project alliance. The competitive single target-cost approach. VTT, Espoo. VTT Tiedotteita – Research Notes 2472.

Royal Institution of Chartered Surveyors, (2004) Contracts in Use, London: RICS.

Royal Institution of Chartered Surveyors, (2005) Partnering practice in the relationship between clients and main contractors. London: RICS

#### **Review of Procurement and Innovation**

Daly, J.P. and Paul D. Geyer (1994) The Role of Fairness in Implementing Large-Scale Change: Employee Evaluations of Process and Outcome in Seven Facility Relocations, Journal of Organizational Behavior, Volume 15, No. 7, (December):623-638, John Wiley & Sons

Edler, J. and Georghiou, L. (2007) Public procurement and innovation—Resurrecting the demand side, Research Policy, Volume 36, Issue 7, Sept 2007:949-963.

Flyvbjerg, B., Bruzelius, N. and Rothengatter, W. (2003) Megaprojects and Risk: An Anatomy of Ambition, Cambridge: Cambridge University Press.

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# Annex F Voluntary arrangements: rationales and responses

#### F.1 Introduction

Our Study has, as noted in Chapter 2, identified five types of voluntary arrangement: project partnering, strategic partnering, framework agreements, construction consortia and alliances into which firms and their clients can enter in order to seek a range of benefits and improvements and to avoid certain costs. We noted that four of these types of voluntary arrangement might involve clients, the exception being consortia, where clients are not involved. This review of the rationales for such relationships has been undertaken to explore from the academic literature why firms and their clients should seek to collaborate through voluntary arrangements of these various kinds and to investigate the range of impacts reported in academic and other policy reviews of activities that involve partnering in the broadest sense. We also seek to review the literature on how voluntary arrangements are promoted, particularly looking at factors that lead to their success and at the barriers to their successful implementation. The annex begins with a consideration of the rationales in its first section and then moves to a consideration of the key issues affecting the initiation and implementation of such schemes and what strategies should be followed to ensure success in this area of business practice and government policy.

# F.2 Rationales - why firms and clients engage in voluntary arrangements

#### Within the Firm

Generally, the business, organisation and management literature has asserted that firms and clients engage in collaboration for a wide variety of reasons but the most important is to give themselves access to complementary assets and capabilities in both short and longer term. This firm / organisational perspective, which was extensively elaborated by Penrose (1954), is known as the resource-based view and has led to other significant and influential work on the capabilities of firms (Teece et al, 1997). This stream of work has focused attention on what specific competences firms need to be successful (Hamel and Prahalad, 1990) and what they can leave to other organisations to provide. The Hamel and Prahalad perspective that firms should focus upon only what they can do best has been a dominant one, the more so for reasons of rapid technological change across industrial sectors (Hobday, 2000), growing internationalisation and adoption of networked forms of business (Amin and Cohendet, 1999), and the facilitation of project management by information technologies (Bar and Simard, 2006).

Hamel and Prahalad's work has been paralleled by other highly significant work in the new institutionalist tradition in sociology, law and economics undertaken by Williamson (1979, 1985) which, building upon the insights of Coase (1937), seeks to make clear what factors determine whether production is organised internally within the firm or is coordinated through the use of markets and contracts. This general approach has now led to work that breaks with the dichotomy introduced by Williamson, concluding that much contracting between organisations must take place at a higher and more abstract level without the specificities of conventional contracting through so-called relational contracting (Macneil, 1974, 1978), see also Williamson (1985).

Relational contracting has been proposed as an alternative to the organisation of the production either within the firm or through markets based upon Taylorist principles (Clegg et al 2003). But Bradach and Eccles (1997) importantly propose in their critique of the markets and hierarchies approach that markets, hierarchies and trust arrangements are not three mutually separate categories of governance arrangement, based on contract, hierarchy and trust respectively, but are forms of governance that can be and are combined. Bradach and Eccles' research agenda begins with this assumption of hybridism and is important because it

encourages a more synthetic and flexible approach to governance and demonstrates that the early attempts to promote and enact partnering rested on too simplistic a set of assumptions about incentives, and where partnering could exist between and within firms (Bresnen and Marshall, 2000a and Bresnen and Marshall 2000b). It has now been increasingly accepted that partnering, voluntary arrangements and relational contracting are complex activities, based on trust, and cultural values. Importantly, networking becomes a key concept and firms must operate within a new context, sometimes taking less account of traditional drivers, such as "markets, products and competitors" (Hakansson and Ford, 2002; page 138) and realizing that some control of the fate of the firm (and potentially the client) must be lost (Hakansson and Ford, 2002) to realize the benefits of network membership.

Trust based activities, which underpin relational contracting, are therefore multifarious and span a range of activities. They can include such inter-firm interactions as benchmarking, as Li et al (2001) have noted and can take place at many levels. However, with closeness and relative informality, there is a risk, which a small number of commentators have identified, that relational contracting approach may lead, in some cases, to illegal business practices (Lambsdorff, 2002, Lambsdorff and Teksoz, 2004); and while such outcomes may not be common, and may not indeed be the objective when firms engage in partnering, they may emerge over the course of an interaction.

Within the construction sector, the use of voluntary arrangement approaches has been widely attempted because of the expectation of improvements to the quality of the finished output but also because of the perception that significant reduction in the costs of enforcing contracts will be possible. But attempts to find mechanisms of control that seek to avoid costs of contracting can generate more problems (Fenn, 2006; Davies et al, 1998; Clegg et al 2003). Difficulties which arise within the area of voluntary arrangements are both general and technical. General difficulties arise over how trust can be established, while technical issues which have emerged following partnering activities include uncertainty over the legal nature of disputes and what methods should be chosen to deal with differences, i.e. whether to use arbitration or the courts. Studies of the way in which contracts go wrong and how they succeed (e.g. Fenn, 2006) are however helpful in identifying key factors which may avoid failure and lead to success. Fenn's analysis of the literature on project failure suggests that the following are the principal features and causes of conflict within construction: design errors, construction overruns, confusion over the interpretation of instructions, negligence and nuisance, changes to the specification, gaming or opportunism (e.g. inflation of costs) project complexity (Fenn, 2006).

Empirical studies on the reasons why firms engage in voluntary arrangements report therefore the importance of a belief that partnering will generate benefits and conclude (Phua 2006) that partnering happens when firms believe they should engage with it, i.e. it is normative behaviour, and not usually the result of a perception that benefits will ensue. Attempts to search for the causes of firms' entering voluntary arrangements have attempted to identify a "trust driver" (Wong et al 2005), and upon decision making on partnering, i.e. on how to make the "Go, No Go Decisions", including the costs of deciding what route to follow (Lowe and Parvar, 2004). Other important contributions suggest that the role of firms in engendering trust behaviour in employees is a key factor as the identity of employees flows from organisational practices (Phua 2003).

#### Organisations and People

The firm based view has been and remains a dominant perspective framing the development of strategies for partnering. However, research carried out at the level of employees and the networks they create within and outside the firm has led to emphasis upon the role of communication and interaction and the bridging of gaps between different parts of the firm to create value. Burt's work (Burt, 2004), on commercial management, has focused on the importance of the links across and between different groups within firms. Such links are a form social capital because they ultimately generate new ideas. While the work undertaken by Burt has predominantly been on the operation of single firm, the implication of his work is that actors who make links outside the organisation are in a position to create value. Partnering,

by providing a basis for the making of such links, can therefore be instrumental in value creation.

#### F.3 Responses to the problem – why government is interested

The realization by government, industry and client interests that the Taylorist mode of production with an attendant highly legalistic governance system in building and construction were failing to achieve similar standards of innovation and quality as found in other sectors has led to attempts to move the sector onto another course. Over the last two decades, and not confined to the UK only (see for example CII (1989, 1991), approaches based upon voluntary arrangements and chiefly termed partnering have emerged as a coherent response with widespread support. The development and evolution of initiatives to promote voluntary arrangements has taken a number of forms, with three principal actors - government. contractors and clients - involved. There have been two main forms of initiative: the propagation of the message that partnering is important on the one hand and on the other. research into how the partnering could be implemented across the sector in ways that fully achieve the benefits with which voluntary arrangements have been credited. The purpose of this section of the review of literature is to examine the experience of policy implementation to understand better how partnering can most effectively be implemented. Both the strategy and change management literature and the policy implementation literature provide useful perspectives on what is important when major economic actors seek to achieve social and economic change on a significant scale. Furthermore, in the area of construction, both government, and private interests are active in promoting change, and therefore both the strategy and the policy implementation literature are relevant resources.

#### F.4 Government as driver of change – policy implementation

The policy implementation literature considers the attempt to foster social and economic change from the point of view of government. As the Egan reform initiative involves both industry and government leadership, there are strong reasons to consider the contribution of the policy studies literature to the issue of how voluntary arrangements are promoted by government.

The policy studies literature has long considered implementation as a central question if not as the central question facing government. Pressman and Wildavsky (1973) were the first to argue convincingly that proposals for policies and programmes, which often carry strong political mandates, nevertheless require the cooperation and skills of numerous state employees and agency staff in numerous layers of government for their successful implementation. The importance of bureaucratic rules to implementation (Merton, 1957), their resistance to change, and the significance of the government as a construction client suggest that the introduction of voluntary arrangements is a highly problematic area of policy. On the one hand, government may, in acting as a regulator in the economy, propose the use of voluntary arrangements as a way of increasing the efficiency of a major sector; but as a major client of the sector, it may have different priorities, particularly in the short term. Furthermore, the importance of construction projects to political goals, noted by Flyvbjerg (2003) in his work on megaprojects, suggests that government's attempts to propose partnering may occasionally conflict with political expediency.

A further key insight from the policy implementation literature suggests that in some areas of policy implementation policies are more easily initiated if those at the street level are given responsibility for implementation (Sabatier, 1986). In the context of voluntary arrangements, it may be the case that leaving the industry and client interests to work out the details of the policy would be best, and experience of the UK suggests that this is a model of action that may work effectively. Another key insight from the literature is that the model of action which the policy assumes should be based upon a valid theory of action (Hogwood and Gunn, 1984). Within the context of construction, the important question for policy makers to address in this

regard is how much of the governance process can realistically take the form of voluntary arrangements, and how much must be subject to existing, contractual and hierarchical structures. In the context of SME activity, voluntary arrangements may in fact be of limited scope, given the nature of their business.

# F.5 Responses – roles and strategies for government

The change management literature provides a number of useful frameworks for modelling action and implementation. Change management models include the McKinsey 7-S Model, Lewin's Change Management Model (Lewin, 1952), and Kotter's Eight Step Change Model (Kotter, 1995). The McKinsey model, while useful in a company setting, is highly firm focused, while the Kotter model is more generic, applying potentially to groups of firms. Lewin's model, while also generic, has fewer steps and is less precise on the question of precise actions to take; therefore it was considered that the Kotter model was most suitable as a guide to the process of creating change in the sector.

Under the Kotter model, change takes place through a sequence of stages, beginning with the identification of a problem and working downwards through a process of social engineering to create awareness of where the solution lies and how best to implement it. In the context of construction reform in the UK, the Egan report (Egan, 1998) proposed the twin-pillars of partnering and professionalism as the means to achieve greater efficiency for the sector. Furthermore, Egan diagnosed a large number of problems in the sector and then proposed a number of corrective actions that could be taken. The importance of culture, teaming and common goals is important to the Egan reform agenda. As Clegg *et al* (2003) note, the new way of doing business in the building and construction sector requires employees to internalize a set of rules that establish a new notion of a common interest<sup>39</sup>. But Clegg *et al* (2003) show, using Foucault's concept of governmentality, that failure must always be part of the process because failure is always required to provide its justification, echoing Romme's claim that power is circular (Romme, 1999): "Paradoxically, the success of these governmental processes is related to their failure: continuous improvement in search of excellence requires some failure as feedback to improve" (Clegg *et al*, 2003; page 333).

A recent review reported in Building (McMeeken, 2008) of the Egan initiative does indeed support the view that the goals of partnering are largely unmet, confirming the contention of Clegg et al. (Clegg et al., 2006) the success of voluntary arrangements needs constant reminders of the failures of existing business practices.

The Kotter Model (Kotter 1995)

- 1. Increase urgency
- 2. Build the guiding team
- 3. Get the vision right
- 4. Communicate for buy-in
- 5. Empower action
- 6. Create short-term wins
- 7. Don't let up

8. Make change stick

<sup>&</sup>lt;sup>39</sup> He new rules are a response to failures of rationalist, Taylorist industrial system whose effectiveness gradually broke down because of fragmentation caused mainly as a result of multiple levels of professional rationality and contractual layers (Clegg et al 2003).

#### F.6 Responses – roles and strategies for firms

Voluntary arrangements for collaborative working constitute a way of organising the production of goods and services that contrasts significantly with the two principal conventional forms of production: market transacting and the management by the firm of resources nominally under its legal responsibility. When firms and clients make voluntary arrangements, they agree to work together in ways that in general fall outside the scope of a contract to govern their relations in a particular area of activity. This allows them greater flexibility than might exist under relations governed by contract, and provides the opportunity to combine resources, to engage in mutually beneficial learning, capability enhancement and product and process development.

Experience shows that the flexibility inherent in a 'voluntary arrangement', as opposed to a contract, is preferable when the work required has a greater level of uncertainty as to its outcome, because the initial conditions have unknown aspects, or it involves significant levels of innovation, or the combination of previously unrelated elements. Thus, where complex production activities are under consideration and where risks are not seen as either definitive or requiring the insurance or assurance of a contract between partners, voluntary arrangements offer a means of regulating inter-firm relations. Voluntary arrangements may also be used by firms in the course of project management as part of a more trust-based approach to doing business.

Experience in different industry sectors, supported by research studies, indicates that voluntary arrangements are appropriate and alternative means of governing inter-firm and client-firm relationships, complementing contractual relationships, when uncertainty is high and/or when the various actors believe that they may attain their objectives through trust.

### F.7 Voluntary Arrangements – importance of joint action

The factors which create the difficulties that partnering seeks to alleviate are, as we note above, not easily removed. Asymmetries of information, and the "one shot Prisoner's Dilemma" character of much traditional construction contracting, remain salient characteristics of relations between firms and clients in the industry. Indeed the one-shot only aspect of contracting is likely to remain a feature for certain subsectors for the foreseeable future. Nevertheless, there are areas of construction where it is possible to change contracting practice but this can only be done by addressing client and contractor perceptions of the incentives through a broad range of initiatives including the correction of markets failures of information. The role of government and representative bodies – i.e. joint action – is without doubt the most important step which can be taken to bring about the change in perception of benefits.

This change can be achieved in a wide variety of ways and needs to involve all the main parties, including firms, clients, government, business services organisations, and those organisations which represent the principal actors in negotiations about collective action, including policy. In sub-sectors where it is possible to achieve it, moving away from single, one shot interactions to continuous and repeated interactions may slowly create a new culture in which incentives to collaboration are higher. This process is already underway in some areas. In the UK, as evidenced by the RICS (2004) Contracts in Use survey, new contracting forms and voluntary agreements and arrangements are being developed in a range of forms. Such experimentation with new contracting forms, some of which will be more and some less successful, is essential to bring about change. As the economic advantages of voluntary arrangements become more evident, older, more conflictual forms of interaction will be seen as most costly and are likely to become less common.

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#### Annex G Consultee organisations from study team Member States for country reports and draft guide

**Belgium** 

Contractors Confédération Construction

Confédération Construction Bruxelles - Halle- Vilvorde

Fédération des Entrepreneurs Généraux de la Construction (FEGC)

Vanhout **EDK** 

Designers and other

FDA architecten & ingenieurs

Fédération Royale d'Associations Belges d'Ingénieurs Civils, professionals

> d'Ingénieurs (FABI) Cobaty International

Archiles

Architect Paul Vandepoel

Architectenbureau JASPERS-EYERS & Partners

Probam Formanova Seco

**Denmark** 

Contractors **Danish Contractors Association** 

NCC

Designers and other

professionals

Danish Association of Architectural Firms Danish Association of Consulting Engineers

Cowi (engineering)

Vive Consult (construction management)

Clients Association of Construction Clients

Danish Directorate of Main Roads

City of Copenhagen

Kuben A/S

Boligfoereningen 3b (Housing company)

Government Agency for Enterprise and Construction

**Finland** 

YIT Contractors

NCC Construction Ltd Lemminkäinen Infra Ltd

VR-Track Ltd

Designers A-Insinöörit Ltd

**Product suppliers** Parma Ltd

Clients Finnish Association of Building Owners and Construction Clients

**Senate Properties** 

Finnish Road Administration Finnish Rail Administration

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Other Confederation of the Construction Industries

TEKES (funding agency for technology and innovation)

Helsinki University of Technology

**Netherlands** 

Contractors Volker Wessels

Heijmans BAM

Clients Government Building Agency

Other Institute for Building Law (TU Delft)

EspritHuis

**Norway** 

Contractors NCC Construction AS

Teknobygg AS

Clients Directorate of Public Construction and Property

Norwegian Public Roads Administration

Municipality of Baerum County of Nordland Entra Eiendom Union Eiendom AS

**OBOS** 

**Sweden** 

Contractors Swedish Association of Contractors

Skanska NCC

NVS (services contractor)

Designers Swedish Association of Consulting Engineers

Swedish Association of Architects

White (architects)

Clients Swedish Construction Clients Forum (Partnering Committee)

**United Kingdom** 

Contractors The Construction Confederation

(including SMEs) National Specialist Contractors Council

Specialist Engineering Group National Federation of Builders

Designers and other

professional

Construction Industry Council Association of Chartered Architects

Halcrows (engineering)
MACE (project management)
Trowers Hamblins (legal)
Pinsent Masons (legal)

Clients Construction Clients Group

Highways Agency Anglian Water

Birmingham City Council

**Land Securities** 

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Individual (former Director of Estates for a university)

Department of Business, Enterprise and Regulatory Reform Government

Office of Government Commerce

Other Strategic Forum

Constructing Excellence

# Annex H Outline for 'Best Practice' guide presented to second MSG

#### 1. Introduction

Origin of Guide – DG ENTR study

- Aims of guide:
  - To introduce concept of non-traditional collaborative relationships in the carrying out of construction projects
  - To provide information on different forms of collaboration, and benefits that they may bring
  - To provide guidance on how such collaborations may be established, while fulfilling the aims and requirements of EU policies
  - To indicate sources of further information
- Indication of the types of bodies addressed by the Guide: client bodies (public and private); supply interests (contractor, design, product etc)

# 2. Forms of collaboration

- General introduction, based on discussion in Chapter 2 of the Progress Report, on the distinction between collaborative arrangements and contractual arrangements.
- Summary of the characteristics of the forms of collaboration covered in the guidance:
  - a. Project partnering
  - b. Strategic partnering
  - c. Alliances
  - d. Framework arrangements
  - e. Construction consortia

# 3. Benefits of collaborative relationships, and issues in their adoption

- Discussion of benefits of each type of arrangement, based on Synthesis and Assessment Report, orientated to different project parties – clients, contractors etc
- Including advantages in relation to EU polices on employment, sustainability etc
- Accompanied by introduction to possible issues and problems in their implementation.

# 4. Guidance on when partnering and other forms of collaboration are appropriate and most beneficial

- Discussion of frequent/infrequent construction requirements, as a guide to which form of collaboration to aim at.
- Need for investment in relationships, preparedness to change behaviours etc.
- Need for appropriate skills and attitudes in client organisation

# 5. Key points in establishing collaborative arrangements

- Discussion of selection/appointment processes
- Measures that will encourage collaboration for the benefit of the project, for example:

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- workshops, financial structures, dispute resolution arrangements
- Role of contract forms that encourage collaboration
- Role of targets and monitoring in informing and improving relationships including targets for the relationship as well as the project
- Discussion of the role of project insurance

# 6. Relationship with EU policies and requirements

- Procedures to ensure compliance with EU procurement requirements
- Discussion of good practice in relation to competition and SMEs

# 7. Relationship with national policies and requirements

- Need for promotion of voluntary arrangements to respect national practices and to be consistent with national regulatory requirements.
- Possibility that national regulations may need to change to accommodate new practices.

#### 8. Concluding comments

Recapitulation of reasons for considering voluntary arrangements.

# Annex A - Sources of further advice and guidance

Listing of sources

#### Annex B - Case studies

- Overview of the types of arrangements illustrated by the Case Studies
- Presentation of individual Case Studies

# Annex I Consultation documents

# Model Letter for inviting comments on draft Guide on voluntary collaborative arrangements in construction

# Collaborative ways of working in construction - proposed EU Guide

I am writing to seek your assistance with a current European study concerned with the construction sector.

The background is that different forms of project organisation, based on collaborative principles, have been introduced in recent years in some Member States of the EU. These have been shown to lead to more successful project outcomes, such as a higher probability that the project will be completed on time. Significantly also, individual managers in the firms and client bodies concerned have found that the work environment as been improved, and report much greater job satisfaction.

The European Commission (DG Enterprise and industry) has therefore commissioned a study of 'voluntary arrangements for collaboration in the construction sector', which is being undertaken by a consortium led by Manchester Business School, part of the University of Manchester, UK. I attach/enclose a brief introduction to the study; further Information, including reports on the use of collaborative approaches in different Member States, is available from <a href="http://www.mbs.ac.uk/research/innovation/voluntary-arrangements-steering-group.aspx.">http://www.mbs.ac.uk/research/innovation/voluntary-arrangements-steering-group.aspx.</a>)

The study includes the preparation of a Guide to collaborative arrangements in construction which the Commission see as a means of promoting their wider use. The Guide is an introduction to the concepts and processes involved and is aimed particularly at firms and client bodies in Member States which have not so far employed these approaches. It is important that this Guide should be of maximum assistance to its intended users. Its preparation therefore includes consultations in a range of Member States. [Name of organisation] is assisting the study consortium by co-ordinating the consultations in [country].

Accordingly, I attach/enclose a copy of the present draft of the Guide and would be very grateful for your comments on it. At the moment, the draft is available only in English although it is envisaged that the final Guide would be available in a range of languages. To assist the consultation I enclose a short summary in [language].

The main focus in the consultation is whether construction firms and their clients will find the proposed Guide helpful as an introduction to collaborative ways of working. I suggest, therefore, that following questions might provide a structure for your comments:

- 1. Do you think that the types of collaborative relationship discussed in the draft Guide are relevant to you/your members? Which appear to be the most relevant?
- 2. Do you think that the information in the Guide would be helpful to organisations wishing to establish such arrangements? Is it at an appropriate level of detail? Are there other topics that should be included?
- 3. Are there particular barriers to the use of collaborative arrangements which should be addressed in the Guide?
- 4. Are the Case Studies useful? How might they be improved?
- 5. How might the final Guide best be promoted?

We would, though, welcome views on any aspect of the Guide and also seek your overall view on whether you think that the Guide, if fully translated into [language], will contribute to improving construction in [country].

We would very much like to receive your comments by [date] and hope that this will be possible. [Sentence on how these comments will be obtained, whether there will be a telephone calls to follow up the letter, etc]

Please contact [name, etc] if you have any questions.

On behalf of the study team, I would like to thank you for your contribution to the preparation of the Guide and look forward to receiving your comments.

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# **Building Together - a Guide to Successful Collaboration in Construction**

# **Draft for Consultation - September 2008**

# **Summary**

#### 1. Introduction

This Guide stems from a study of the use of collaborative arrangements in construction, commissioned by DG ENTR of the European Commission. Experience in a number of EU Member Sates indicates that when firms engaged in a construction project commit explicitly to working in a collaborative manner, the outcome is likely to be a successful project. Moreover, the individuals concerned find the working environment more satisfying. Another form of collaboration takes place when firms come together to exploit market opportunities which they could not address individually.

This Guide is addressed to all concerned with the supply of construction-related services, and to clients for construction. It provides initial advice on different forms of collaboration in order to inform individuals and organisations about these ways of working and to promote their adoption.

#### 2. Review of collaborative relationships

The Guide identifies five types of collaborative arrangement, but relationships may in practice include elements of several types of arrangement:

- Project partnering where the client and principal supply interests in a specific project formally agree to work collaboratively
- Strategic partnering where a client works with a limited set of supply interests over a
  number of projects (not all of them necessarily defined at the start of the arrangement),
  with the agreed intention of improving the quality of their relationships and the level of
  their performance over the course of the projects.
- Framework agreement this is similar to strategic partnering in that the client selects a number of firms to carry out works in a future period, but may not include such a strong commitment to performance improvement Often the arrangement concerns smaller items of work.
- Construction consortium where a group of supply interests (often SMEs) agree to develop and market their services jointly. The consortium enhances the overall market

competitiveness of its member firms. This is distinct from the temporary relationships that firms enter into in order to tender for a specific project.

 Alliance – this is a particular form of consortium (or of project partnering), in which the client becomes a shareholder in a jointly-owned company formed to deliver a project.

Collaborative relationships are based on *trust* and *openness* amongst the parties, and lead to behaviours and decisions which provide mutual, not just individual benefit. They are also based *belief*. The parties to the relationship have no guarantee that they will benefit from it, but believe that this will happen.

Collaborative arrangements linked to projects are not a substitute for a contract; they enable contractual obligations to be discharged more effectively.

The benefits of collaborative relationships for clients and suppliers include:

- More reliable delivery of projects
- Fewer (or even zero) formal disputes or instances of conflict
- Improved communications, leading to better problem-solving and potential cost savings
- Continuous performance improvement and transfer of knowledge between projects
- Greater assurance on payment schedules
- Greater ability to address markets

The greatest benefits from collaboration on projects are achieved with larger, more complex projects where there are challenges which should be addressed jointly.

# 3. Successful collaborative relationships

This Section summarises factors which contribute to successful collaborative relationships and outlines ways of fostering collaboration. The topics covered include:

- The critical importance of inter-personal relationships
- The central role of leadership, particularly by senior managers in client organisations.
- The selection of partners who share a willingness and commitment to working collaboratively
- The benefits of early appointment of key members of a project team
- The need to establish a common understanding of the principles and objectives of the collaboration, and to express these in an agreed, public document
- The interactions between measures that support collaboration and contractual provisions
- Measures which promote collaborative behaviours and good communications
- The role of rigorous performance monitoring in maintaining healthy and effective relationships
- Financial incentives for collaboration
- Procedures that that enable disputes to be settled without recourse to legal action

# 4. Compliance with EU and national policies and requirements

This Section contains general guidance on the relationship between collaborative ways of working and the requirements of the EU procurement and competition legislation but it is not intended to be a definitive guide to the application of such legislation. It:

- considers how collaborative arrangements may be implemented in a way that is wholly compatible with EU Procurement Directives
- Points out that national procurement and other requirements should be taken into account; hence appropriate advice should be sought before implementation of collaborative arrangements.

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• Underlines the need to ensure that SMEs are not excluded from collaborative arrangements and offers guidance on how this may be avoided.

Annex A – <u>Further sources of information</u> (not included in the present draft)

Annex B - Case Studies (provisional texts of six Case Studies are included).

Manchester, UK 19th September 2008

# Annex J Consultee organisations outside Member States of study team for draft guide

#### **France**

Contractors FFB (contractors)

CAPEB (Small builders) EGF-BT (Enterprises)

FG3E (Building services contractors)

Bouygues SA Vinci Construction

Designers Chambre de l'Ingénierie et du Conseil de France

Syntec Ingénierie – Fédération Professionnelle de l'Ingénierie

Union of Architects CRMIF 75 (architecture)

Riff Architecture

Materials FFNMC (builders merchants)

Lafarge

Clients Conseil Général des Yvelines

Conseil Général Charente Maritime

Conseil Général St Denis

DDE du Nord

Eurodisney Asociés SCA

Agency Publique pour l'Immoblier de la Justice

**SENAT** 

EFIDIS SA HLM Ville de Cannes

Government Ministry of Development

Bureau des Marchés

**PUCA** 

Other CSTB (research)

Processus et Innovation (consulant) École des Ponts et Chaussées

National Association of Construction Economists

Germany

Contractors Hauptverband der Deutschen Bauindustrie

Zentralverband des deutschen Baugewerbes

Hochtief AG Ed. Züblin AG Bilfinger Berger AG Wittfeld GmbH Hentschke GmbH

Clients DEGES - Deutsche Einheit Fernstraßenplanungs- und -bau GmbH

Airport Berlin-Brandenbur International

Hessisches Landesamt für Straßen- und Verkehrswesen

Greece

Contractors Association of Technical Companies of the Highest Classes

Panhellenic Association of Engineers Contractors of Public Works

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Panhellenic Union of Public Works Contractors - Association Panhellenic Association of Mechanical Electrical Engineers

Contractors of Public Works

J & P AVAX AE

TERNA A.E.- GEK GROUP HELLINIKI TECHNODOMIKI TEB

Hochtief Vioter AE Aktor

Designers Greek Architects Association

Hellenic Association of Consulting Firms

OMETE (Civil engineering)

Materials Associations for steel, concrete and heavy clay products

Government Ministry for the Environment, Physical Planning and Public Works

Ministry of Development

Other Greek General Confederation of Labour

**Technical Chamber of Greece** 

Institute for Economic Studies of the Construction Industry

**Poland** 

Contractors Polish Association of Construction Employers

National Chamber of Business - Construction Committee

Mostostal Warszawa A/S

Materials St Gobain Isover Polska

Shomburg Rethmeier

Clients Polish National Railways

Sea Development Ltd

Government Ministry of Environment

Ministry of Infrastructure

Other Polish Construction Technology Platform

Academy of Construction

**Directorates** DG ENTR: E4 (SME Policy)

**General** DG ENV: G2 (Sustainable development and integration)

DG MARKT: C1 andC3 (Public procurement), DG MARKT: D4 (Regulated professions), DG MARKT: E2 (Internal market for services) DG COMP E2 (Anti-trust: basic industries)

DG COMP: F2 (Markets and cases: other services)

European representative

**bodies** 

ACE (Architects)

ive CEETB (Electrical Services)
CEPMC(Materials and Products)

EBC (Builders)

EuroGypsum (Materials) FIEC (Contractors) UEPC (Developers)

# Annex K A comparison of three forms of contract developed in the UK to support the principles of collaborative working

In the UK, several forms of construction contracts which aim to support collaborative ways of working have been developed. The contracts are:

- Association of Consulting Architects: PPC2000 Standard Form of Contract for Project Partnering (2003) (referred to as PPC2000)
- National Engineering and Construction Contract 3 (2006) (referred to as NEC3)
- Joint Contracts Tribunal Constructing Excellence Contract and Project Team Agreement (2006) (JCT-CE and JCT –CE/P)

Table K.1 presents a comparison of the main features of these three standard forms of contract that are considered to promote collaborative working.

While PPC2000 is a multi-party partnering contract, both NEC3 and JCT-CE are bilateral contracts which embrace collaborative methodologies. NEC3 incorporates a partnering option (Option X12) for use when more than two parties are involved on a project, while the JCT contract has an associated Project Team Agreement (JCT-CE/P), a multi-party arrangement that facilitates and reinforces cooperation.

All three contracts have received industry-wide backing. Currently, however, only the NEC form is endorsed by the Office of Government Commerce (OGC) as being fully compliant with its Achieving Excellence in Construction (AEC) principles (see UK Country Report). However, a review of PPC2000 and JCT- CE by Arup concluded that each contract would satisfy those principles. Arup further noted that:

'The difference in the way that each contract is applied by users will be at least as significant as the differences in the processes or terms and conditions provided within the contract'

The criteria used in the Arup review were that the contract should:

- a) encourage:
  - collaborative working
  - project processes necessary for successful projects
  - the achievement of value
  - supply chain management
  - dispute prevention
  - early dispute resolution
  - risk management
  - · client and supply chain involvement in design development
- b) provide:
  - processes for dealing with variation control and pricing
  - · performance management
  - risk allocation
  - clear terms regarding variation pricing and impact of variations on programme
- c) incentivise supply chain performance

The 'user-friendliness' of the documentation was also taken into account.

#### Sources:

- ACA (2003) PPC2000 ACA Standard Form of Contract for Project Partnering, Association of Consultant Architects, Bromley
- ACA (2003) Guide to the ACA Project Partnering Contracts PPC 2000 and SPC 2000, Association of Consultant Architects, Bromley
- Arup Project Management/Office of Government Commerce (OGC) (2008) Partnering Contract Review, Ove Arup & Partners Ltd, London
- JCT (2006a) JCT Constructing Excellence Contract, Sweet and Maxwell Ltd, London JCT (2006b) JCT Constructing Excellence Contract: Project Team Agreement, Sweet and Maxwell Ltd, London
- JCT (2006) JCT Constructing Excellence Contract: Guide, Sweet and Maxwell Ltd, London Mosey, D (2005) ACA Standard Form of Project Partnering Contract PPC 2000. Briefing Note, Trowers and Hamlins, London
- NEC (2006a) NEC3 Engineering and Construction Contract, Thomas Telford Ltd, London NEC (2006b) NEC3 Engineering and Construction Contract Guidance Notes ECC, Thomas Telford Ltd, London
- Willis, T (2005) Which Partnering Contract Should I Use? The Wilkes Partnership, London www.fbe
  - org.co.uk/viewDocument.cfm?id=Wilkes%20presentation%20to%20FBE%20WM.ppt

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Table K.1: Comparison of the features of three recent construction contracts that promote collaborative working

	PPC 2000	NEC3 Engineering and Construction Contract	JCT-CE - Constructing Excellence Contract
General features:			
Multi-party contract	Yes	No – the basic NEC form is a partnering contract between 2 parties	No – the approach is a series of bilateral contracts (within a common framework), which embraces a collaborative methodology
Partnering Option	N/A	Yes - Option X12 (Partnering) employed for partnering between more than two parties involved on a project (or programme).	Yes - associated CE/P JCT - Constructing Excellence Contract Project Team Agreement - a multi-party Project Team Agreement which facilitates/reinforces a cooperative approach
			Under this agreement Project Team members do not owe each other a duty of care; further no Project Team member has any liability to any other member for any act or omission of the Project Team or its members. However, this does not apply in respect of payments provisions under the agreement.
Single/Multiple Projects	Single	Single (Although the NEC3 Framework Contract is available)	Single (Although the form can be used in conjunction with the JCT Framework Agreement for a series of projects)
Intended parties	Client and first tier suppliers – related Standard forms for specialist contracts SPC2000 and SPC International available	Client and first tier suppliers  – related NEC3 Subcontract (ECS), Short Subcontract, and Professional Services Contract (PSC) available	Client, contractors, consultants, or subcontractors at all tiers. Parties are referred to as the 'Purchaser' and 'Supplier'
	The form has been utilised by the public, voluntary and private sectors to deliver offices, residential, educational, healthcare, leisure and public buildings, plus road and rail infrastructure.	Applicable to public and private sector clients both in the UK and internationally	While applicable to both the private and public sectors, the contract has been developed to meet the particular needs of local authorities and other public sector clients
	The contract can be used on any form of partnered project in any jurisdiction.		
Contract philosophy	Collaborative working is central to the contract, which incorporates	Designed to address all facets of the management of engineering and	The elimination of waste and the successful delivery of a project is achieve by the

	PPC 2000	NEC3 Engineering and Construction Contract	JCT-CE - Constructing Excellence Contract
	processes (a base and route map) to encourage effective project delivery as part of a Partnering team	construction projects, the Contract sets project management procedures within a legal framework.  Stated benefits include: stimulus to good management, flexibility and simplicity, which can be applied to any project, large or small.	identification, collaboration between and management of the entire supply chain  Project members work together for the benefit of the project, which in turn creates value for the individual participants.
Payment terms	A mechanism is provided to enable the parties to:  • develop and agree prices for all elements of the project  • establish a Maximum Price within a Budget included in a Price Framework – at the lowest price that delivers best value (Clause 12.3)  A fixed rate is included for the Constructor's profit, site and central office overheads (Clause 12.4)  The contract also provides for the payment of:  • services carried out prior to the date of the Commencement Agreement (Clause 12.1)  • activities under any Pre-Possession Agreement (Clause 12.2)	Contract variants: Priced contract with activity schedule (Option A) Priced contract with bill of quantities (Option B) Target contract with activity schedule (Option C) Target contract with bill of quantities (Option D) Cost reimbursable contract (Option E) Management contract (Option F) Option selected prior to appointment	Section 7 Payment:  Target Cost option based on a target cost and guaranteed maximum cost  Contract Sum option by reference to a contract sum  Option selected prior to appointment  Under the optional risk and reward sharing arrangements (Section 3 of the Project Team Agreement) provision is made for the establishment of a Project Target Cost by the members of the Project Team.
Features that promote collaborative working:			
Collaboration	The Partnering Team members shall work together and individually, in accordance with the Partnering Documents, to achieve transparent and cooperative exchange of information in all matters relating to the Project and to organise and integrate	The Employer, the Contractor, the Project manager and the Supervisor shall act as stated in this contract and in the spirit of mutual trust and cooperation (Actions 10.1 and Option X12).	The Overriding Principle guiding the Purchaser and the Supplier in the operation of this Contract is that of collaboration. It is their intention to work together with each other and with all other Project Participants in a cooperative and collaborative manner in good faith and in the spirit of mutual trust and

	PPC 2000	NEC3 Engineering and Construction Contract	JCT-CE - Constructing Excellence Contract
	their activities as a collaborative team (Clause 3.1).		respect. To this end the Purchaser and the Supplier agree they shall each give to, and welcome from, the other, and the other Project Participants, feedback on performance and shall draw each other's attention to any difficulties and shall share information openly, at the earliest practicable time. They shall support collaborative behaviour and address behaviour that does not comply with the Overriding Principle (Clause 2·1).
Core group/Project Team	A Core Group is established by the members of the Partnering Team (Clause 3.3). Its role is to:  • to review and stimulate progress of the Project • implement the Partnering Contract  Core Group decision-making is by consensus (i.e. all members present at a particular meeting) – members of the Partnering Team are to comply with any decision made within specified terms of reference (Clause 3.6).	Option X12: Partnering establishes a 'Core Group' from the partners listed in a Schedule of Core Group Members. The Core Group, for example:  • acts and takes decisions on behalf of the Partners on specified issues (Clause X12.2.3) • decides how the Core Group operates (Clause X12.2.4) • issues and revises the Schedule of Core Group Members and the Schedule of Partners (Clause X12.2.5)  Unless otherwise agreed, the Client's representative heads the Core Group.	Each Project Team member is represented on the Project Team, an advisory body, whose function is to guide the successful delivery of the Project through its design and construction. [Section 2 Working Together (Contract) and Section 2 Working together as the Project Team (Project Team Agreement)]  Tasks undertaken by the Project Team may include:  • reviewing progress of the project • reviewing and revising the project Risk Register • considering risk avoidance and/or mitigation measures • reviewing the results of any project planning, risk or value engineering workshops • monitoring the performance of a contributor to the project • considering any Project Team Relief Event or dispute • reviewing the performance of Project Team members against their KPIs • considering opportunities to deliver improved value • where applicable, considering the

	PPC 2000	NEC3 Engineering and Construction Contract	JCT-CE - Constructing Excellence Contract
			proposed Final Cost of the project under its risk sharing arrangements
Partnering objectives	Partnering relationships are to be established, developed and implemented by members of the Partnering Team.  The aim being to deliver:  trust, fairness, mutual co-operation, dedication to agreed common goals and an understanding of each other's expectations and values finalisation of the required designs, timetables, prices and supply chain for the Project innovation, improved efficiency, costeffectiveness, lean production and reduction or elimination of waste completion of the Project within the agreed time and price and to the agreed quality measurable continuous improvement commitment to people  plus any further objectives included in the Partnering Documents for the benefit of the Project and the common benefit of the Partnering Team (Clause 4.1).	That Partners work together as required by the Partnering Information and " in a spirit of mutual trust and co-operation" (X12.3: Working together)  A Partner:      may request information from another Partner, if required to complete the work under its own contract (the Partner shall comply with the request)      is required to forewarn its Partners of any issue that may impact on the realization of their objectives      implements Core Group decisions under its own contracts      uses common information systems as specified in the Partnering Information      gives (full, open and objective) advice, information and opinion to the Core Group and its Partners when requested  The Core Group:      may issue instructions to the Partners to amend the Partnering Information      prepares and maintains the project timetable      issues revised copies of the timetable to the Partners	If not already prepared, the Parties shall draw up and adopt a project protocol setting out the aims and objectives of the Project Team with regard to the delivery of the Project and the development of their working relationships (Clause 2·8 - Project Team Agreement).
Partnering facilitator	A Partnering Adviser is appointed to advise and support the Partnering Team either individually or collectively (Clause 5.6).	N/A	N/A
Intellectual Property Rights (IPR)	IPR is retained by the individual Partnering Team members, who grants the Client and the other Partnering Team	Not specifically mentioned, however, under clause 22.1: The Employer may use and copy the Contractor's design for any purpose connected	IPR (Copyright) is retained by the individual Supplier (or the relevant member of its Supply Chain), who grants (or ensures that the member of its

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	members " an irrevocable, non-exclusive, royalty-free licence to copy and use all such designs and documents for any purpose relating to completion of the Project" and in respect of the Client " the Operation of the Project" (Clause 9.2).	with construction, use, alteration or demolition of the works unless otherwise stated in the Works Information and for other purposes as stated in the Works Information.	Supply Chain grants) to the Purchaser " an irrevocable, assignable, royalty free licence to use, copy and reproduce all designs and related documents prepared in connection with the Services for any purpose relating to the Project including, without limitation, the construction, maintenance, letting, sale, promotion, advertisement, reinstatement, refurbishment and repair of the Project". (Clause 4.10).
Integration of the supply chain	Clause 10 (Supply Chain) defines the procedures for the integration of the individual partnering team member's supply chains. The principles include the incorporation/provision of:  • open-book arrangements • Terms and conditions to reflect the requirements of the Client, the interests of the Partnering team members and the project • the 'best available' warranties and support • maximum innovation  Plus the establishment and demonstration of best value for the client and, wherever practical, establishment of partnering relationships consistent with the Partnering Contract.	Limited references to the extended supply chain, the contract includes clauses relating to the appointment and position of subcontractors (Clause 26).	The Supplier shall endeavour to work together with, and fully involve, his Supply Chain (if any) in the delivery of the Services, and shall organise or take part in project planning, risk and value engineering workshops involving all or relevant members of his Supply Chain and other Project Participants as necessary or appropriate to the stage of the Project (Clause 4·16).  The Supplier shall use reasonable endeavours to engage all members of his Supply Chain using the JCT - Constructing Excellence Contract (CE) or otherwise on terms that fully reflect the terms of this ContractThe Supplier acknowledges that terms imposing more onerous obligations on members of the Supply Chain are to be avoided (Clause 4·16).
Incentivisation Gain/pain share	Incentives (shared savings arrangements and/or added value inducements) may be included in the Partnering Documents to influence the behaviour of Partnering Team members to 'maximise their efforts' for the	The following incentives are available under Option C: Target contract with activity schedule and Option D: Target contract with bill of quantities: The responsibility for assessing the Contractor's share of the difference	The contract incorporates both gain share and pain share mechanisms:  • Gain share: where the Actual Cost of delivering the Services is lower than the agreed Target Cost, a proportion of the difference is shared

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	benefit of the Project. Also, the Core Group is required to consider and seek to agree additional appropriate incentives Clause 13.1), which are then recommended to the Client for approval (Clause 13.2).  All incentive arrangements are to be implemented by the members of the Partnering Team (Clause 13.2).	between the sum of the Prices and the price for 'Work Done to Date' lies with the Project Manager in accordance with the methodology for its calculation provided in Clauses 53.1 and 53.5.  Where the price for 'Work Done to Date' is lower than the sum of the Prices, the Contractor receives a predetermined proportion of the saving. Conversely, where the price for 'Work Done to Date' is more than the sum of the Prices, the Contractor pays the Client a predetermined proportion of the over spend (Clauses 53.2 and 53.6)	between the Parties as specified in the Contract Particulars (Clause 7·11).  Pain share: where the Actual Cost of delivering the Services is greater than an agreed Guaranteed Maximum Cost, a proportion of the difference is borne by the Supplier as specified in the Contract Particulars (Clause 7·13).  Optional risk and reward sharing arrangements between members of the Project Team are also provided in Section 3 of the Project Team Agreement:  Surplus (when a project Final Cost has been established): where the Final Cost of delivering the project is lower than the agreed Project Target Cost, a proportion of the difference is paid by the Client to each Party, as agreed, up to the their individual Maximum Benefit (Clause 3.10).  Deficit: where the Final Cost of delivering the project is greater than the agreed Project Target Cost, a proportion of the difference is paid to the Client by each Party, as agreed, up to the their individual Maximum Liability (Clause 3.11).
Bonus for early completion	Incentive payments can be linked to the project completion date or any other target established as a KPI (Clause 13.5).	Option X6 enables bonus payments to be made at a predetermined rate/day	Provisions can be made for a bonus payment or payments to be made where the Service or a predetermined section of the Service is completed ahead of schedule (Clause 7.28).
Risk management:	Asserts that the Partnering Team members recognise the risks (and their associated costs) involved in the design, supply and construction of the Project.  Both at the Partnering Team level and supplier	Clause 80.1 (Employer's risks) itemises the general risks borne by the client and allows for additional Employer's risks to be included in the Contract Data.  Clause 81.1 (The Contractor's risks) states that all risks not borne by	Active project risk identification and management is promoted by the inclusion a mandatory Risk Register (Clause 5.1).  A Risk Allocation Schedule, derived, usually, from the Risk Register, forms part of the Agreement, enabling the identified risks to be

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	level Risk Management exercises are to be undertaken to analyse and manage these risks effectively. The aim being to:  identify risks and their potential cost impact eliminate or reduce risks and their potential cost impact insure risks when relevant and cost effective distribute/allocate risks to the Partnering Team member most able to manage a particular risk (Clause 18.1).  Generally the supplier (Constructor) is responsible for managing all risks connected with the project and its site, from the date of the Commencement Agreement until the Completion Date. Any exceptions to this are to be stated in the Partnering Terms or in the risk sharing arrangement(s) specified in the Commencement Agreement (Clause 18.2).	the Employer are to be carried by the Contractor.  A Risk Register is incorporated as part of the Contract Data, which is revised by the Project manager to include early warning events identified by the Project Manager or Contractor (plus the Core Group if X12 used). Also, the contract allows for the convening of collaborative risk reduction meetings (Clauses 11.2.14 and 16).	described, valued (i.e. a statement of any amount contained within the Target Cost/Contract Sum to meet the risk) and a time period attributed (for which the Supplier is responsible). The schedule also enables the cost and time consequences of the risk to be apportioned between the Purchaser and Supplier. Two Risk Allocation Schedule options are available, where the method of adjustment is either based on:  • each risk (Schedule A) or • the total amount/total period of all the risks (Schedule B).  Responsibility for preparing, updating and amending the Risk Register can be assigned to the Supplier (Clause 5.1 and 5.2).  The cost/time consequences of risks are to be allocated on a fair/practical basis. The contract also deals fairly with the occurrence of risks: 'Relief Events' (Clauses 5.7 to 5.16).
Performance measurement – Key Performance Indicators (KPIs)	Includes:  • regular performance reviews (by reference to KPIs) of each Partnering Team member by the Core Group  • provision of information, on an open-book basis, by each Partnering Team member to indicate progress against its KPIs  • review of continuous improvement proposals by the Core Group (Clause 23).	If Option X12 adopted and KPI's agreed	If Part 6 is implemented and KPI's established, KPIs are used by the Supplier to monitored the performance of Purchaser and likewise by the Purchaser to monitor the performance of the Supplier (Clause 6.1).  Additionally, regular formal reviews of both Purchaser and Supplier performance (against their KPIs) are required, together with a discussion of ways to improve their performance (Clause 6.2).  Under the Project Team Agreement, monitoring may be undertaken jointly by the Project Team (Clause 6.3).

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Transparency (Open book approach)	Transparency in the establishment of the Price Framework	<ul> <li>If 'target cost' option selected transparency of cost and adjustment of Target</li> <li>If 'Lump Sum' option selected – transparency of Fee and Defined Cost of Compensation Events</li> </ul>	<ul> <li>If 'target cost' option selected – definition of Actual Cost and records</li> <li>If 'contract sum' option selected - no transparency of pricing and no clear basis of valuing Relief Events (Clauses 7.2 to 7.4).</li> </ul>
Insurance	Project insurance (including the site, any structures on it or any identified risk) is obtained in the joint names of the parties by the Partnering Team member designated in the Commencement Agreement (Clause 19.1).	Insurance is provided by the Contractor as required by the 'Insurance Table', plus any further insurance as itemised in the Contract Data. Similarly, any insurance provided by the Employer is also listed in the Contract Data (Clause 84.1).	The Purchaser and the Supplier are both required to maintain insurance cover as designated in the Contract Particulars (Clause 8-1).  Where available, comprehensive project insurance should be considered (Footnote 14).
Dispute resolution	A staged problem solving and dispute avoidance/resolution process is included:  initially differences or disputes are referred to a Problem-Solving Hierarchy, which seeks to achieve an agreed solution  if the Problem-Solving Hierarchy fails to resolve the issue or find a solution the issue is referred to the Core Group for review  following these two stages, if the difference or dispute is still unresolved, then the issue may be referred to conciliation, mediation or any other form of alternative dispute resolution  any party to the difference or dispute has the right to refer the issue to adjudication  if adjudication is unsuccessful any issue can either be referred to the courts (as set out in the Project Partnering	NEC3 contains two dispute resolution procedures, one (Option W2) to be used in the United Kingdom when the Housing Grants, Construction and Regeneration act 1996 applies, the second (Option W1) where it does not.  Both procedures enable a dispute arising under or in connection with the contract to be referred to and decided by an Adjudicator. Following adjudication, a dissatisfied party may refer a dispute to a tribunal. If the tribunal is arbitration, the arbitration procedure is to be as stated in the Contract Data.	The aim is for disputes to be resolved by the Project Team in a collaborative approach. Failing this the contract allows for resolution by mediation, adjudication or litigation. Adjudication is to be conducted in accordance with The Scheme for Construction Contracts. There is no provision for arbitration.  Corresponding provisions are provided under section 4: Dispute Resolution in the Project Team Agreement.

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	Agreement) or, if permitted, to an arbitrator. (Clause 27: Problem solving and dispute avoidance or resolution)		
Additional information			
Introduced/launched	September 2000 - The first standard form of Project Partnering Contract – (amended in 2003 and October 2008)	NEC 3 June 2005 (amended June 2006) NEC2 January 1995 NEC March 1993	1 March 2007 (attestation update February 2008)
Impetus	Developed in response to the recommendations of the Rethinking Construction ('the Egan') report and contains principles proposed in the Construction Industry Council's Guide to Project Team Partnering.  Plus, a recognition that the construction and engineering sectors required a process document that encompassed all the functions involved in the design and delivery of a project during its preconstruction and construction stages.	To create a contract that met both the present and future requirements of the engineering, building and construction industries; the objective being to improve upon existing forms of contract in terms of:  • flexibility • clarity and simplicity • stimulus of good management Edition 2 of the contract was revised so as to be compliant with the principles for a modern contract as recommended by the 'Constructing the Team' (The Latham) report	To provide a contract that supported collaborative and integrated team working within the supply chain, with the aim of:  • encouraging collaborative behaviour • promoting and requiring the implementation of risk management during the pre-tender stage (to aid the delivery of successful projects) • providing flexibility in use • being applied throughout the supply chain
Endorsements	Endorsed by The Construction Industry Council     Recommended by Constructing Excellence.     Supported by The Housing Corporation     Sir Michael Latham, Chairman of ConstructionSkills confirmed that the contract incorporates all his recommendations and principles for a modern construction contract.	OGC (The Office of Government Commerce):     recommends the use of NEC3 by public sector construction procurers     considers NEC3 to be fully compliant with the Achieving Excellence in Construction (AEC) principles     Sir Michael Latham, Chairman of CITB-ConstructionSkills	Constructing Excellence in the built environment The Local Government Association (LGA) Sir Michael Latham, Chairman of CITB- ConstructionSkills
Associated forms:	PPC(S)2000 – the Scottish supplement, PPC International SPC2000* SPC International* * = Standard forms for	NEC3 Engineering and Construction Subcontract (ECS) NEC3 Engineering and Construction Short Subcontract	CE/P JCT - Constructing Excellence Contract Project Team Agreement Attestation Update (February 2008)

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	specialist contracts	NEC3 Professional Services Contract (PSC) NEC3 Engineering and Construction Short Contract (ECSC) NEC3 Adjudicator's Contract (AC) NEC3 Term Service Contract NEC3 Framework Contract (FC)	
Publishers/Authors	Association of Consultant Architects 98 Hayes Road, Bromley, Kent BR2 9AB  Authors: Trowers & Hamlins, Sceptre Court, 40 Tower Hill, London EC3N 4DX	NEC, 1 Heron Quay, London,E14 4JD Published by Thomas Telford Ltd	The Joint Contracts Tribunal (JCT), 4th Floor, 28 Ely Place, London EC1N 6TD/ Constructing Excellence  Published by Sweet and Maxwell  Principal authors, Giles Dixon and Martin Howe, solicitors

#### Annex L **Construction business systems**

Construction is an industry with centuries of tradition, and as most construction takes place in a national or sub-national context. While the same tasks of design, site works, maintenance etc always need to be accomplished, the relationships between the various actors (designers, contractors, clients etc) vary from country to country. These relationships are governed by structures of responsibility that have evolved from different traditions and pressures and the introduction of voluntary arrangements in certain EU countries is a response to perceived inadequacies in these traditional structures, commonly termed 'construction business systems'40.

While each Member State has its own business system, earlier research by members of the Study Team has identified five important groupings of national construction business systems in Europe which reflect the prevailing politico-business cultures:

# Anglo-Saxon

This is based on liberal market values and on the stock market for industrial finance. It has a relatively low level of state intervention and of worker protection. In construction, it is marked by a strong separation between design and construction activities, with designers (architects, civil engineers, building services engineers etc) being grouped into a set of self-governing professional bodies and, at least in the building sector, an almost complete separation of background, education and culture between these professional groups and the contractors. In civil engineering, there is greater sharing of backgrounds, since many contracting firms are led by civil engineers. The UK and Ireland demonstrate this tradition, as do countries in the British Commonwealth.

The high degree of fragmentation in the overall construction process offers scope for failures of communication, 'boundary' disputes, and uncertainty over responsibilities, differences in objective and failure of cost control. These problems have stimulated the development of a wide range of procurement routes (design-build, design-buildoperate etc), each of which attempts to address the interconnected issues of design, construction and project co-ordination in a different way. They have also led to vigorous promotion of 'partnering' as an overlay to more integrated procurement.

# Corporatist

The corporatist system depends more on negotiated coordination between 'social partners', with the government showing a greater willingness to intervene in the open market to protect social values. It has a greater reliance on banks for industrial finance and relatively high levels of worker protection. In construction, it is manifest in higher levels of cooperation among actors in the construction process and a more equal relationship between designers and contractors. Contractors take a more prominent position. Prominent designers exist, but do not provide the 'public face' of construction as in the Anglo-Saxon model. The Scandinavian countries, together with the Netherlands and Germany, broadly follow this model.

The evidence from a previous study is that countries with this system appear to be familiar with most of the procurement routes that have been developed in the Anglo -Saxon system, although perhaps fewer are used to any extent. They are, though, are still concerned about fragmentation of the process, and alignment of objectives, and some countries have been particularly keen to explore partnering concepts.

<sup>&</sup>lt;sup>40</sup> For more extensive discussion of construction business systems, see the special issues of *Building* Research and Information 2000, 28, 2, "Construction Business Systems in the European Union" and 2002, 30, 6 "Global Construction Business Systems". Both were edited by Professor Graham Winch.

# o Étatique

The étatique system has more extensive coordination of the economy by the state and a greater reliance on the state for industrial finance. It has a relatively high level of worker protection and a desire to promote national champions in various industrial sectors. Also significant is the high degree of interchange at management levels between state and private bodies, facilitated both by state ownership of important industry and commercial functions and by the common educational background of the senior executives in both sectors. In construction, it is marked by the relatively weak organisation of independent architects and engineers, and leadership of the industry by the construction contractors. Another distinctive feature of these systems is the decennial project insurance arrangements which indemnify the client from the consequences of technical failures in the first ten years of operation. Belgium and France have this tradition.

The *étatique* system is, more than the others, focussed on delivery. By being focussed on delivery, the system appears (at least in France, although there is some concern in Belgium) not to have stimulated the same concerns over fragmentation, cost over-runs and poor performance (and the project insurance arrangements may have served to insulate clients from some of the consequences of technical failure).

As a consequence, the system has not developed the range of procurement routes manifest in the various contract forms known in other systems. The relationship between the client and the contractor is set out in a traditional manner, and after the contract is signed the parties make it work though their greater shared backgrounds and perspectives, some of this stemming from the fact that much public procurement takes place at local level. Partnering concepts have not been explored to the same extent as in the systems discussed above.

#### o Post-communist

These are the countries that have moved over the last 15 years or so from a centrally planned economy towards a market-based one. They face particular challenges in developing the institutions that will allow them to compete within the single European market, and in making the investments in infrastructure required by a modern economy. In construction this involves changes such as moving from the large, integrated "Kombinat" to the more disintegrated supply chains of market-orientated systems, and the development of an independent consultancy sector.

These countries are relatively inexperienced in contractual structures and have understandable concerns that 'collaboration' may easily translate into undesirable practices. Hence there has not been exploration of partnering or similar concepts.

#### Mediterranean

Across southern Europe, a number of countries share distinctive features in their business systems of reliance upon the state, but from a position of relative state weakness compared to the *étatique* countries. The construction business systems tend to be less developed, and infrastructure development has often been funded by the EU. Where internationally competitive firms develop, they tend to be contractors, and the organisation of consultants tends to be weaker.

As with the post-communist countries, public authorities are conscious that without rigorous application of procurement rules and contractual conditions there may be opportunities for inappropriate behaviours. Hence there do not appear to be strong moves towards collaborative arrangements in these countries.