EIC/FIDIC Questionnaire Survey:The use of the FIDIC Red Book

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Will Hughes
Department of Construction Management & Engineering
University of Reading
P O Box 219, Reading, RG6 6AW, UK
Tel +44 (0)118-931 8201 Fax +44 (0)118-931 3856

Introduction

This survey was undertaken at the request of EIC (European International Contractors) and FIDIC (Fédération Internationale des Ingénieurs-Conseils). As part of the process of revising the Red Book and harmonizing it with other FIDIC contracts, the purposes were to examine contract users' feelings about contract policy in general and about the Red Book in particular; and to consider the way that the FIDIC Red Book is used in practice in order to discover what changes might be useful for those who use the contract. A survey questionnaire was prepared in consultation with EIC and FIDIC. The questions were tested and refined by discussing them with experienced practitioners and the questionnaire was distributed around the world with the assistance of EIC and FIDIC through their member associations. Because the questionnaires were distributed to organizations who subsequently duplicated them and forwarded them to others, it is not possible to gauge how many questionnaires were distributed. A total of 204 completed questionnaires were received.

Summary of findings

Contract use

- **Countries of respondents:** Responses came from 38 countries. Most responses came from UK and Western Europe, although the best represented country is Malaysia (page 5)
- **Size of project:** The majority of projects reported were in the region of US\$10-100m. Only 4% of the reported projects were less than US\$1m and 24% of them were above US\$100m (page 20).
- **Type of work:** Just over half of the reported projects consist largely of work above ground. Offshore work constituted the next most common category, and underground the least (page 20).
- Extent of amendment: Most contracts incorporate amendments, presumably in a project-specific Part II. In this sample, only 16% had less than four clauses amended. 29% of contracts had 20-29 clauses amended and 26% of them had more than 30 clauses amended (page 22).
- Main departures from standard: Clause 61 was least amended. Clauses 10, 14, 21, 67 and 70 were amended in more than 60% of the contracts and clause 60 was amended in 74% of the cases (page 23).

Attitudes to contracts: policy and practice

- Compatibility with common practice: The questions on general policy issues elicited responses which were consistent with those specifically on the Red Book. Therefore, the Red Book form of contract is largely compatible with common practice. Further statistical analysis will help in revealing any incompatibilities.
- **Risk apportionment:** Most people felt that the Red Book apportions risks equitably (page 13).
- **Best and worst features of Red Book:** The best features of the Red Book were that it was comprehensive and equitable (page 17). The worst feature identified by respondents

was the "Engineer's role" (page 18). Only a small proportion of the respondents identified particular features, and the answers for other questions show that the problems are not extensive.

Attitudes to standardization and contract drafting

- Standardization: There is overwhelming support for the concept of standardization of contracts (page 6), but there is some uncertainty as to whether a standard can be equally applicable in common law as well as civil code jurisdictions (page 6). Very few people felt that the Red Book was better in either civil code or common law jurisdictions (page 13).
- Clarity and simplicity: In principle, most respondents agreed that legal precision is aided by simplicity of expression and that it is more important than ease of translation (page 7). Most respondents (71%) found the Red Book easy to understand (page 14)
- The use of project-specific clauses: Generally, most people felt that contracts should encourage parties to add project-specific clauses, although many contractors disagreed (page 7). With particular reference to the Red Book, there were evenly divided views on whether it often needed to be altered to suit the needs of individual projects (page 13). The separation of the clauses in to parts I and II was perceived to be very advantageous for those who prepare contracts, and for those who administer contracts (page 14).

Selected contractual provisions

- Payment: There was a strong feeling that payment clauses are both necessary and useful in contracts (page 11). The majority of people felt that the Red Book encourages fair payment regimes (page 15) and are about right (page 16).
- Claims: There was strong agreement for the idea that for certain qualifying events, contractors should be able to request extensions of time (page 11) and that these events should be fairly comprehensive, but clients felt that the coverage should be limited (page 12). With reference to the Red Book, half of the respondents were neutral about whether the provisions for money claims were adequate, but contractors tended to feel that they were not (page 16). A similar picture emerged for time claims (page 16).
- Engineer's powers: There was an even split of views about the extent of the Engineer's powers in approving Contractor's work. Generally, consultants and clients felt that the Engineer should have wide powers whereas contractors felt that he should not (page 8). There was very little support for the idea of transferring approval powers directly to the Employer (page 8) but strong support for objective tests laid down in the specification, rather than a reliance upon the Engineer's opinion (page 8). In the Red Book, the Engineer's powers of approval are generally about right, although contractors had a slight tendency to feel that there were too many powers (page 15)
- Engineer's impartiality: There was also a wide range of views about impartiality of Engineers. Generally, consultants and clients feel that Engineers are impartial whereas contractors feel that they are not (page 9). Most people feel that Engineers typically favour the Employer in administering contracts (page 9)
- **Dispute resolution:** Generally, most respondents seemed to think it a good idea for the Engineer to be the settler of disputes. Contractors were less keen on this idea than others

(page 9). There was a large minority in favour of someone other than the Engineer settling disputes (page 10). In the Red Book, it seems that the clauses governing Engineer's decisions are neither help nor hindrance in achieving speedy and equitable settlement of disputes (page 15). Contractors felt that the provisions do not help, but consultants and clients disagree.

- **Binding decisions:** Adjudicators should make decisions, rather than recommendations and these decisions should be open to subsequent appeal (page 10).
- Inclusion of optional specialist clauses: Although there were no direct calls for optional clauses to cover specific types of work, ground conditions are usually a problem (page 12) and should usually be the responsibility of the employer (page 12).

The remainder of this report summarizes the responses for each question. The questionnaire and details of the qualitative data are given in appendices at the end.

Part One: Personal data

Profession

Respondents were asked an open question about their profession. Given a free choice as to how to describe themselves, people used a wide range of descriptions.

These responses show that a wide range of qualified professionals have provided data. But there is little direct match between professions and type of employer. For example, 29 of the civil engineers worked for contractors, 42 worked for consultants and 10 for clients.

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Academic	2	Lawyer	21
Civil Engineer	81	Manager	25
Civil Servant	1	Other Consultant	15
Contract Specialist	1	Quantity surveyor	29
Contractor	6	Services Engineer	4
Contracts Manager	5	Technical Director	1
Engineer	10	Missing	3

Geographical distribution

The respondents were asked for their country (address, not nationality). The countries have been grouped together into regions for the purposes of summarising the data and these are given in Table 2. This shows that most of the responses came from the UK and Western Europe, with a the remainder being fairly well spread around the world. Generally speaking, locations near the UK seemed more likely to respond. One exception was Malaysia where, due to the gracious assistance of the Construction Industry Development Board, a large number of responses were elicited.

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Middle East	2
Scandinavia	2
South America	3
USA and Canada	9
Asia	10
Eastern Europe	11
Africa	17
United Kingdom	31
S.E.Asia	59
Western Europe	60

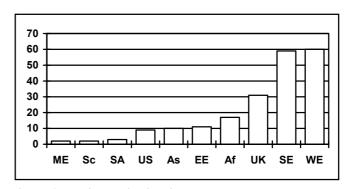


Figure 1: Regional distribution

The 38 countries represented by these data are given in Table 3. This shows that the majority of the responses were from Western Europe (including UK) and the rest are fairly well spread between the countries. Apart from a few cases, there are too few data points for most countries for any causal links to be established. Any investigation of "geographical" influences in the data will be restricted to grouping together common law and civil code countries.

Table 3: Country distribution

Algeria	1	Italy	7	Spain	1
Argentina	2	Japan	9	Sweden	1
Belgium	3	Lesotho	5	Switzerland	4
Canada	4	Malaysia	37	Tanzania	1
China	2	Mexico	1	Thailand	1
Denmark	6	Pakistan	5	The Netherlands	10
Finland	2	Poland	7	Turkey	2
France	10	Portugal	1	UK	31
Germany	15	Romania	2	United Arab Emirates	2
Hong Kong	1	S. Korea	3	USA	5
Hungary	1	Singapore	3	Zambia	1
India	5	Slovak Republic	1	Zimbabwe	4
Indonesia	3	South Africa	5	Total	204

Type of organization

In question 6, respondents were asked to place themselves in one of six organizational types. Their responses are shown in Table 4. This shows that the majority of respondents were contractors, closely followed by consultants. It proved very difficult to get responses from clients, but altogether, clients represent approximately 10% of the sample. This will enable inferences to be drawn about the differences of views between clients, consultants and contractors.

Table 4: Type of organization

Government	5	2%
Other public sector client	12	6%
Private sector client	9	4%
Consultant	69	34%
Contractor	101	50%
Other	8	4%

Part two: General contractual issues

This part of the questionnaire consisted of 21 questions about respondents' views on contracts generally. Here, no reference was made to the FIDIC Red Book other than to ask respondents not to relate their answers to it.

Each question offered opposing statements and asked respondents to circle one of five numbers closest to their own view. The questions were designed to overlap and duplicate to a certain extent to help check that responses were consistent and sensible. For each question, the two opposing statements are reproduced and in the five possible answers, the frequency of each response is given. These frequencies (%) are first given in respect of consultants ("Cons"), Contractors ("Cont") and Client bodies, the latter being extended to include respondents describing themselves as governmental organizations and others who seemed likely to be sympathetic to project sponsors. Second, frequencies (%) are given by allocation into civil code and common law jurisdictions. However, it should be noted that the latter allocation was based on the country of the respondent, not of a project.

Question 7: Equitability of standardization

Standardizing contract terms does nothing towards helping ensure an equitable distribution of risks between contracting parties

%	1	2	3	4	5	п
Cons	1	1	6	24	68	71
Cont	4	4	1	29	62	102
Client	4	0	0	27	69	26
Civil	3	1	1	28	67	78
Com	3	3	3	26	64	121
Tot	3	3	3	27	65	199

The standardization of contract terms is helpful in ensuring an equitable distribution of risks between the contracting parties

These responses show an unequivocal agreement with the proposition that standardizing contract terms is helpful in ensuring an equitable distribution of risks between the parties. Grouping those who agree with those who agree strongly gives a total of 92% who are in favour of standardization. All categories share the same view.

Question 8: Standardizing for both civil law and common law jurisdictions

A standard-form contract can be equally applicable to both civil code and common law countries

%	1	2	3	4	5	п
Cons	15	17	48	8	11	71
Cont	20	30	28	13	9	103
Client	19	19	23	23	15	26
Civil	23	27	27	11	13	79
Com	16	22	40	13	9	121
Tot	19	24	35	13	11	200

Civil code countries require different standard forms to common law countries

More than a third of respondents were unable to form a view on this issue. This format of question does not distinguish between "don't know", "unsure" and "no strong opinion", lumping neutral responses into the central column. Therefore, this large proportion of unsure responses reveals no explanation for the lack of views. Grouping the answers together by adding strong and mild views, 43% of respondents felt that a standard form could be equally applicable in both civil code and common law countries, whereas 24% did not. On examining the breakdown between the categories, consultants seem to be more neutral about this than other groups. Respondents from civil code countries were slightly more likely to feel that a contract could be equally applicable in both jurisdictions.

Question 9: Standardization across jurisdictions

An international standard-form contract can never be as effective as one written for a specific jurisdiction

%	1	2	3	4	5	п	
Cons	7	7	6	30	51	71	
Cont	9	7	6	35	43	<i>102</i>	
Client	8	4	4	23	62	26	
Civil	1	8	6	32	53	<i>78</i>	
Com	12	6	5	31	45	121	
Tot	8	7	6	32	48	199	

A well-drafted international standard-form contract will be effective in most jurisdictions

Most people agreed that a well-drafted standard form is effective in most jurisdictions (80%). This is interesting in the light of the preceding question which specifically focused on differences between civil and common law jurisdictions. Even though the preceding question brought the difference to the fore, the answers to this question seem to indicate that respondents do not usually consider details like basic jurisdictional differences. In conjunction with question 7, the message is clear that respondents feel that standard form contracts are widely applicable as well as helpful.

Question 10: Use of project-specific clauses

Generally, a standard-form contract should not encourage parties to add project-specific clauses

%	1	2	3	4	5	п
Cons	8	11	4	25	51	71
Cont	17	18	1	25	39	103
Client	8	12	0	23	58	26
Civil	11	16	0	30	42	79
Com	13	14	3	21	48	121
Tot	13	15	2	25	46	200

Generally, a standard-form contract should encourage parties to add project-specific clauses

These responses indicate that people are generally very comfortable with the idea of adding project-specific clauses to a standard-form contract. Such additional clauses would tend to modify any strict notion of standardization. This is interesting in the light of the responses to question 7 which indicate an overwhelming support for standardization. These views can be rationalized by arguing that for many people, standardization of contracts is not a strict notion but one involving a standard *approach* rather than a rigid set of clauses for all occasions. Only 2% of respondents were neutral for this question.

Although consultants and clients match in the proportions agreeing and disagreeing, contractors seemed generally less keen on the idea of encouraging parties to add project-specific clauses.

Question 11: Simplicity of expression

In drafting standard-form contracts, legal precision is aided by simplicity of expression

%	1	2	3	4	5	п
Cons	49	31	13	4	3	71
Cont	39	29	10	16	7	103
Client	54	19	8	12	8	26
Civil	32	33	18	11	6	79
Com	53	26	6	11	5	121
Tot	45	29	11	11	6	200
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In drafting standard-form contracts, legal precision is jeopardized if simplicity of expression is a priority

There is strong support for the notion that legal precision can be aided by simplicity of expression, with 74% of respondents recording agreement or strong agreement with the idea. Support for the notion was slightly stronger among consultants. When comparing common law with civil code countries, respondents from common law countries were much more strongly in agreement with the idea that legal precision follows simplicity.

This question was originally intended to look for any indication of a distinction between clarity of language and simplicity of language. Clearly, this distinction needs spelling out if such views are required.

Question 12: Ease of translation

Ease of translation is not as important as legal precision

%	1	2	3	4	5	п
Cons	17	32	15	14	21	71
Cont	31	25	19	12	13	103
Client	50	35	8	4	4	26
Civil	33	34	16	9	8	79
Com	26	26	17	13	19	121
Tot	29	29	17	12	15	200

Ease of translation is more important than legal precision

Legal precision is felt to be more important than ease of translation by a narrow majority of respondents. Only a quarter of respondents felt that ease of translation was more important. In considering the separate groups, clients differ from the others in that most of them (85%) feel that ease of translation is not as important as legal precision. The corresponding figures

for contractors and consultants are 56% and 49% respectively. In civil code countries, there is marginally less support for ease of translation than there is in common law countries.

Question 13: Powers of engineer to approve/reject contractors' work

There should be strict limits placed on the powers of the Engineer to approve or reject the work of the Contractor

%	1	2	3	4	5	п
Cons	7	7	6	35	45	71
Cont	40	21	8	17	15	103
Client	19	8	4	31	38	26
Civil	35	16	6	24	18	79
Com	19	13	7	26	36	121
Tot	26	15	7	25	29	200

The Engineer, in administering a contract, should have extensive and wide-ranging powers to approve or reject the work of the Contractor

Most people had a view on the issue of the extent of an engineer's powers, but the responses are fairly evenly split. A majority felt that the engineer's powers should be extensive (54%). But a large minority disagreed (41%).

There are distinct differences between the views of contractors and others. 69% of clients and 80% of consultants felt that the engineer should have extensive powers, whereas 61% of contractors disagreed. Also, in common law countries, there is slightly more support for extensive engineer's powers than there is in civil code countries.

Question 14: Approval of contractors' work; who?

The Contractor's work should be subject to the approval of the Employer, not the Engineer

%	1	2	3	4	5	п
Cons	1	4	8	23	63	71
Cont	16	13	9	21	42	102
Client	12	0	12	31	46	26
Civil	12	10	12	31	36	78
Com	9	7	7	17	60	121
Tot	10	8	9	23	50	199

The Contractor's work should be subject to the approval of the Engineer, not the Employer

Nearly half the respondents felt *strongly* that the Contractor's work should be subject to the approval of the Engineer and not the Employer. Another quarter agreed, but not so strongly. A clear majority are against the idea of the Employer approving work.

There is a small tendency among contractors indicating that employer's approval would be preferable to engineer's approval, but still the majority of contractors (63%) are in favour of engineer's approval. Similarly, a small proportion (22%) of civil code respondents are in favour of employer's approvals.

Question 15: Approval of contractors' work; how?

Any approval of the Contractor's work should be subject to strict objective tests laid down in the specification

%	1	2	3	4	5	n
Cons	46	32	7	14	0	71
Cont	57	28	4	5	6	103
Client	54	35	4	8	0	26
Civil	52	29	8	8	4	79
Com	54	31	3	9	2	121
Tot	53	31	5	9	3	200

Approval of the Contractor's work should be a subjective matter for either the Employer or Engineer

Respondents felt strongly that approval of the contractor's work should be subject to strict objective tests. This is interesting in the light of the preceding question which revealed resounding support for Engineer's approval of work. The picture which emerges is one where Engineers should be called upon to check work against an objective standard, but not

to exercise subjectivity in approving Contractors' work. There is a small proportion of consultants who feel that subjectivity should play a part in the approval of contractors' work, but this is very slight.

Question 16: Engineers' impartiality

Engineers are rarely impartial in exercising their powers under a contract

%	1	2	3	4	5	n
Cons	6	4	8	45	37	71
Cont	30	38	13	16	3	104
Client	12	19	12	31	27	26
Civil	22	32	14	19	14	79
Com	17	18	10	34	20	122
Tot	19	23	11	28	18	201

Engineers are usually impartial in exercising their powers under the contract

Responses on impartiality are fairly evenly split. 46% of respondents feel that engineers exercise their powers with impartiality, whereas 42% do not. Nearly all consultants (82%) feel that engineers are usually impartial, whereas a large proportion of contractors (68%) feel that engineers are rarely impartial. Clients are mostly of the view (58%) that engineers are impartial.

It is interesting that the jurisdictions show almost opposite patterns of response. In civil code jurisdictions, 54% of respondents feel that engineers are rarely impartial, whereas in common law jurisdictions, 54% feel that engineers are usually impartial.

Question 17: Direction of engineers' partiality

Engineers typically favour the Contractor in administering contracts

Tot	1	2	25	44	27	201
Com	2	3	23	44	28	122
Civil	0	1	29	43	27	79
Client	0	0	23	58	19	26
Cont	1	2	16	38	42	104
Cons	1	4	39	46	8	71
%	1	2	3	4	5	п

Engineers typically favour the Employer in administering contracts

Almost no-one feels that engineers favour contractors in administering contracts. A majority of respondents (71%) feel that engineers favour the employer. More than a quarter chose the neutral option, implying that these respondents feel that engineers favour neither the employer or the contractor. This is interesting in the light of the previous question which revealed that 47% of respondents exercised their powers impartially. No clients felt that engineers favoured the contractor. Interestingly, a few contractors felt that they did.

Question 18: Engineer as dispute settler

Generally, it is a bad idea to incorporate terms which call upon the Engineer to settle disputes between the Employer and the Contractor

%	1	2	3	4	5	n
Cons	7	8	7	34	44	71
Cont	26	28	4	27	15	104
Client	27	8	4	12	50	26
Civil	15	27	5	27	27	79
Com	22	13	5	28	32	122
Tot	19	18	5	27	30	201

Generally, it is a good idea to incorporate terms which call upon the Engineer to settle disputes between the Employer and the Contractor

The idea of having the engineer as a settler of disputes elicited clear opinions, with only 5% being unable to express a view. 57% of respondents feel that it is a good idea, whereas 38% do not. In looking at the way that these views vary among the groups, only a few consultants (15%) think it a bad idea to have the engineer settle disputes, whereas 54% of contractors and

35% of clients thought it a bad idea. There are no significant differences between the jurisdictions.

Question 19: Adjudicator as dispute settler

Someone other than the Engineer should be first line Adjudicator(s) in the event of disputes

%	1	2	3	4	5	n
Cons	14	10	6	25	45	71
Cont	30	24	3	23	20	104
Client	31	4	0	23	42	26
Civil	20	27	6	19	28	79
Com	27	10	2	27	34	122
Tot	24	16	3	24	32	201

The Engineer is the best person to be the first line Adjudicator in the event of disputes

There was marginal preference for the idea that the engineer was the best person to be the first line adjudicator in the event of disputes, but 41% of respondents felt that someone other than the engineer should settle disputes.

These responses broadly follow those in the preceding question as would be expected since the two questions barely differ.

Question 20: Decisions of adjudicators

An Adjudicator, or a formal adjudication board, should make recommendations, rather than decisions

%	1	2	3	4	5	n
Cons	13	17	4	23	44	71
Cont	15	19	8	24	34	104
Client	12	19	8	27	35	26
Civil	16	20	9	27	28	79
Com	12	17	5	22	43	122
Tot	14	18	6	24	37	201

An Adjudicator, or a formal adjudication board, should make decisions, rather than recommendations

Generally, most people (61%) felt that adjudicators should make decisions rather than recommendations, but a fairly large minority (32%) held the opposite view. The differences among the groups are small, the only notable point being that consultants have a slightly stronger tendency to the view that adjudicators should make decisions, rather than recommendations.

Question 21: Appeals against adjudications

Decisions of the Engineer (or Adjudicator, or adjudication board) should not be open to appeal

%	1	2	3	4	5	n
Cons	10	11	3	41	35	71
Cont	5	2	6	18	69	103
Client	15	15	15	35	19	26
Civil	5	9	11	29	46	79
Com	10	6	2	28	54	121
Tot	8	7	6	29	51	200

Decisions of the Engineer (or Adjudicator, or adjudication board) should be open to appeal

Most people felt that decisions connected with the administration of the contract should be open to appeal (80%). This feeling was strongest among contractors (87%) and weakest among clients (54%). There was little difference between the jurisdictions.

Question 22: The need for payment clauses

Comprehensive payment clauses are needed in contracts to make sure that Employers pay appropriate amounts to Contractors

%	1	2	3	4	5	п
Cons	55	32	7	4	1	71
Cont	75	16	2	3	4	104
Client	73	8	12	4	4	26
Civil	63	20	5	6	5	79
Com	70	21	5	2	2	122
Tot	68	21	5	3	3	201

Employers generally pay appropriate amounts to Contractors, without the need for comprehensive payment clauses in contracts

There was a strong feeling that payment clauses are needed to ensure that contractors are paid appropriate amounts. The only slight exception is that some clients (12%) felt unsure that this was so.

Question 23: The utility of payment clauses

Generally, payment clauses will not help Contractors to be paid on time

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Tot	7	10	5	32	48	200
Com	4	10	3	30	52	122
Civil	10	9	6	33	41	78
Client	0	8	12	19	62	26
Cont	10	12	1	30	48	103
Cons	4	7	7	38	44	71
%	1	2	3	4	5	ſ

Generally, payment clauses have the potential to help Contractors ensure that they are paid on time

There was a strong feeling that payment clauses help contractors to be paid on time. As would be expected, this concurs with the responses to the previous question. There is slightly less strength of feeling here than in the previous question, but the difference is very slight.

Question 24: The need for extension of time clauses

For certain delaying events, it is necessary to provide clauses which enable Contractors to request more time for completion

Tot	66	23	1	5	5	201
Com	70	19	2	6	4	122
Civil	59	29	1	4	6	79
Client	42	19	8	15	15	26
Cont	77	21	0	0	2	104
Cons	58	27	1	8	6	71
%	1	2	3	4	5	п

Contract periods are usually specific and clauses which enable Contractors to request more time are not usually required

Only 10% of respondents felt that contractors should be constrained by the original programme. Only 1% of the respondents were unable to form a view. Everyone else felt that it was necessary to provide clauses enabling contractors to claim extensions of time (89%). However, 30% of clients felt that the original programme should stick and that clauses enabling the contractor to request more time are not usually required.

Question 25: The scope of financial claims

Generally, Contractors' rights to claim extras should be extremely limited

%	1	2	3	4	5	п
Cons	10	23	13	35	20	71
Cont	0	3	11	30	57	104
Client	38	8	8	31	15	26
Civil	9	5	19	33	34	79
Com	8	14	6	31	41	122
Tot	8	10	11	32	38	201

Generally, Contractors' rights to claim extras should be fairly comprehensive

There is a relatively strong view (70%) that contractors' rights to claim extras should be fairly comprehensive, and this varied little between the jurisdictions. The biggest variance is in the views of clients, 46% of whom felt that rights to claim extra money should be extremely limited, a view shared by 33% of consultants.

Question 26: The impact of ground conditions

Ground conditions rarely cause problems in construction projects

%	1	2	3	4	5	п
Cons	0	6	6	26	63	72
Cont	1	2	9	36	53	104
Client	4	19	4	35	38	26
Civil	1	9	8	35	48	80
Com	1	3	7	30	59	122
Tot	1	5	7	32	54	202

Ground conditions usually cause problems in construction projects

Clearly, ground conditions usually cause problems in construction projects, with 86% of respondents agreeing with this proposition. Interestingly, 23% of clients did not share this view.

Question 27: Responsibility for unforeseeable ground conditions

Responsibility for unforeseeable ground conditions should lie exclusively with the Employer

%	1	2	3	4	5	n
Cons	33	33	17	17	0	72
Cont	73	16	9	0	2	104
Client	31	23	31	12	4	26
Civil	59	18	18	4	3	80
Com	50	27	12	10	1	122
Tot	53	23	14	7	1	202

Responsibility for unforeseeable ground conditions should lie exclusively with the Contractor

A few people felt that ground conditions should be at the risk of the contractor and several were unsure, but three quarters of respondents felt that this risk should lie exclusively with the Employer. The preceding question revealed that most people felt that ground condition usually caused problems, so the responses here are not speculation on the part of the respondents! Two contractors felt that the risk of ground conditions should lie exclusively with them, and about one sixth of consultants and clients felt the same. But most people feel that the risk of ground conditions should lie with the employer.

Part three: Specific FIDIC Red Book contractual issues

Question 28: Equitable distribution of risk

The FIDIC conditions do not ensure an equitable distribution of risks between the parties

%	1	2	3	4	5	п
Cons	3	12	13	42	30	67
Cont	1	18	5	48	27	92
Client	8	4	8	44	36	25
Civil	1	14	7	51	27	71
Com	4	14	10	42	31	113
Tot	3	14	9	45	29	184

The FIDIC conditions are generally well-suited to an equitable distribution of risks between the parties

Most people feel that the FIDIC Red Book is generally well suited to an equitable distribution of risk. A small proportion disagreed (17%). There are very few differences between the groups.

Question 29: Project-specific needs

The distribution of risks in the FIDIC conditions often needs to be altered to suit the needs of a particular project

%	1	2	3	4	5	r.
Cons	9	37	15	27	12	67
Cont	14	27	10	39	10	92
Client	12	12	20	40	16	25
Civil	3	32	14	32	18	71
Com	18	27	12	36	7	113
Tot	12	29	13	35	11	184

The distribution of risks in the FIDIC conditions rarely needs to be altered to suit the needs of a particular project

The responses to this question were equivocal. There was a slight majority in favour of the idea that the distribution of risk rarely needs altering to suit the needs of a particular project. It should be expected that these answers concur with those to question 10, which asked whether project-specific clauses were a good idea.

Consultants tended to favour the idea that the conditions often need to be modified, whereas clients and contractors tended slightly to be of the opposite view. In civil code jurisdictions, there was slightly more people feeling that the standard conditions rarely need modifiying, and the opposite was true in common law countries. But the responses are very widely spread and there are no strong pointers either way.

Question 30: Applicability in common law and civil law jurisdictions

The FIDIC conditions do not work as well in common law countries as they do in civil code countries

%	1	2	3	4	5	п
Cons	1	7	72	15	4	67
Cont	0	3	65	18	13	92
Client	8	0	64	24	4	25
Civil	0	3	66	18	13	71
Com	3	5	68	18	6	113
Tot	2	4	67	18	9	184

The FIDIC conditions work better in common law countries than they do in civil code countries

Most people were neutral about the idea of whether the FIDIC Red Book was equally applicable in civil law and common law countries. This compares interestingly with question 8 which focused on the general principle of equal applicability. There, only one third of respondents were neutral. When it comes to making a decision on a particular form, nearly 70% of respondents are unclear. A respondent who felt that the FIDIC conditions would work equally well in both types of jurisdiction would have no choice but to circle the neutral

option. Of those who did express a view, most felt the FIDIC Red Book would work better in common law countries. There is very little difference between the jurisdictions.

Question 31: Advantages of splitting parts I & II for contract preparation

For those who prepare contracts, the separation of general from project-specific clauses into Parts I & II of the FIDIC conditions has no real advantages

%	1	2	3	4	5	T.
Cons	0	1	10	28	60	67
Cont	5	9	11	35	40	92
Client	12	8	24	12	44	25
Civil	6	7	18	30	39	71
Com	4	5	9	29	53	113
Tot	4	6	13	29	48	184

For those who prepare contracts, the separation of general from project-specific clauses into Parts I & II of the FIDIC conditions has big advantages

Most agreed that the separation of project-specific clauses from clauses of general application held real advantages for those who prepare contracts (77%). These responses broadly match those for question 10, as would be expected.

Question 32: Advantages of splitting parts I & II for contract administration

For those who administer contracts, the separation of general from project-specific clauses into Parts I & II of the FIDIC conditions has no real advantages

%	1	2	3	4	5	п
Cons	2	6	12	32	48	66
Cont	5	15	15	34	30	92
Client	12	20	24	20	24	25
Civil	7	14	23	27	29	70
Com	4	12	11	34	41	113
Tot	5	13	15	31	36	183

For those who administer contracts, the separation of general from project-specific clauses into Parts I & II of the FIDIC conditions has big advantages

Feelings were less strong when it came to the administration of contracts. The proportion of respondents in mild agreement was similar to that for question 31, but less were in strong agreement. However, there is still a clear majority feeling that for contract administration purposes, separation of specific from general clauses is an advantage. There were some slight differences between the groups, with consultants being more in favour of separation of parts than clients. But the differences are slight.

Question 33: Ease of understanding

The FIDIC conditions are difficult to understand

%	1	2	3	4	5	п
Cons	3	10	12	48	27	<i>67</i>
Cont	2	10	15	41	32	92
Client	0	28	16	24	32	25
Civil	0	18	14	37	31	71
Com	4	9	14	44	29	113
Tot	2	13	14	41	30	184

The FIDIC conditions are easy to understand

Only four people felt *strongly* that the FIDIC Red Book conditions were difficult to understand. The vast majority felt that the conditions are easy to understand (71%). The slight differences between groups show that clients have marginally more difficulty understanding the conditions than do contractors and consultants. Also, civil code jurisdictions have slightly more difficulty than common law.

Question 34: Engineer's powers of approval

In the FIDIC conditions, the Engineer has more powers of approval of work than are necessary for the efficient discharge of the contract

Tot	9	31	44	15	1	183
Com	8	31	45	15	1	112
Civil	11	31	44	14	0	71
Client	17	17	42	25	0	24
Cont	11	39	37	12	1	92
Cons	4	25	55	15	0	67
%	1	2	3	4	5	r.

In the FIDIC conditions, the Engineer does not have enough powers of approval of work to run the contract efficiently

With nearly half of the respondents not expressing an opinion, this question elicits an strong view that the FIDIC conditions either have it right, or respondents simply don't know. Of those who did express an opinion, most felt that the engineer had too many powers, but this feeling was mild. Only one person felt strongly that the engineer did not have enough powers of approval; a contractor, interestingly enough. Generally, contractors felt slightly more strongly than others that the engineers had more powers than were absolutely necessary. There was almost no difference between the jurisdictions.

Question 35: Engineer's dispute settlement

The FIDIC clauses governing Engineer's decisions are not particularly helpful in achieving speedy and equitable settlement of disputes

%	1	2	3	4	5	n
Cons	6	27	25	34	7	67
Cont	25	22	21	27	5	92
Clien	8	16	24	32	20	25
t						
Civil	18	23	21	28	10	71
Com	14	23	24	32	7	113
Tot	16	23	23	30	8	184

The FIDIC clauses governing Engineer's decisions are very helpful in achieving speedy and equitable settlement of disputes

Nearly a quarter of the sample did not express an opinion, with the remainder evenly split. If anything, there is a slight leaning towards dissatisfaction with the clauses governing engineers' decisions because there was a stronger agreement with this than with the opposite contention. But the responses are too evenly split to give any clear message about engineers' decisions.

On examining the breakdown be groups, it is clear that consultants and clients tend to feel that the Red Book's engineer's decision are very helpful in settling disputes, whereas contractors tend to disagree.

Question 36: Payment regime

The FIDIC payment provisions do not encourage fair payment regimes

%	1	2	3	4	5	n
Cons	1	9	19	42	28	<i>67</i>
Cont	3	12	18	47	20	92
Client	0	4	20	36	40	25
Civil	1	8	24	38	28	71
Com	3	11	16	47	24	113
Tot	2	10	19	43	26	184

The FIDIC payment provisions do encourage fair payment regimes

The majority felt that the payment provisions encouraged fair payment regimes. Only 12% of people disagreed with this idea. Differences between the groups were insignificant.

Question 37: Utility of payment clauses

The FIDIC payment clauses leave a lot to be desired

%	1	2	3	4	5	п
Cons	3	9	19	49	19	67
Cont	5	17	20	40	17	92
Client	0	8	24	40	28	25
Civil	3	11	18	45	23	71
Com	4	14	21	42	18	113
Tot	4	13	20	43	20	184

The FIDIC payment clauses are about right

Most respondents (63%) were satisfied that the payment provisions were about right. About one sixth of the respondents felt that there was room for improvement. The pattern of responses here seems to match those for the preceding question, which is what should be expected. Differences between groups are marginal.

Question 38: Provision for money claims

The FIDIC conditions do not make adequate provision for Contractors' money claims

Tot	11	22	49	15	2	184
Com	9	16	56	16	4	113
Civil	15	32	39	13	0	71
Client	4	12	56	28	0	28
Cont	22	32	39	8	0	92
Cons	0	13	61	19	6	67
%	1	2	3	4	5	I

The FIDIC conditions make too many provisions for Contractors' money claims

Nearly half the respondents were unable to express a view, but most of those who did express a view felt the conditions did not make adequate provision for contractors' money claims. It should be borne in mind that a neutral response may express satisfaction with the status quo, just as it could express indecision. Contractors tended to feel that the Red Book does not make adequate provision for contractors' claims. Respondents from civil code countries also felt that there were inadequate provisions for contractors' claims.

Question 39: Provision for time claims

The FIDIC conditions do not make adequate provision for Contractors' time claims

%	1	2	3	4	5	п
Cons	0	21	60	19	0	67
Cont	17	41	33	9	0	92
Client	8	12	44	36	0	25
Civil	15	30	45	10	0	71
Com	6	30	43	20	0	113
Tot	10	30	44	16	0	184

The FIDIC conditions make too many provisions for Contractors' time claims

It is interesting that no-one feels strongly that the conditions make too many provisions for contractor's time claims, even though 16% feel mildly that they do. Nearly half of the respondents remained neutral, but most of those who did express a view thought that the provisions for contractors' time claims are inadequate. The broad picture from these responses matches those from the previous question, as would be expected. Contractors tended to feel more strongly that time claims were not adequately provided for, as did respondents from civil code jurisdictions.

Question 40: The best feature of the FIDIC Red Book

This open question elicited a range of responses. These have been interpreted into short phrases and grouped together into Table 5 which shows numbers of responses in each case, categorized by organization type. The actual responses, with minor grammatical revisions, are given in Appendix 2 to this report. Some respondents listed more than one advantage; only the first was taken in each case to ensure that each respondent gets only one "vote". The most popular features of the contract are its equitability and comprehensiveness. The ease of understanding scored fairly highly as did the fact that the Red Book was a standard and that it was internationally accepted as such. Other features, such as the separation of general from specific clauses and the role of the engineer were also highlighted as important. The identification of standardization as a benefit seems not to be particularly helpful as it is a virtue which applies to any standard form. It is only if the standard is well used and widely accepted without amendment that its effect on normalizing contractual relationships can be said to exist. Many of the comments form only a very small proportion of the whole sample.

Table 5: The best features of the contract

	Consultant	Contractor	Client	Total
No response	21	27	7	55
Comprehensive	14	4	4	22
Equitable	3	15	4	22
Understandable	4	8	2	14
Internationally accepted	7	6	0	13
Standardized	4	8	1	13
Engineer's role	2	7	2	11
Parts I & II	6	5	0	11
Claims	1	4	2	7
Like ICE	4	2	1	7
Framework	4	2	0	6
Well known	2	2	2	6
Dispute resolution	1	4	0	5
Specific clauses	0	6	0	6
Risk allocation	0	3	1	4
General obligations	1	0	0	1
The Guide	0	1	0	1
Total	53	75	19	204

Question 41: The worst feature of the Red Book

The responses seemed much more varied than those for the previous question. Again, comments have been summarized and grouped and the summary is shown in Table 6. It is interesting that a much greater proportion of respondents could think of no one worst feature. Also, many of the items previously specified as good features, are here repeated as bad features, such as the ability to incorporate project-specific clauses. The comprehensibility and clarity identified in the previous question are here countered with a smaller number of respondents claiming incomprehensibility and verbosity. Bias was identified by 12 people, most of whom identified that the contract was biased toward the employer. But this was not a frequent concern. However, it does seem salient that no clients singled out bias as a problem. The most serious feature of the contract causing concern was the role of the Engineer; 29 people felt that this was the worst feature, whereas in the previous question only 11 identified it as the best feature. Most reservations about the role of the engineer were

connected with impartiality. However, these numbers form only a small proportion of the overall total.

Table 6: The worst feature of the contract

	Consultant	Contractor	Client	Total
No response	32	39	14	85
Engineer's role	3	22	4	29
Incomprehensible	8	3	1	12
Employer bias	2	8	0	10
Payment	4	3	2	9
Standardization	2	5	0	7
Claims	3	3	0	6
Isolated comment	5	0	1	6
Level of detail	2	2	2	6
Verbose	3	3	0	6
Complexity	3	1	0	4
Parts I & II	1	2	1	4
Unlimited liabilities	0	4	0	4
Dispute resolution	0	2	1	3
Inflexible	2	1	0	3
Bonding	1	1	0	2
Contractor bias	2	0	0	2
Obscure comment	1	1	0	2
Timing of advance payments	0	2	0	2
Variation Orders	0	2	0	2
Total	74	104	26	204

Table 7: Important changes for future editions

	Consultant	Contractor	Client	Total
No response	29	39	16	84
Simplify language	9	8	2	19
Engineer's role	4	11	2	17
Obscure comment	4	7	1	12
Payment	2	7	1	10
Claims	5	4	0	9
Risk apportionment	2	7	0	9
Dispute resolution	0	7	1	8
Flexibility	6	1	1	8
Isolated comments	3	2	2	7
Sub-contracting	1	2	0	3
Tighten up periods	3	1	0	4
Determination	0	2	0	2
Employer's role	2	0	0	2
Environmental protection	1	1	0	2
Internationalize	0	2	0	2
Keep changes to a minimum	2	0	0	2
Modernize	1	1	0	2
Pre-value variations	0	2	0	2
Total	74	104	26	204

Question 42: The single most important change to a future edition of the contract

In line with the previous two questions, the themes of clarity and of the Engineer's role dominate these responses. In terms of language, most of the comments related to making it simpler to understand and less legalistic. As for the Engineer's role, many comments were related to reducing the Engineer's powers under the contract, particularly in relation to Engineer's decisions. Other than these, obscure comments seemed to be fairly prevalent. A series of specific recommendations is revealed, connected with particular clauses. These are detailed in Appendix 4 and summarized in Table 7.

Question 43: Changes to a future edition of the guide

This question elicited few responses. The majority of people left it blank. Some said they had never heard of Red Book Guide. Others mis-read the question and saw it as another opportunity to provide an answer to question 42.

Obscure comments form the largest category. Some of these are difficult to understand, others seemed not to offer much helpful assistance. The strongest theme emerging from the answers is that more explanations are needed. This theme was echoed in many of the other categories of comments. More clarification of the Engineer's role was requested, more flow charts, more advice on how to prepare Part II of the contract and so on. Additionally, some comments indicated that respondents would like somehow to limit the freedom of other contracting parties by prohibiting, or at least discouraging certain types of behaviour. Those whose comments have been summarized as "history" wanted to know how clauses had been derived and wanted reasons for changes from earlier editions. Another interesting request was for more standard documentation, such as pro-formas for extensions of time and other contract administration documents. Finally, some respondents felt that the Guide was fine as it is and need not be revised.

Table 8: Changes to the Red Book Guide

	Consultant	Contractor	Client	Total
No response	47	72	21	140
Obscure comments	7	11	0	18
More explanations	7	3	0	10
Leave it alone	1	2	2	5
Simplify	2	2	1	5
Clarify Engineer's role	1	3	0	4
Isolated comments	2	2	0	4
Provide standard documentation	4	0	0	4
History	1	1	1	3
More examples	0	2	1	3
Civil code	1	1	0	2
Guidance on part II	0	2	0	2
More flow charts	0	2	0	2
Report judgments on clauses	1	1	0	2
Total	74	104	26	204

Question 44: Role on current project

This question was an open question and was interpreted quite widely. The data was used as a cross-check for question 2. It was useful in clarifying ambiguous answers, but the collation and presentation of the data is not very helpful because of the enormous diversity in people's responses.

Ouestion 45: Version of the Red Book

Only three versions were reported in use, most of which were the 1987 version (80%). Of the remainder, 6% were the 1992 revision and 14% the 1977 edition.

Question 46: The approximate value of the respondent's project

Respondents were asked to give an indication of the value of their current project in millions of US\$. Figure 2 shows the range of responses. There were 147 responses, 55% of which lay in the \$10m to \$100m range. Only one project was less than \$100k. This gives a useful indication of the typical size of project for which the Red Book is used.

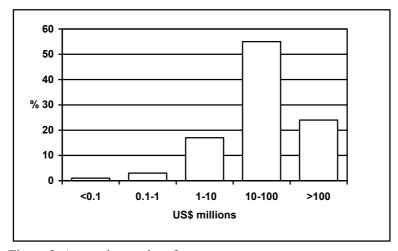


Figure 2: Approximate size of contract

Questions 47-49: The proportion of work offshore, below ground and above ground

These questions sought to discover what kind of work was represented in the sample. Respondents were asked to show how the work in the project was split between offshore, underground and surface work. There were 147 projects reported. The data for the three questions are summarized in Table 9. This shows the proportion of responses for each category of work. The same data are portrayed in Figure 3.

Table 9: Type of work								
	%	0-20	20-40	40-60	60-80	80-100	n	
Offshore		77	15	15	15	25	147	
Underground		81	27	11	17	11	147	
Surface		25	19	22	29	52	147	

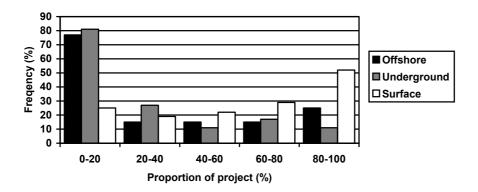


Figure 3: Type of work

From Figure 3 it is clear that most of the work represented by these projects is above ground. Nearly 80% of the projects have minimal offshore and underground work. 11% of the projects are almost wholly underground and 23% of the projects are almost wholly offshore. Half of the projects are almost wholly surface work.

Question 50: Amended clauses in current contract

This turned out to be the most complex and difficult question to analyse as the responses were so comprehensive and diverse. In examining contract amendments, the data were grouped together under whole clause numbers. Although most people entered sub-clause numbers, this made analysis too vague as there were so many column headings. Therefore, it was decided to derive an indication of the number of clauses typically amended, and to identify those clauses which are most frequently amended.

The number of amendments encountered in each contract

The first piece of information concerns the intensity of amendment in contracts, i.e. how many clauses were amended in each contract reported. Some contracts have only one or two amendments, others have many. Table 10 shows the extent to which contracts are amended by giving the frequency with which different intensities were encountered. For example, 14 respondents reported 4 or less clauses having been amended, whereas 25 respondents reported between 20 and 29 clauses amended. Since 87 people reported some amendments, the frequency of each number is expressed as a percentage of 87. The frequency data are also shown in Figure 4.

From these figures it can be seen that a significant proportion of contracts have relatively minor amendments, but of those contracts which are amended, most have amendments affecting somewhere around one third of the clauses in the contract. It is rare for more than two thirds of the clauses to be amended on any one contract.

Table 10: Amendments per contract

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No. of amendments	Frequency	%
1-4	14	16
5-9	9	10
10-19	17	20
20-29	25	29
30-39	17	20
40-49	4	5
50-59	1	1

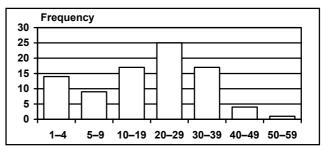


Figure 4: Amendments per contract

Clauses typically amended

By identifying the number of times each clause was identified, a profile of which clauses are most often amended can be developed. Table 11 shows how often particular clauses were mentioned by respondents. Every clause was amended at least once, but clause 61 was reported amended only once, making it the least amended clause. Clause 60 was reported amended in 62 (73%) cases, making it the most frequently amended clause. The data is also listed by clause number in Table 12. As it turns out, much of the sub-clause data is not very useful. There was little consistency in the way that people reported the amended clauses and respondents switched between whole clauses and sub-clauses. For example, in examining the sub-clause data for clause 60, it appears that 25 people reported 60.1 amended, and less than 7 reported amendments to any of the sub-clauses 60.2 to 60.10. But 64 people reported amendments to clause 60 as a whole. The result is that the sub-clause data is not very informative, other than indicating that 60.1 seems to attract more attention than the rest of clause 60. Of the 64 people who reported that clause 60 was amended, in most cases we cannot tell if they mean part or all of the clause. It is quite conceivable that people may have found it too time consuming to list every sub-clause number. Alternatively they may have intended to denote that every sub-clause was amended. For the benefit of clarity, sub-clause data are simply included as main clause data by counting a hit for a main clause when a respondent mentioned one or more of its sub-clauses. By then focusing only on main clause data, double-counting is avoided. For the sake of completeness, Table 13 shows the subclause data by sub-clause number and Table 14 shows it in descending frequency.

Table 11: Incidence of amended clauses

No. of mentions	Clause numbers	No. of mentions	Clause numbers
64 (74%)	60	25 (29%)	12, 15, 49
58 (67%)	70	24 (28%)	41, 44, 51
56 (64%)	67	22 (25%)	24, 42, 74
53 (61%)	10, 14, 21	19 (22%)	11, 19, 46, 57, 63
52 (60%)	5	18 (21%)	7
49 (56%)	52	17 (20%)	4, 37, 59
47 (54%)	1	16 (18%)	40
44 (51%)	2	15 (17%)	18, 31, 62
39 (45%)	16	14 (16%)	22, 45
37 (43%)	72	13 (15%)	58, 73
36 (41%)	69	11 (13%)	27, 71
34 (39%)	6, 48	10 (11%)	17
33 (38%)	54, 68	9 (10%)	9, 55, 56
32 (37%)	30	8 (9%)	26, 29, 43,
31 (36%)	8, 47	7 (8%)	65
30 (34%)	23, 36	5 (6%)	3, 64, 66
29 (33%)	53	3 (3%)	33, 38,39
28 (32%)	25, 35	2 (2%)	13, 32, 50
27 (31%)	28	1 (1%)	61

Table 12: Frequency of amendment by clause number

Clause	n	%									
1	47	54	20	35	40	39	3	3	58	13	15
2	44	51	21	53	61	40	16	18	59	17	20
3	5	6	22	14	16	41	24	28	60	64	74
4	17	20	23	30	34	42	22	25	61	1	1
5	52	60	24	22	25	43	8	9	62	15	17
6	34	39	25	28	32	44	24	28	63	19	22
7	18	21	26	8	9	45	14	16	64	5	6
8	31	36	27	11	13	46	19	22	65	7	8
9	9	10	28	27	31	47	31	36	66	5	6
10	53	61	29	8	9	48	34	39	67	56	64
11	19	22	30	32	37	49	25	29	68	33	38
12	25	29	31	15	17	50	2	2	69	36	41
13	2	2	32	2	2	51	24	28	70	58	67
14	53	61	33	3	3	52	49	56	71	11	13
15	25	29	34	35	40	53	29	33	72	37	43
16	39	45	35	28	32	54	33	38	73	13	15
17	10	11	36	30	34	55	9	10	74	22	25
18	15	17	37	17	20	56	9	10			
19	19	22	38	3	3	57	19	22			

Table 13: Sub-clause amendments by	sub-clause number
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CI	Fr	CI	Fr	CI	Fr	CI	Fr	CI	Fr	CI	Fr	CI	Fr
1.1	17	8.1	3	21.3	3	34.1	33	48.2	6	54.8	1	63.4	1
1.2	0	8.2	2	21.4	6	35.1	26	48.3	3	55.1	9	64.1	4
1.3	0	9.1	8	22.1	6	36.1	15	48.4	2	56.1	8	65.1	7
1.4	0	10.1	13	22.2	1	36.2	2	49.1	10	57.1	5	65.2	4
1.5	0	10.2	4	23.1	7	36.4	1	49.2	3	57.2	3	65.3	2
2.1	18	10.3	6	23.2	2	37.1	7	49.3	0	58.1	4	66.1	4
2.2	1	11.1	18	23.3	4	37.2	1	49.4	0	58.2	0	67.1	24
2.3	2	12.2	9	24.1	6	37.3	1	50.1	2	58.3	0	67.2	3
2.4	0	13.1	2	24.2	2	37.4	1	51.1	9	59.1	8	67.3	8
2.5	1	14.1	28	25.1	14	38.1	1	51.2	2	59.2	1	67.4	4
2.6	2	14.2	7	25.2	2	40.1	11	52.1	19	59.5	1	68.1	14
3.1	5	14.3	11	25.3	1	40.2	3	52.2	8	60.1	25	68.2	3
4.1	4	14.4	2	25.4	1	40.3	1	52.3	10	60.2	6	68.3	1
4.2	1	15.1	23	26.1	7	41.1	22	52.4	2	60.3	7	69.1	19
5.1	13	16.1	14	27.1	11	42.1	7	53.1	7	60.4	7	69.5	1
5.2	20	16.2	4	28.1	9	42.2	1	53.2	2	60.5	3	70.1	30
6.1	8	17.1	10	28.2	8	42.3	2	53.3	1	60.6	5	70.2	11
6.2	1	18.1	15	29.1	8	43.1	8	53.4	4	60.7	4	71.1	10
6.3	3	19.1	8	30.1	11	44.1	17	53.5	2	60.8	5	72.1	14
6.4	3	19.2	3	30.2	4	44.2	2	54.1	11	60.9	3	72.2	6
6.5	3	20.1	11	30.3	6	44.3	2	54.2	1	60.10	6	72.3	4
7.1	3	20.2	0	30.4	3	45.1	14	54.3	3	61.1	1		
7.2	7	20.3	1	31.1	8	46.1	19	54.4	4	62.1	6		
7.3	0	20.4	10	31.2	3	47.1	14	54.5	2	62.2	3		
7.4	1	21.1	26	32.1	2	47.2	4	54.6	2	63.1	8		
7.5	1	21.2	11	33.1	3	48.1	13	54.7	1	63.2	3		

Table 14: Sub-clause amendments by frequency

CI	Fr	CI	Fr	CI	Fr	CI	Fr	CI	Fr	CI	Fr	CI	Fr
34.1	33	10.1	13	52.2	8	57.1	5	31.2	3	48.4	2	53.3	1
70.1	30	48.1	13	56.1	8	60.6	5	33.1	3	50.1	2	54.2	1
14.1	28	14.3	11	59.1	8	60.8	5	40.2	3	51.2	2	54.7	1
21.1	26	20.1	11	63.1	8	4.1	4	48.3	3	52.4	2	54.8	1
35.1	26	21.2	11	67.3	8	10.2	4	49.2	3	53.2	2	59.2	1
60.1	25	27.1	11	7.2	7	16.2	4	54.3	3	53.5	2	59.5	1
67.1	24	30.1	11	14.2	7	23.3	4	57.2	3	54.5	2	61.1	1
15.1	23	40.1	11	23.1	7	30.2	4	60.5	3	54.6	2	63.4	1
41.1	22	54.1	11	26.1	7	47.2	4	60.9	3	65.3	2	68.3	1
5.2	20	70.2	11	37.1	7	53.4	4	62.2	3	2.2	1	69.5	1
46.1	19	17.1	10	42.1	7	54.4	4	63.2	3	2.5	1	1.2	0
52.1	19	20.4	10	53.1	7	58.1	4	67.2	3	4.2	1	1.3	0
69.1	19	49.1	10	60.3	7	60.7	4	68.2	3	6.2	1	1.4	0
2.1	18	52.3	10	60.4	7	64.1	4	2.3	2	7.4	1	1.5	0
11.1	18	71.1	10	65.1	7	65.2	4	2.6	2	7.5	1	2.4	0
1.1	17	12.2	9	10.3	6	66.1	4	8.2	2	20.3	1	7.3	0
44.1	17	28.1	9	21.4	6	67.4	4	13.1	2	22.2	1	20.2	0
18.1	15	51.1	9	22.1	6	72.3	4	14.4	2	25.3	1	49.3	0
36.1	15	55.1	9	24.1	6	6.3	3	23.2	2	25.4	1	49.4	0
16.1	14	6.1	8	30.3	6	6.4	3	24.2	2	36.4	1	58.2	0
25.1	14	9.1	8	48.2	6	6.5	3	25.2	2	37.2	1	58.3	0
45.1	14	19.1	8	60.10	6	7.1	3	32.1	2	37.3	1		
47.1	14	28.2	8	60.2	6	8.1	3	36.2	2	37.4	1		
68.1	14	29.1	8	62.1	6	19.2	3	42.3	2	38.1	1		
72.1	14	31.1	8	72.2	6	21.3	3	44.2	2	40.3	1		
5.1	13	43.1	8	3.1	5	30.4	3	44.3	2	42.2	1		

Appendix 1: The questionnaire form

Introduction

Thank you.

The University of Reading has been commissioned by EIC and FIDIC to undertake a research project about the use to which FIDIC contracts are being put. The purpose of the research is to assess the usage of the contracts produced by FIDIC and to ensure that when they are used, they meet the requirements of their users. More specifically, the results of this survey will help to guide the drafting committee in developing a fifth edition of the Red Book for publication during 1997.

The basis of this research is a questionnaire survey of FIDIC users. We want to know what kind of professionals and what kind of organizations around the world use FIDIC contracts. We also want to learn about those who prefer not to. We wish to discover general views about the kind of contract policy that should guide those who draft standard conditions of contract. We also wish to learn the extent to which some of the important provisions in FIDIC are used or amended. Our focus is in ascertaining what constitutes common practice in the various regions and for various project types. This information will be of value in developing the whole range of FIDIC contracts and ensuring that they are kept up to date. While your personal views will be used by the researchers in analysing the data and forming conclusions, all responses will be treated with the strictest confidence. Individuals' opinions will not be revealed to anyone in EIC or FIDIC.

As a possible user of the FIDIC Red Book, we are sure that you are keen to see such research carried out effectively and fully. Accordingly, we seek your willingness to complete the attached questionnaire and return it to Reading by <u>28 February 1996</u>. Faxed responses are welcome. The utility of the results depends critically upon achieving a high response rate in each region and within each project type. With your help we will be able to maintain the high standards and commercial relevance of FIDIC contracts. The final report from this research will be available in Spring 1996.

Dr Will Hughes Department of Construction Management & Engineering, The University of Reading, UK Part One: Information about you 1. Name 2. Profession 3. Your **Employer** Address 5. Country What type of organization do you work for? (please tick one box) Other public sector client Private sector client Consultant Other Government Contractor

Part Two: Your views on general contractual issues

Circle the number which most closely represents your opinion. Compare the statement on the left with the statement on the right. If you agree strongly with one of them, circle the '2' next to it. If you agree mildly with one of them, circle the corresponding '1'. If you are not sure, or do not feel strongly about the issue, please circle '0'. This section refers to your general views and should not be related just to the FIDIC Red Book.

7.	Standardizing contract terms does nothing towards helping ensure an equitable distribution of risks between contracting parties	2	1	0	1	2	The standardization of contract terms is helpful in ensuring an equitable distribution of risks between the contracting parties
8.	A standard-form contract can be equally applicable to both civil code and common law countries	2	1	0	1	2	Civil code countries require different standard forms to common law countries
9.	An international standard-form contract can never be as effective as one written for a specific jurisdiction	2	1	0	1	2	A well-drafted international standard-form contract will be effective in most jurisdictions
10.	Generally, a standard-form contract should not encourage parties to add project-specific clauses	2	1	0	1	2	Generally, a standard-form contract <i>should</i> encourage parties to add project-specific clauses
11.	In drafting standard-form contracts, legal precision is aided by simplicity of expression	2	1	0	1	2	In drafting standard-form contracts, legal precision is jeopardized if simplicity of expression is a priority
12.	Ease of translation is not as important as legal precision	2	1	0	1	2	Ease of translation is more important than legal precision
13.	There should be strict limits placed on the powers of the Engineer to approve or reject the work of the Contractor	2	1	0	1	2	The Engineer, in administering a contract, should have extensive and wide-ranging powers to approve or reject the work of the Contractor
14.	The Contractor's work should be subject to the approval of the Employer, not the Engineer	2	1	0	1	2	The Contractor's work should be subject to the approval of the Engineer, not the Employer
15.	Any approval of the Contractor's work should be subject to strict objective tests laid down in the specification	2	1	0	1	2	Approval of the Contractor's work should be a subjective matter for either the Employer or Engineer
16.	Engineers are rarely impartial in exercising their powers under a contract	2	1	0	1	2	Engineers are usually impartial in exercising their powers under the contract
17.	Engineers typically favour the Contractor in administering contracts	2	1	0	1	2	Engineers typically favour the Employer in administering contracts
18.	Generally, it is a bad idea to incorporate terms which call upon the Engineer to settle disputes between the Employer and the Contractor	2	1	0	1	2	Generally, it is a good idea to incorporate terms which call upon the Engineer to settle disputes between the Employer and the Contractor
19.	Someone other than the Engineer should be first line Adjudicator(s) in the event of disputes	2	1	0	1	2	The Engineer is the best person to be the first line Adjudicator in the event of disputes
20.	An Adjudicator, or a formal adjudication board, should make recommendations, rather than decisions	2	1	0	1	2	An Adjudicator, or a formal adjudication board, should make decisions, rather than recommendations
21.	Decisions of the Engineer (or Adjudicator, or adjudication board) should not be open to appeal	2	1	0	1	2	Decisions of the Engineer (or Adjudicator, or adjudication board) should be open to appeal
22.	Comprehensive payment clauses are needed in contracts to make sure that Employers pay appropriate amounts to Contractors	2	1	0	1	2	Employers generally pay appropriate amounts to Contractors, without the need for comprehensive payment clauses in contracts
23.	Generally, payment clauses will not help Contractors to be paid on time	2	1	0	1	2	Generally, payment clauses have the potential to help Contractors ensure that they are paid on time
24.	For certain delaying events, it is necessary to provide clauses which enable Contractors to request more time for completion	2	1	0	1	2	Contract periods are usually specific and clauses which enable Contractors to request more time are not usually required

25.	Generally, Contractors' rights to claim extras should be extremely limited	2	1	0	1	2	Generally, Contractors' rights to claim extras should be fairly comprehensive
26.	Ground conditions rarely cause problems in construction projects	2	1	0	1	2	Ground conditions usually cause problems in construction projects
27.	Responsibility for unforeseeable ground conditions should lie exclusively with the Employer	2	1	0	1	2	Responsibility for unforeseeable ground conditions should lie exclusively with the Contractor
Pa	rt Three: Your views on certain	fe	at	11 Y	'es	O	f the FIDIC Red Book
Circl	e the number which most closely represents your opinion of 'O'. Questions in this section refer to your views about	n.	lf yo	ou a	re r	ot s	sure, or do not feel strongly about the issue, please
28.	The FIDIC conditions do not ensure an equitable distribution of risks between the parties	2	1	0	1	2	The FIDIC conditions are generally well-suited to an equitable distribution of risks between the parties
29.	The distribution of risks in the FIDIC conditions often needs to be altered to suit the needs of a particular project	2	1	0	1	2	The distribution of risks in the FIDIC conditions rarely needs to be altered to suit the needs of a particular project
30.	The FIDIC conditions do not work as well in common law countries as they do in civil code countries	2	1	0	1	2	The FIDIC conditions work better in common law countries than they do in civil code countries
31.	For those who prepare contracts, the separation of general from project-specific clauses into Parts I & II of the FIDIC conditions has no real advantages	2	1	0	1	2	For those who prepare contracts, the separation of general from project-specific clauses into Parts I & II of the FIDIC conditions has big advantages
32.	For those who administer contracts, the separation of general from project-specific clauses into Parts I & II of the FIDIC conditions has no real advantages	2	1	0	1	2	For those who administer contracts, the separation of general from project-specific clauses into Parts I & II of the FIDIC conditions has big advantages
33.	The FIDIC conditions are difficult to understand	2	1	0	1	2	The FIDIC conditions are easy to understand
34.	In the FIDIC conditions, the Engineer has more powers of approval of work than are necessary for the efficient discharge of the contract	2	1	0	1	2	In the FIDIC conditions, the Engineer does not have enough powers of approval of work to run the contract efficiently
35	The FIDIC clauses governing Engineer's decisions are	2	1	n	1	2	The FIDIC clauses governing Engineer's decisions are

	general from project-specific clauses into Parts I & I of the FIDIC conditions has no real advantages	l					general from project-specific clauses into Parts I & II of the FIDIC conditions has big advantages
32.	For those who administer contracts, the separation of general from project-specific clauses into Parts I & II of the FIDIC conditions has no real advantages		1	0	1	2	For those who administer contracts, the separation of general from project-specific clauses into Parts I & II of the FIDIC conditions has big advantages
33.	The FIDIC conditions are difficult to understand	2	1	0	1	2	The FIDIC conditions are easy to understand
34.	In the FIDIC conditions, the Engineer has more powe of approval of work than are necessary for the efficient discharge of the contract	rs 2	1	0	1	2	In the FIDIC conditions, the Engineer does not have enough powers of approval of work to run the contract efficiently
35.	The FIDIC clauses governing Engineer's decisions are not particularly helpful in achieving speedy and equitable settlement of disputes	2	1	0	1	2	The FIDIC clauses governing Engineer's decisions are very helpful in achieving speedy and equitable settlement of disputes
36.	The FIDIC payment provisions do not encourage fair payment regimes	2	1	0	1	2	The FIDIC payment provisions do encourage fair payment regimes
37.	The FIDIC payment clauses leave a lot to be desired	2	1	0	1	2	The FIDIC payment clauses are about right
38.	The FIDIC conditions do not make adequate provision for Contractors' money claims	n 2	1	0	1	2	The FIDIC conditions make too many provisions for Contractors' money claims
39.	The FIDIC conditions do not make adequate provision for Contractors' time claims	n 2	1	0	1	2	The FIDIC conditions make too many provisions for Contractors' time claims
40.	In your opinion, what is the best feature of the FIDIC contract?						
41.	In your opinion, what is the worst feature of the FIDIC contract?						
42.	What do you think is the single most important change that						

	should be made in a future edition of the Red Book?									
43.	What do you think is the single most important change that should be made in a future edition of the Red Book Guide?									
Pa	rt Four: Experiences	s with the	FIDIC I	Red Book						
rece accu	section contains questions about youtly crossed your desk. Do not try to mulated, a clear picture of "typical" of, then please leave this section blar	o select a projec will emerge from	t that is repres	entative or typi	cal. Once all the	e responses hav	re been			
	What is your role in this project? (e.g., Engineer, Client, Contractor)									
	Which version of the Red Book is bein project? (e.g., 1977, 1987)	g used for this								
46. \	What is the approximately value of t	he work	less than 0.1	0.1–1	1–10	10–100	Over 100			
i	in this project in millions of US\$? (T	ick one box)	U.1							
	Approximately what proportion of thin this project is offshore? (Tick one		0–20%	20–40%	40–60%	60–80%	80–100%			
	Approximately what proportion of thin this project is underground? (Tick		0–20%	20–40%	40–60%	60–80% 	80–100%			
	Approximately what proportion of th in this project is surface work? (Ticl		0–20%	20–40%	40–60%	60–80%	80–100%			
	n your current (or most recent) FIDIC project, which clauses of Part I are altered from the published version (list clause numbers)?									
You FIDI	Thank you for completing this form. Please post or fax the completed form to the address shown at the top of Page 1. Your views will be treated with the strictest confidence. Opinions of individuals will not be revealed to anyone in EIC or FIDIC. The results of this survey will be considered by the FIDIC drafting committee and will be published in appropriate international journals.									
	u would like a copy of the summary ess is given on the first page of the		search, please 1	tick this box and	d make sure that	t your full posta				

Appendix 2: Question 40–Details of best feature

This list shows all of the responses to the question asking for the best feature of the Red Book. In each case, the sub-heading shows how the short list of phrases was derived for presentation in Table 5. In some cases, respondents gave more than one feature. In interpreting these, only the first feature in the answer has been used. Features are listed alphabetically.

Claims (7)

Clients 2, Consultants 1, Contractors 4

- 1. Commencement and delays procedures for claims
- 2. Contractors' claims on extra cost and reimbursement of expenses
- 3. Contractor's remedies for employer's default
- 4. Extension of time
- 5. It provides for payment of compensation to the contractor under the contract for some normal default of the employer/engineer
- 6. Procedure of claims. General obligations
- 7. Submission of claims possible without time bars

Comprehensive (22)

Clients 4, Consultants 14, Contractors 4

- 1. A comprehensive contract document which deals well with most situations during contract implementation
- 2. Adaptability, guidance, standardization to certain extent
- 3. Completeness
- 4. Comprehensibility; everything is there
- 5. Comprehensive, widely accepted
- 6. Comprehensive and clear general contract conditions for international use
- 7. Covers most eventualities
- 8. Document complete with respect to topics covered; project specific (part II) conditions easy to add
- 9. Document quality and coverage
- 10. Flexibility and particular conditions help users apply localized conditions suitable for differing jobs
- 11. General application
- 12. In general it covers most areas in a civil engineering project
- 13. International application
- 14. It is thorough
- 15. It is very comprehensive. It covers any type of situation
- 16. It is well laid out to suit international contracts and is the most reasonable available on the international market
- 17. Its flexibility
- 18. Its flexibility makes it capable of use on civil projects of any size and on other projects which even have substantial M&E content
- 19. The FIDIC contract is to appeal in general practical conditions of contract for works of civil engineering construction (sic)
- 20. The FIDIC contracts deal with most provisions and terms in detail
- 21. Thoroughness
- 22. Universality

Dispute resolution (5)

Clients 0, Consultants 1, Contractors 4

- 1. Clause 67 settlement of disputes is very extensive and offers adequate options
- 2. FIDIC provides more room for common sense approach for equitable settlement of disputes
- 3. It is to consider that arbitration is not taken place in the country of the work
- 4. The new "dispute resolution boards"
- 5. Ultimate resolution of disputes by an independent body ICC-67

Engineer's role (11)

Clients 2, Consultants 2, Contractors 7

- 1. Clause 2.6 Engineer to act impartially
- 2. Complexity and engineers role in the process
- Engineer
- 4. Engineer's powers to order the contractor to meet the time for completion at the contractors expense if the delay does not entitle the contractor for extension of time
- 5. Its having the engineer as a central figure, with independent position
- 6. Powers of engineer to act impartially
- 7. Role of engineer to act impartial and time frame for IPC payment by employer
- 8. The independent engineer
- 9. The institution of the engineer as an impartial expert with far reaching powers if so approved by the employer
- 10. The intention to be helpful in performing the contract through impartiality
- 11. The section dealing with the engineer and engineer's representative

Equitable (22)

Clients 4, Consultants 3, Contractors 15

- 1. Attempt to an equitable distribution of risks between the parties
- 2. Balance of powers at the site: contractor-engineer-employer
- 3. Balance of risk is fair
- 4. Conditions equitable if strictly followed
- 5. Equitable contract for contractor and employer
- 6. Equitable distribution of risks
- 7. Equitable distribution of works between the parties
- 8. Equity, balance. Wide acceptance internationally, by both parties.
- 9. Fair balance of risk, which gives the document a high degree of acceptance
- 10. Fairness for both sides, justified by the worldwide acceptance
- 11. Generally fair
- 12. Impartial
- 13. Impartiality and fairness to both parties
- 14. It extends a fairly equitable allocation of risks between the parties and it is relatively easy to understand and administer
- 15. It tries to be equitable
- 16. Its attempt to distribute risk between the employer and the contractor
- 17. Its equitability
- 18. Reasonably fair to all parties to the contract
- 19. The achievement of a reasonably equitable distribution of risk between the parties, such risks being described in understandable language and terminology
- 20. The conditions fairly distribute the risks between the parties and contain employer's default and unforeseeable conditions clauses. Without the standard conditions contract specific conditions would be more onerous
- 21. The equal distribution of risks between the parties
- 22. To serve a reference as reflecting a reasonable balance of rights and obligations between the contractor and the employer

Framework (6)

Clients 0, Consultants 4, Contractors 2

- 1. FIDIC contract provides excellent framework for the implementation of contracts
- 2. Have a base
- 3. It is a good starting point to write a contract
- 4. It standardizes general conditions of contract and encourages project specific clauses which generally standardizes how we approach compliance with the contract
- 5. Standard easy to prepare
- 6. The FIDIC contract can be used as a base line for a variety of construction project

General obligations (1)

Clients 0, Consultants 1, Contractors 0

1. General obligations, commencement and delays, procedure for claims

Internationally accepted (13)

Clients 0, Consultants 7, Contractors 6

- 1. An internationally recognized document with a fair distribution of risks
- 2. FIDIC Red Book is widely accepted through the world
- 3. International acceptability
- 4. International approach
- 5. Internationally acknowledged standard contract documents
- 6. Internationally recognized (was)
- 7. It is a world wide standard of contracts
- 8. Its universal use
- 9. The ability for it to be used in most international situations with little modification
- 10. The attempt to provide an international standardized "General conditions of contract document acceptable to both clients and contractors
- 11. The fact that it is an internationally recognized form
- 12. The majority of employers consultants and contractors worldwide are aware of and prepared to use FIDIC
- 13. Worldwide acceptance with clauses known to all parties (if not changed)

Like ICE (7)

Clients 1, Consultants 4, Contractors 2

- 1. Being based on the ICE form of contract, there is a body of opinion/law available to assist in its interpretation
- 2. Features consistent with ICE and other forms of contract for which there is extensive precedent and leaned opinion available
- 3. It is similar to the ICE form so ICE associated sub-contract forms may be used with it
- 4. Similar format to ICE 6
- 5. Similar format to ICE 6
- 6. That it is and through the ICE form of contract backed by considerable experience and legal precedent
- 7. They are modelled on the ICE conditions of contract

None (55)

Clients 7, Consultants 21, Contractors 27

- 1. Never used it
- 2. No opinion on best features

- 3. None which stands out
- 4. We are not aware of the FIDIC Red Book

In addition to these comments, a further 51 respondents left their answer blank

Parts I & II (11)

Clients 0, Consultants 6, Contractors 5

- Every clause seems to be reasonably described in general, assisting necessary preparation of part II
- 2. It encourages parties to add project specific clauses
- 3. Part I is the same for all projects, i.e. you only need to read part II when starting on a new project
- 4. Separation into Parts I & II to enable project specific clauses to be incorporated to suit host country/employer
- 5. Special risks
- 6. The ability to write project specific conditions
- 7. The availability of general applicable clauses and specific clauses to suit local circumstances
- 8. The recommended part II clauses
- 9. The separation of general from project specific clauses into parts I & II
- 10. The separation of general from project-specific clauses into Parts I & II
- 11. The separation of general from specific clauses into parts I & II

Risk allocation (4)

Clients 1, Consultants 3, Contractors 0

- 1. Allocation of risks; predictability of rights and duties of the parties
- 2. Distribution of risks
- 3. In comparison to JCT forms, FIDIC is better in terms of contractors' rights and obligations
- 4. Risk allocation (damage to works)

Specific clauses (6)

Clients 0, Consultants 0, Contractors 6

- 1. clause 1.1
- 2. Clause 69
- 3. Clauses 11/12
- 4. Clauses 20.4 and 65.2, 67.3; 69
- 5. Taking over, liquidated damages, defects liability, employer's risks
- 6. The fairness and flexible certificates of payment clauses under Parts I & II

Standardized (13)

Clients 1, Consultants 4, Contractors 7

- 1. A standard contract form which civil engineers can follow with confidence
- 2. Conformity
- 3. General acceptance of a standardized document
- 4. It is a standard contract with almost the same clauses from job to job
- 5. It is an accepted standard, and this is generally known among contractors, clients and consultants
- 6. Normalization, one centre responsible for decision
- 7. Standard forms PQ applications and biddings
- 8. Standardization
- 9. Standardization
- 10. Standardization of contractual obligations and responsibilities simplifies understanding and avoids misinterpretation from contract to contract
- 11. Standardized forms of contract; contract arrangement recognized internationally

- 12. Standardized terms; a lot of experience
- 13. To have a standard form of contract

The Guide (1)

Clients 0, Consultants 0, Contractors 1

1. Guide to the use of FIDIC conditions makes the readers understand easily the contents of contracts for works of civil engineering construction

Understandable (14)

Clients 2, Consultants 4, Contractors 8

- Clarity
- 2. Clear definition of responsibilities of client, engineer and consultant
- 3. Clear, usable
- 4. Comprehensibility
- 5. Easily understandable international contract conditions
- 6. Easy to read and comprehend
- 7. General arrangement is logical and easy to handle
- 8. It clearly defines the responsibilities of both parties to the contract
- 9. It is a clear structure for a contract
- 10. It is clearly worded and sufficiently comprehensive
- 11. Precise and simple English; indicating many points to be considered and discussed
- 12. Relatively straightforward and does operate in most scenarios
- 13. Role and responsibility is clearly defined
- 14. Widely understood and accepted

Well known (6)

Clients 2, Consultants 2, Contractors 2

- 1. A well established contract
- 2. Familiarity with basic conditions: Both employer and contractor know what they are entering into
- 3. Its recognition by large number of bodies and clients; its acceptability
- 4. Its wide applicability and acceptance; its user friendliness
- 5. Standardized clauses, well understood by participants, seen to be non-partisan
- 6. The general conditions are known

Appendix 3: Question 41–Details of worst feature

There were many comments which were the corollary of the answers to question 40. Some isolated features were identified. A few of the answers seemed to fall into categories as shown below. 85 respondents made no comment. The headings are listed alphabetically, with frequency of occurrence given in brackets in each case.

Bonding (2)

Clients 0, Consultants 1, Contractors 1

- Bonding requirements & Engineers using the document on building works traditionally architectural
- 2. Performance bonds and insurance clauses

Claims (6)

Clients 0, Consultants 3, Contractors 3

- 1. Employers decision/approval sought on some important provisions like EOT(44) & variations (cl.51)
- 2. Evaluation and claims
- 3. In certain cases (variations, suspension, terminations) contractors' costs are the sole element of compensation
- 4. No extra payment is made if the work is delayed by no fault of the contractor, only time extension is given
- 5. The procedure for claims
- 6. This use of the term "reasonably foreseen by an experienced contractor"

Complexity (4)

Clients 0, Consultants 3, Contractors 1

- 1. Clause 60, Part II, alternative B, makes payments complicated
- 2. Complexity
- 3. Complexity and bureaucracy; too many letters needed in day to day work
- 4. Relationship among programme revision(14.2), extension of time (14.4), and extra costs is always difficult, resulting in delay of updating programme

Contractor bias (2)

Clients 0, Consultants 2, Contractors 0

- 1. Generally being contractor biased
- 2. Generally being contractor-biased

Dispute resolution (3)

Clients 1, Consultants 0, Contractors 2

- 1. No adverse comments on the worst feature, but only area is possibly clause 67.1 whereby, the engineer's decision in arbitration cases should not be final
- 2. Not incorporated a standard for a second line of dispute-settling mechanism
- 3. The time given for dispute settlement is too long especially in matters as to instructions during the works

Employer bias (10)

Clients 0, Consultants 2, Contractors 8

- 1. Arbitrary powers of the employer
- 2. Bias against contractor, in favour of engineer/employer. Part II allows any clause to be amended; some should be sacrosanct
- 3. Biased towards the employer; does not allow the engineer to be truly unbiased.
- 4. Cessation of employer's liability should contractor fail to submit a claim in respect thereof in his "statement at completion" and "final statement" clause 60.9
- 5. Force majeure (even if contractor's personnel are jeopardized, there is no right to terminate)
- 6. Most conditions favour the client by placing most risks on the contractor
- 7. No obligation on client to resolve problems expeditiously
- 8. The contract is biased in favour of the employer/engineer9. The contractor does not have any possibility to stop works without falling under failure
- 10. There are too many provisions for the employer to escape from force majeure

Engineer's role (29)

Clients 4, Consultants 3, Contractors 22

- 1. Ambiguous role of the engineer
- 2. Clause 52 is ambiguous and too open to subjectivity by the engineer
- 3. Client/engineer factor
- 4. Engineer and employer have more powers to value variations. Contractor should have the option to reject a variation
- 5. Engineer is contract partner to employer, e.g. no penalty for engineer to exceed 28 days for payment claims - no payment, no default
- 6. Engineer is too powerful
- 7. Engineer's powers if he is employer by (or part of) the Employer
- 8. FIDIC's contract is drafted with the presumption of an ideal situation whereby dishonesty and unprofessional practices does not exist in the construction industry.
- 9. It is too easy for the engineer to vary the works without firmly agreeing the outcome with the contractor
- 10. It supposes an impartial engineer, in spite of the engineer being paid by the cient
- 11. Lack of conditions to assure engineer's fair job
- 12. Lack of conditions to assure Engineer's fair job
- 13. Lack of partiality of the engineer who is generally paid by the employer
- 14. Position of the engineer
- 15. Supervision of works
- 16. The illusion that the engineer has the powers attributed to him in clause 51
- 17. The notion that the Engineer is independent: he is paid and chosen by the employer
- 18. The position of the Engineer is largely unknown in the oil industry and unacceptable
- 19. The role of independent consulting engineer is exaggerated
- 20. The role of the Engineer
- 21. The role of the engineer
- 22. The role of the engineer as adjudicator of disputes, since he cannot separate himself from his role as agent of the employer
- 23. The role of the engineer; he is appointed by the employer and acts on his behalf and at the same time he has to act impartially
- 24. There are no time limits for the performance of some important functions by the engineer (time extension clause); there is a contradiction regarding independence of the engineer - FIDIC contemplates the employer employing the engineer
- 25. There is no time limit on the engineer making a determination. This can delay the dispute resolution process and payment to the contractor
- 26. There is not this type of contract in which an Engineer is involved as a contract administrator in Korea
- 27. To administer a FIDIC contract needs very qualified personnel
- 28. Too dependent on the presence of a competent and independent engineer
- 29. Variation orders; the Engineer is given very wide powers to fix rates

Incomprehensible (12)

Clients 1, Consultants 8, Contractors 3

- 1. An easy English should help not British contractors
- 2. Clause on determination by employer not precise
- 3. Clauses pertaining to claims and valuation are difficult and confusing in interpretation
- 4. Deals with prolongation costs and valuation of delays in a very oblique fashion
- 5. Difficult to comprehend
- 6. It is too complicated
- 7. Its old-fashioned legal jargon
- 8. No "worst feature", but the most difficult is that it requires training of employers if it's to work as intended by FIDIC. Some of the syntax is still complex for non-native English users
- 9. Often not specific enough with regard to procedures for claims, extensions, variations, etc.
- 10. The complexity of the grammar
- 11. The legal jargon
- 12. The use of words which are difficult to interpret such as "reasonable" or "practicable"; these are subjective and they are incapable of definition; the Engineer's judgement being challenged by both contractor and employer

Inflexibility (3)

Clients 0, Consultants 2, Contractors 1

- 1. Based on one way of thinking of how to deal with contracts
- 2. Lack of flexibility
- 3. The contract cannot cover a new type of contract such as a BOT scheme

Isolated comments (6)

Clients 1, Consultants 5, Contractors 0

- 1. Assignment and sub-contracting
- 2. Clause 14 does not specify date by which the programme must be agreed, reasonableness etc
- 3. Clause 65
- 4. Definition of the Employer's risks and the special risks
- 5. Does not cover contractor's design
- 6. Normalization

Level of detail (6)

Clients 2, Consultants 2, Contractors 2

- 1. Attempting to cater for all aspects of usage; should focus on general with allowance for project specific usage
- 2. Inability/impossibility to cater to the needs and peculiarities of every nation and or its construction industry
- 3. Lack of sufficient contract data (specific to the project) in the contract conditions
- 4. Part 2, wider application coverage needed
- 5. Should take into account the local law and working conditions
- 6. Too many clauses for very specific conditions

Obscure comments (2)

Clients 0, Consultants 1, Contractors 1

- 1. Impartiality of the Employer
- 2. Relies too heavily on a number of legal issues being clarified by particular conditions, so long standing elements of doubt could be removed by received wording

Parts I & II (4)

Clients 1, Consultants 1, Contractors 2

- 1. Additional clause related to taxes, local taxation, income taxes, customs and duties
- 2. Alterations have to be made to accommodate certain clauses of particular projects
- 3. Separation of general from specific clauses
- 4. The invitation in 2.1(b) to have contract modified in Part II to have employer control Engineer's decisions.

Payment (9)

Clients 2, Consultants 4, Contractors 3

- 1. Allows payment mechanism to be far too long
- 2. In India, the escalation clause (70.1) does not compensate for the actual increase in costs. Also, interest on delayed payments (60.10) does not compensate the contractor due to very high rate of interest in India
- 3. Long time periods to issue certificates and effect payments give rise to contractor claims in countries with high inflation rate
- 4. No payment security
- 5. No protection for contractor/client due to currency fluctuations
- 6. Payment provisions: lack of mechanisms for schedule delay and additional cost assessments
- 7. There are no technical contract conditions like the German VOB, part C, for interest due
- 8. Time allowances in the payment and settlement of disputes clauses are excessive
- 9. Time allowed for the employer to honour the payment certificate is too long

Standardization (7)

Clients 0, Consultants 2, Contractors 5

- 1. It is drafted for a common law scenario
- 2. Its perceptions overseas that it is an English law derived contract
- 3. Not applicable in civil law countries
- 4. Obscure clauses which are relevant only to (and derived from) English law
- 5. Perhaps some changes are incomprehensible or ambiguous as they offer more scope for interpretation by tending to be less specific and more simplistic
- 6. The option for clients to tinker with the overall concept of the contract terms by imposing unrealistic requirements under the specific clauses
- 7. Too often amended by client to enable unfair distribution of risk

Timing of advance payments (2)

Clients 0, Consultants 0, Contractors 2

- 1. No availability of time-frame for mobilization and machinery advance, absence of redress over contractor's grievances for site conditions and other factors
- 2. There is no time frame for release of advance payments

Unlimited liabilities (4)

Clients 0, Consultants 0, Contractors 4

- 1. Absence of limitation of liabilities
- 2. Lack of indemnity and limitation of liability provisions
- 3. Limitation (exclusion) of liability, failure to include consequential loss of use
- 4. No exclusion of contractor's liability for consequential damages; no overall cap of contractor's liability; possibility of employer to procrastinate/protract valid claims of contractor

Variation Orders (2)

Clients 0, Consultants 0, Contractors 2

- 1. Clause 31 concerning other contractors; tender price on some items of other contractor's work is higher than our contract, we were asked to carry out V.O based on our bill
- 2. Difficult to differentiate between a formal V.O. and one that is required by the project at hand

Verbose (6)

Clients 0, Consultants 3, Contractors 3

- 1. Excessive drawn out terminology in the contract clauses; requires simplification
- 2. In some clauses, the sentences are too long, even for English speakers, and can lead to misinterpretation, particularly by non-English speakers
- 3. It is too long and much too cumbersome
- 4. Too much unnecessary wording
- 5. Too verbose
- 6. Too wordy and confrontational (although the later is usually the user's problem), clause 52.3

Appendix 4: Question 42-Details of most important change

This question elicited a very wide range of responses from which few generalizations emerge. Answers have been grouped together loosely to aid interpretation. There are some clear messages, such as the call for simplification and clarification, and a few specifics.

Claims (9)

Clients 0, Consultants 5, Contractors 4

- 1. Besides giving time extension, extra payment should be made to the Contractor if the work is delayed by no fault of his own
- 2. Bring in appropriate time scales for response to claims in order to expedite resolution thereof (response/determination by engineer)
- 3. Clarification on responsibility for ground conditions
- 4. Clauses related to prolongation costs and the application of limit of variation
- 5. Deals with prolongation costs and valuation of delays in a less oblique fashion
- 6. More specific clauses for Force Majeure
- 7. Redraft claims and escalation clauses
- 8. The clauses on claims (53) and variations (52), should be specific on unforeseen conditions
- 9. Time and cost of extensions due to variations and recognition of disruptions

Determination (2)

Clients 0, Consultants 0, Contractors 2

- 1. Clauses on determination should be more precise
- 2. Lack or delays in payment should be considered a default of the employer and a door to termination

Dispute resolution (8)

Clients 1, Consultants 0, Contractors 7

- 1. ADR provisions
- 2. Efficient use of adjudicators to solve in true disputes
- 3. Introduce a formal adjudication board and eliminate the Engineer's decision; thus complete recast of clause 67
- 4. Introduction of disputes review board (like World Bank standard documents)
- 5. It should strongly encourage resolution of claims in an equitable manner between the contracting parties to avoid involvement of the legal profession and the resulting process to settle disputed claims
- 6. Provisions for dispute resolution should be amended; ideally introducing a review/adjudication panel prior to or instead of the Engineer's decision
- 7. Registration to time for dispute settlement for expediency
- 8. The introduction of the dispute review board cl. 67

Employer's role (2)

Clients 0, Consultants 2, Contractors 0

- 1. An employer's accountability clause should be legislated and incorporated
- 2. Role of Employer should be more passive rather than an influential and/or active role

Engineer's role (17)

Clients 2, Consultants 4, Contractors 11

- 1. "Implied terms" for Engineer should be fixed in clauses
- 2. Abolish the position of the engineer
- 3. Eliminate the excessive role of the engineer
- 4. Engineer to make fair amicable assessment of contractor's work notwithstanding the inadequacy of contractor's claim or insufficiency of details thereof in respect of clause 60.9
- 5. Engineer's role
- 6. Engineers supervise only- not to resolve disputes or financial disagreements.
- 7. If the engineer is asked for a decision he must give one; he must not be able to refuse to give a decision on the grounds that there is no dispute, i.e. a dispute as to whether there is a dispute
- 8. Introducing the possibility of separation of contract management, works supervision and disputes resolution
- 9. Make more provisions for an Engineer's liability to Contractor and Employer
- 10. Recognize the true role of the engineer and clip his powers as the decider in disputes
- 11. Reduction of the power of the engineer
- 12. Safeguard against arbitrary decisions
- 13. Engineer and employer have more powers to value variations. Contractor should have the option to reject a variation
- 14. Separate the dual role of the Engineer: to be Employers' representative; to act impartially
- 15. Split the Engineer's functions between Employer's representative, independent expert and Engineer
- 16. The Engineer and Employer must be separate entities, independent of each other so that the Engineer in clause 67.1 can give independent, impartial decisions
- 17. Time limits should be stipulated for the exercise of each and every power by the Engineer and the Employer; consequences of non-compliance should be provided

Environmental protection (2)

Clients 0, Consultants 1, Contractors 1

- 1. A clause about environment protection should be included
- 2. Clause on environmental protection with clear specification on duties and liabilities of each party

Flexibility (8)

Clients 1, Consultants 6, Contractors 1

- 1. A smaller number of generally accepted core clauses in Part I with alternative/suggested clauses for particular applications in part II
- 2. Adoption of turnkey, E.P.C. and B.O.T. contracts
- 3. Incorporate a wider choice of options in Part II
- 4. Incorporate clauses to suit local law and working practices and conditions
- 5. Make multi-disciplinary
- 6. Standardisation of cl. 60 of Part II to a single clause with no alternatives
- 7. The general condition to contain more standard clauses thereby reducing the task of amending part II substantially, provided the clauses are fair and equitable between the employer and contractor
- 8. The general conditions to contain more standard clauses thereby reducing the task of amending pt I & II substantially, provided the clauses are fair and equitable between the Employer and Contractor

Internationalize (2)

Clients 0, Consultants 0, Contractors 2

- 1. For it to become less reliant upon its English roots and to become truly international
- 2. The Red Book is not adapted to countries with very strong political power and very different economic habits; the question of inflation should be addressed

Isolated comments (7)

Clients 2, Consultants 3, Contractors 2

- 1. Unify common aspects of the yellow (E/M) book, particularly insurance. 2. Improve the performance bond
- 2. Introduce special provisions to the conditions of contract whereby sufficient contract data is to be included to minimize grey areas for the purpose of good administration of contracts
- 3. Method of measurement; it should be in line with the method already established and accepted in any one country or region
- 4. Release the retention against guarantees
- 5. Removal of clause 69
- 6. Some definition from the start, quantitative which establishes that after a certain delay the contractor is in default
- 7. To be made immune from interference by the World Bank! And more flexibility

Keep changes to a minimum (2)

Clients 0, Consultants 2, Contractors 0

- Changes should be kept to an absolute minimum and should only address serious deficiencies brought to the attention of EIC/FIDIC
- 2. Not too many new editions too soon! Changes should be empirical not theoretical: i.e. based on extensive user experience

Modernize (2)

Clients 0, Consultants 1, Contractors 1

- 1. In a computer diskette form
- 2. It is necessary to revise it so as to cope with a current working environment, especially for an intensive use of computers

No response (84)

Clients 16, Consultants 29, Contractors 39

Obscure comments (12)

Clients 1, Consultants 4, Contractors 7

- 1. Clause 37
- 2. Employer to approve Engineer's role
- 3. Entering into force of the contract
- 4. Extend specifications on the variation orders incl. procedures
- 5. It may be suggested that collection of actual examples related to any clause will be very much important, rather that further elaboration of clauses
- 6. Payment clause
- 7. Resolution of disputes
- 8. Revision of the section: alterations, additions and omissions
- 9. Support to contractor's items

- 10. The treatment of claims
- 11. To improve the capacity of the Employer to administrate among many contractors of the Employer; this capacity should also a fair and impartial
- 12. To reflect recent transactions which are seen often

Payment (10)

Clients 1, Consultants 2, Contractors 7

- 1. Add a clause to protect contractor/client from currency fluctuations
- 2. Advance payment clause should be included
- 3. Client payment for interim of time
- 4. Complete revision of clause 70 "change in cost and legislation". Set-up of a practical procedure for price adjustments due to inflation/devaluation, mainly for local currency and in developing countries
- 5. Lack of, or delays in payments should be considered a default of the Employer and a cause for termination
- 6. Provide for payment security
- 7. Release of advances within one week. Release of ad hoc amount within 7 days from submission of IPC application
- 8. The contracts of short duration (up to 9 months) should be fixed ones and linked to the dollar to avoid the fluctuations which can easily double the contract sum through inflation, especially in 3rd world countries
- 9. Time frame for advance payment on e.g. mobilisation, equip advance on mobilisation, ad hoc payment within 7 days of submission to contractor
- 10. To secure payments by Employer (e.g. to guarantee by Central Bank etc.); default of Employer usually neglected by Consultant due to political reasons and/or to keeping a good client relationship

Pre-value variations (2)

Clients 0, Consultants 0, Contractors 2

- 1. In the case of variation orders, new prices should be agreed between the Contractor and the Engineer or Employer before starting the work
- 2. Include a provision for agreeing the cost/time impact of variations with the contractor prior to instructions being issued

Risk apportionment (9)

Clients 0, Consultants 2, Contractors 7

- 1. A concise review of clauses 60.1 to 62.1 and 67.1 to 67.4; in this area more flexibility and fairness to the contractor should be assessed
- 2. Equitable distribution of risks between parties
- 3. Exclude consequential damages, loss of use, loss of contract, loss of profit
- 4. Given the present state of the insurance market that risks which cannot reasonably be insured are employer's risks clauses 20/21
- 5. Inclusion of indemnity and limitation of liability provisions plus offshore risk reference, e.g. pollution, damage to existing property, plus waiver of consequential damages provisions
- 6. Limit the contractor's liability
- 7. More equitable distribution of risks between the parties which are commensurate with their respective obligations and responsibilities
- 8. More specific specification of risk, approvals incl. tests. Contractor to be responsible.....
- 9. Removal of the confusion caused from the above definition (Employer's vs. special risks)

Simplify language (19)

Clients 2, Consultants 9, Contractors 8

- 1. A bit of simplicity (sic)
- 2. A simple style; the subtleties of the English language are not always understood
- 3. Amend the reference to "climatic conditions" in clause 40.1(c) to refer to "weather"
- 4. Conditions to be made simpler and easier to understand and to interpret (sic)
- 5. Consideration should be given to simplifying the language used so that either local translation can easily be made or the local contractor with limited English/French ability can equally easily understand; the NEC has set the format.....
- 6. Improve the English for its comprehensibility
- 7. It should be written in a more comprehensive form (the payment condition should be simpler; too many certificates and draft statement)
- 8. Language needs to be made easier
- 9. Make the terminology more simplistic in order to allow "non-contractual" people to be more aware of their contractual requirements
- 10. Simpler language
- 11. Simplification
- 12. Simplified method of dealing with variations and their speedy approval
- 13. Simplify English wording and make shorter sentences
- 14. Simplify general and specific terms
- 15. Simplify the format and language
- 16. The basic principles should not be changed but the wording should be internationalized
- 17. Try to define what is reasonable
- 18. Use plain English
- 19. Write it for an engineer (not a lawyer) in clear, easily understood English

Sub-contracting (3)

Clients 0, Consultants 1, Contractors 2

- 1. Allowing contract to be flexible when it comes to subcontractor's design
- 2. Expand the clauses regarding responsibilities of the parties in case of nominated subcontracts
- 3. The employer should not be able to bar the contractor from using a sub-contractor for certain parts of the works as the contractor is anyway responsible to the contract

Tighten up periods (4)

Clients 0, Consultants 3, Contractors 1

- 1. Clause 14 need agreed programme within 28 days, or otherwise be dated on tender programme
- 2. Response periods for the Engineer to Contractor's claims for time and money; modernize language; simplify structure
- 3. Time allowances should be reduced
- 4. When specific compliance periods and given, following phrases such as "or other such reasonable time" etc should be avoided as they lead to non-compliance

Appendix 5: Question 43–Details of changes to the Guide

Civil code (2)

Clients 0, Consultants 1, Contractors 1

- 1. Detailed note about contract by civil code and clarify the conditions of liability, compensation
- 2. To eliminate all concepts which refer to common law (such as fair and reasonable etc) in order to be applicable in civil law countries

Clarify Engineer's role (4)

Clients 0, Consultants 1, Contractors 3

- 1. That the Engineer should really be independent of both Client and Contractor
- 2. The Engineer and Employer must be separate entities, independent of each other so that the Engineer in cl 67.1 can give independent, impartial decisions
- 3. The unqualified independence of the engineer should be assured; the disputes resolution should be left to dispute resolution board (independent) and then arbitration
- 4. To provide for the various scenarios of Engineer's powers assigned to him by owner

Guidance on part II (2)

- 1. Part II should be viewed as the opportunity to vary part I to take account of the local circumstances rather than the opportunity for the employer to change the intent of the conditions
- 2. To increase alternative clauses as sample

History (3)

Clients 1, Consultants 1, Contractors 1

- 1. A brief history behind the formulation of some of the controversial clauses should be provided; the not so specific clauses should be discussed in the context of real situations.
- 2. It should give the reason for changes from the previous version of FIDIC
- 3. Should contain adequate explanation of derivation of the principles and the wording of the clauses

Isolated comments

Clients 0, Consultants 2, Contractors 2

- 1. Clarification that: use of bill rates to price new work may become inequitable in a lengthy project; as stated in 3rd Notes, dayworks rates are for work of minor and incidental nature, not the wholesale (slothful) pricing of V.O.s
- 2. Making users aware of its existence; I do not have a copy
- 3. Nominated sub-contractor; the employer's responsibility should include the default of nominated sub-contractor
- 4. Should require mediation prior to arbitration i.e. amplify cl 67.2. Remove oral instructions from engineer clause 2.5

Leave it alone (5)

Clients 2, Consultants 1, Contractors 2

- 1. Generally acceptable
- 2. No major changes

- 3. None
- 4. The guide suits me fine as it is, although more examples of actual application would always be welcome
- 5. The Red Book guide is fine as is

More examples (3)

Clients 1, Consultants 0, Contractors 2

- 1. Add the example of an international project under Red Book
- 2. Additional example of interpretation
- 3. More samples

More explanations (10)

Clients 0, Consultants 7, Contractors 3

- 1. Add more about test on completion
- 2. Clauses for payments, claims, and engineers duties should be more elaborated upon
- 3. Come off the fence and give more guidance
- 4. Detailed substantiation of the entitlement to additional contract price due to extension of time for completion of the works
- 5. Explain distinction between a formal V.O. and one that is required by the project at hand
- 6. Further explanations as to the inapplicability of certain conditions to contracts for dredging and reclamation works; see part III of 1977 edition
- 7. Greatly enhance commentary on claims and escalation matters. Case studies should be included of typical engineers decisions/scenarios
- 8. Include some information on insurance practices
- 9. Specific usage on each clause including standard forms/formats
- 10. To incorporate guidance notes included in international funders' FIDIC revisions

More flow charts (2)

Clients 0, Consultants 0, Contractors 2

- 1. Flow chart, more guidance
- 2. More flow charts

No response (140)

Clients 21, Consultants 47, Contractors 72

Obscure comments (18)

Clients 0, Consultants 7, Contractors 11

- 1. Addition ofto have come to the arbitration to settle conflict regarding claims
- 2. Amend clause 12.2 delete "whichsoever or conditions were in his opinion...." add "which obstructions or conditions where not clearly identified in tender documents"
- 3. Change in clause 71
- 4. Contractors' views/opinions should be considered regarding unforeseen conditions and risks
- 5. Guidelines in overcoming the difficulty encountered on cessation of employer's liability should the contractor fail to submit a claim on time
- 6. I am not familiar with this
- 7. I haven't changed my mind
- 8. In our experience the guide is of limited practical use
- 9. Liquidated damages and penalties for non-performance in the currency of the contract failure to meet interim targets

- 10. More for building works rather than civil works
- 11. p115, clause 52.1: Ref. to "...in principle, the various prices of a lump sum character for the contractor's preliminary and general..." should be deleted as this is a project specific matter & obviously depends on the nature of the particular lump sum items
- 12. Payment limits of Employers in time now open ended
- 13. Publish list of acceptance clients
- 14. Relaxation in payment forms and shape for suitable time extension with escalation payments on practical difficulties during extension
- 15. Removal of the bid security for very small contract < \$100,000.00
- 16. Right to terminate contract in case of Force Majeure exceeding x months
- 17. See 42
- 18. Timely release of payments, scope of the contractor to cover practical difficulties and grant of time extension with pay escalation

Provide standard documentation (4)

Clients 0, Consultants 4, Contractors 0

- 1. Prescribe a standard pro-forma for extension of time to plug loopholes
- 2. Standard document for contract practice
- 3. Standard documentation for contract practice
- 4. The guide should contain some standard "instructions to tenderers" text related to the Red Book conditions

Report judgments on clauses

Clients 0, Consultants 1, Contractors 1

- 1. Adding references to some international arbitration cases related to FIDIC clauses
- 2. Expansion to include reported instance of disputes over interpretation of FIDIC wording

Simplify (5)

Clients 1, Consultants 2, Contractors 2

- 1. Make it user friendly
- 2. More compact and less legalistic
- 3. Simplify language
- 4. Simplify the format and language
- 5. Use simplified language