

| Proposal draft review objective  | Proposal draft review subjects |   |
|--|--------------------------------|---|
| 1. Customer requirements have been clarified and documented  | 1.1                            | The functional requirements.  |
|  | 1.2                            | The customer's operating environment (hardware, data communication system, operating system, etc.).   |
|  | 1.3                            | The required interfaces with other software packages and instrument firmware, etc.  |
|  | 1.4                            | The performance requirements, including workloads as defined by the number of users and the characteristics of use.   |
|  | 1.5                            | The system's reliability.   |
|  | 1.6                            | The system's usability, as realized in the required training time for an operator to achieve the required productivity. The total of training and instruction efforts to be carried out by the supplier, including number of trainees and instructed staff, locations and duration. |
|  | 1.7                            | The number of software installations to be performed by the supplier, including locations.  |
|  | 1.8                            | The warranty period, extent of supplier liability, and method of providing support.   |
|  | 1.9                            | Proposals for maintenance service provision extending beyond the warranty period, and its conditions.   |
|  | 1.10                           | Completion of all the tender requirements, including information about the project team, certification and other documents, etc.  |
| 2. Alternative approaches for carrying out the project have been examined                            | 2.1                            | Integrating reused and purchased software.  |
|  | 2.2                            | Partners.   |
|  | 2.3                            | Customer's undertaking to perform in-house development of some project tasks.   |
|  | 2.4                            | Subcontractors.   |
|  | 2.5                            | Adequate comparison of alternatives.  |
| 3. Formal aspects of the relationship between the customer and the software firm have been specified | 3.1                            | A coordination and joint control committee, including its procedures.   |
|  | 3.2                            | The list of documentation that has to be delivered.   |
|  | 3.3                            | The customer's responsibilities re provision of facilities, data, and answers to the team's inquiries.  |
|  | 3.4                            | Indication of the required phase approval by the customer and the approval procedure.   |
|  | 3.5                            | Customer participation (extent and procedures) in progress reviews, design reviews, and testing.  |
|  | 3.6                            | Procedures for handling customer change requests during development and maintenance stages, including method of costing introduction of changes.  |
|  | 3.7                            | Criteria for project completion, method of approval, and acceptance.  |
|  | 3.8                            | Procedures for handling customer complaints and problems detected after acceptance, including non-conformity to specifications detected after the warranty period.  |

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|  | <p>3.9 Conditions for granting bonuses for earlier project completion and penalties for delays.</p> <p>3.10 Conditions to be complied with, including financial arrangements if part of or the entire project is cancelled or temporarily halted upon the customer's initiative. (Issues include the expected damages to the firm if such actions are taken at various stages of the project.)</p> <p>3.11 Service provision conditions during warranty period.</p> <p>3.12 Software maintenance services and conditions, including customer's obligation to update his version of the software as per supplier's demands.</p> |
| 4. Identification of development risks                           | <p>4.1 Risks re software modules or parts that require substantial acquisition of new professional capabilities.</p> <p>4.2 Risks re possibility of not obtaining needed hardware and software components according to schedule.</p>   |
| 5. Adequate estimation of resources and timetable                | <p>5.1 Man-days required for each project phase and their cost. Do the estimates include spare resources to cover for corrections following design reviews, tests, and so forth?</p> <p>5.2 Do the estimates of man-days include the required work to prepare the required documentation, especially the documentation to be delivered to the customer?</p> <p>5.3 Manpower resources needed to fulfill warranty obligations and their cost.</p> <p>5.4 Does the project schedule include time required for reviews, tests, etc. and making the required corrections?</p>  |
| 6. Examination of the firm's capacity to perform the project     | <p>6.1 Professional pool of knowledge.</p> <p>6.2 Availability of specialized staff (on schedule and in the required numbers).</p> <p>6.3 Availability of computer resources and other development (including testing) facilities (on schedule and in the required numbers).</p> <p>6.4 Ability to cope with the customer requirements demanding use of special development tools or software development standards.</p> <p>6.5 Warranty and long-term software maintenance service obligations.</p>   |
| 7. Examination of customer's capacity to fulfill his commitments | <p>7.1 Financial capability, including contract payments and additional internal investments.</p> <p>7.2 Supply of all the facilities, data and responses to staff queries as they arise.</p> <p>7.3 Recruitment and training of new and existing staff.</p> <p>7.4 Capacity to complete all task commitments on time and to the requisite quality.</p>  |

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| 8. Definition of partner and subcontractor participation conditions | <p>8.1 Allocation of responsibility for completion of tasks by the partners, subcontractors, or the customer, including schedule and method of coordination.</p> <p>8.2 Allocation of payments, including bonuses and penalties, among partners.</p> <p>8.3 Subcontractor payment schedule, including bonuses and penalties.</p> <p>8.4 Quality assurance of work performed by subcontractors, partners and the customer, including participation in SQA activities (e.g., quality planning, reviews, tests).</p> |
| 9. Definition and protection of software proprietary rights         | <p>9.1 Securing proprietary rights to software purchased from others.</p> <p>9.2 Securing proprietary rights to data files purchased from others.</p> <p>9.3 Securing proprietary rights to future reuse of software developed in custom-made projects.</p> <p>9.4 Securing proprietary rights to software (including data files) developed by the firm (the supplier) and his subcontractors during the development period and while in regular use by the client.</p>   |

## Appendix 5B Contract draft review – subjects checklist

| Contract draft review objective   | Contract draft review subjects  |
|---|---|
| 1. No unclarified issues remain in the contract draft                             | <p>1.1 Supplier's obligations as defined in the contract draft and its appendices.</p> <p>1.2 Customer's obligations as defined in the contract draft and its appendices.</p>   |
| 2. All understandings reached subsequent to the proposal are correctly documented | <p>2.1 Understandings about the project's functional requirements.</p> <p>2.2 Understandings about financial issues, including payment schedule, bonuses, penalties, etc.</p> <p>2.3 Understandings about the customer's obligations.</p> <p>2.4 Understandings about partner and subcontractor obligations, including the supplier's agreements with external parties.</p> |
| 3. No "new" changes, additions, or omissions have entered the contract draft      | <p>3.1 The contract draft is complete; no contract section or appendix is missing.</p> <p>3.2 No changes, omissions and additions have been entered into the agreed document, regarding the financial issues, the project schedule, or the customer and partners' obligations.</p>  |