Aarhus School of Engineering

Request For Proposal

SitaWare Civilian
Company: B

Dunke Inc.

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Revision history

Version	Date	Changes
0.1	17-02-2015	Document created.
0.2	17-02-2015	Document updated with information and ready for internal review.

Table 1. Revision history.

Glossary and Terms

The following table contains a glossary of abbreviations and technical subject-specifik terms used in this document which require further explanation.

Abbreviation	**Meaning**	**Explanation**
COP	Common Operational Picture	Display/picture of relevant information in operation area.

Table 2. Glossary.

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Introduction 1

1.1 Summary

Dunke Inc. is accepting proposals to develop the hardware for a specific hand-held dismounted COP. The assignment will be based on requirements given by Dunke Inc. By these requirements the contractor will design, develop and produce the hand-held device hardware.

1.2 Proposal guidelines and requirements

- The selection of contractor is a closed but competitive process. Only invited contractors will be subject to evaluation.
- Proposals shall be received by Dunke Inc. before TIME, DAY AND DATE, YEAR. Proposals which are received after will not be subject for evaluation. [1]
- It shall contain the signature of a authorized officer to verify the proposal.
- Prices quoted in the proposal shall be fully explained.
- The RFP is a confidential document and all information regarding this project is only for classified personnel.

1.3 Contract terms

Upon selected to subcontract Dunke Inc. will draft a initially contract. This contract will be available for the subcontractors legal department for investigation and signing.

The project will start on the DATE and is expected to be finished at the latest of the DATE [2]

Any subcontracting is allowed by Dunke Inc. but this shall be explicit explained in the proposal response. Subcontractors and their work must be quoted in details. Though Dunke Inc. will reserve the right to raise objections against a subcontractor and eventually reject a proposal with the subcontractor.

[1] FiXme Fatal: indsæt tid, dato og år.
[2] FiXme Fatal: indsæt dato

1.4 Payment model and incentives

The payment will be paid in bites.

- To conduct the discovery and design phase 25-35% will paid in advance.
- Upon starting production phase 45-55% will be paid.
- The remaining will depend on the tests result and the cooperation as a whole.

In total the estimated budget will be around 8-10.000.000,- danish kroner.

Background and description 2

2.1 Background

In a military battlefield SitaWare suite have the capability to establish situational awareness, what in other settings may be referred to as a common operations picture (COP). We want to extend the possibilities offered by Systematic SitaWare to cover civilian scenarios where actors from police, armed forces, hospitals and emergency management work together to control a crisis situation. We envision a scenario where the commanders from a mobile headquarter can evaluate incoming information, act upon it and possibly dispatch orders or information to relevant actors to respond to. In a crisis situation, the SitaWare Civilian allows communication and exchange of information between various users.

2.2 Vision

The effectiveness of an emergency management team deployed on the location of a crisis situation is greatly dependent on the team's situational awareness. The more emergency response actors involved in a crisis situation, the higher is the risk of losing overview and control of the situation. The lack of overview might end up in important information getting lost and missions being carried out in undesirable ways. A way of getting this to every actor in the emergency team is by introducing a condensed common operation picture in a hand-held device.

2.3 Description of project

Create the hardware platform for a hand-held condensed COP. The device shall be design to be mounted on the users arm. It shall be resilient to harsh environments and be reliable in use. The hand-held COP shall have a touchscreen interface and able to connect with the rest of the system through telecommunication. The hand-held device shall embed various sensors and have sufficient battery to be used several days.

In section 3.2 further guidelines and requirements are stated.

Process and scope of work 3

3.1 Phases of work

In this section the different phases of the tendering will be elaborated.

Discovery

In this phase the contractor shall identify the needed hardware such as the best microprocessor-system, best battery option, materials for housing, hardware for telecommunications and available sensors on the market.

Design

The design phase will contain the design of the hand-held device. This shall include all interfaces and specific hardware design documents. If elected the contractor shall provide documentation according to a later specified agreement.

Development and Production

The development and integration of the hand-held device is a joint operation between the contractor and Dunke Inc. The production will be the contractors responsibility including any hardware and OS specific tests.

Testing

During this phase extensive testing will be required. In the response proposal an outline for these tests shall be quoted.

3.2 Development guidelines and requirements

The following requirements encapsulates functionality regarding both software and hardware. Therefore you shall extract the appropriate information from the requirements below in

order to design and develop an adequate hardware platform.

3.2.1 Capability requirements

FR-0111 The hand-held dismounted COP shall be able to get its current location.
FR-0112 The hand-held dismounted COP shall be able to notify the server with the current location.

3.2.2 Safety requirements

FR-0350 The hand-held dismounted COP shall warn the user about dangerous radiation levels.
FR-0352 The hand-held dismounted COP shall warn the user about dangerous temperature levels.
FR-0354 The hand-held dismounted COP shall warn the user about dangerous oxygen levels.

3.2.3 System environment requirements

FR-0390 The hand-held dismounted COP shall be waterproof.
FR-0400 The hand-held dismounted COP shall be shock resistant.
FR-0410 The hand-held dismounted COP shall be heat resistant.
FR-0420 The hand-held dismounted COP shall be cold resistant.

3.2.4 System quality factors

FR-0430 Warranty period shall be at least 10 years.
FR-0440 The system shall be open for future updates.

3.2.5 Design and construction constraints

FR-0460 The hand-held dismounted COP shall be wearable.
FR-0470 The hand-held dismounted COP shall be worn so it is easily accessible.

3.2.6 Non-functional requirements

NFR-0131 The location of a device shall able to be updated at least every 10 seconds (FR-0110).
NFR-0140 When the system provides COP-information to a device, the information must be available on the device within 10 seconds (FR-0115).

NFR-0170 Dangerous radiation levels are defined by measurements above 0.25 Sievert.

NFR-0180 Dangerous temperature levels are defined by temperatures below -40 °C and above 70 °C (FR-0352).

NFR-0190 Dangerous oxygen levels are defined by oxygen levels below 10 atmosphere (FR-0354).

NFR-0200 The probability of data loss shall not exceed 1/1000 (FR-0450).

NFR.0210 The weight of the hand-held dismounted COP shall not exceed 1 kg (FR-0460).

3.3 Reporting during joint operations

The contractor will be obliged to give regularly updates. Typically on a weekly basis or similar. It will be the forum for discussion of problems and solutions.

In the end of every phase the contractor shall provide documentation that summarizes the work conducted in the phase.

3.4 Deliverables of RFP response

In this section the wanted format of a response to the RFP is elaborated. All documents to be exchanged shall be in portable document format.

3.4.0.1 Cover letter

A covering letter, dated and signed by a person authorized to negotiate, make commitments, and provide any clarifications with respect to the proposal on behalf of the bidding consultant or firm. Provide a statement indicating your company's understanding of the proposed project and the deliverables required. This is done to match expectation of the project. Optionally provide an indication of any proposed deviations or exceptions to the terms and conditions outlined in this RFP document.

3.4.0.2 Scope

Discuss in detail items from the RFP and how you intend to tackle it. Use diagrams to illustrate your configuration. This will be the longest section of your proposal and will probably have several subsections

3.4.0.3 Proposed project schedule and cost

When do you anticipate starting? How long will each task take? Make a table of your expected schedule for completing the project.

Breakdown the cost by equipment and personnel time to come up with your expected budget. The budget must include all phases and describe in details.

3.4.0.4 Supporting Information

Any other information regarding the project. This could be technology considerations. It could also be what your company have done in similar projects.

Evaluation and contacts 4

4.1 Evaluation

In this section criteria for the evaluation and selection will be outlined.

- Suitability of the Proposal. The proposed solution meets the needs and criteria set forth in the RFP.
- Expertise and experience in this field of technology. The company will be subject to an investigate of former project and reputation.
- The appropriate staff. This includes the depth given by specialist and the breadth of a well founded company.
- A reasonable and reliable budget including a well disposed time schedule.

4.2 Contacts

The following personnel will be available for further questions and other queries.

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