

# **Tender Document 006-2016**

Open tender according to Part I and II of the regulations  
for procurements below the EEA threshold values

for purchase of

**Cubesat or similar small satellite training kit**

for delivery to

Forsvarets forskningsinstitutt (FFI)  
Norwegian Defence Research Establishment

*16<sup>th</sup> March 2016*

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# 1 GENERAL DESCRIPTION

## 1.1 The customer

Forsvarets forskningsinstitutt (the Norwegian Defence Research Establishment, hereafter named FFI) is a civilian institution of research directly answerable to the Norwegian Ministry of Defence. The establishment has 700 employees, of whom 500 are research scientists and engineers who are engaged in the development of technology and expertise to enable Norway to maintain a modern and effective national defence. FFI is a multidisciplinary enterprise covering such fields as mathematics, physics, information technology, chemistry, biology, medicine, psychology, political science and economics. It is located at Kjeller near Lillestrøm, and also has a smaller division at Horten. For more information, please see our internet web pages [www.ffi.no](http://www.ffi.no).

## 1.2 Objective of the procurement

The Norwegian Defence Research Establishment (FFI) wants to acquire a Cubesat or similar small satellite training kit for the purpose of investigating what is required in order to take a larger role in satellite system development. Specifically for the space domain, FFI have experience in designing missions, specifying satellite system and payload capability, performing payload environmental testing and operating satellites (AISSat-1 and -2). Experience in satellite sub-system selection, integration and testing is limited however.

FFI would like to use the kit in order to perform sub-system checkout, payload and satellite integration, integrated checkout, mission software development, environmental testing etc. as a learning by doing project. The rationale for a complete kit is to ensure compatibility between the sub-systems. Swapping sub-systems with mission optimized sub-systems and integrating with the other sub-systems is envisaged as the next step in the education process.

The kit is not primarily intended for launch.

Further details are stated in clause "Specification of technical requirements" in this competition basis. The acquisition can be cancelled if the offered price exceeds the budgeted amount.

## 1.3 Size of procurement and value of contract

The estimated value of this procurement is expected to lay under the threshold for EEA announcements; hence the decision to follow the regulations in Part II of the "Regulations on Public Procurement".

The purchase is subject to budgetary coverage

## 1.4 Composition of the tender document

The tender document consists of this template and its associated attachments:

1. General purchase conditions, BI 5052 (march 2008) (Annex 1)
2. Ethical statement (Annex 2)

## 1.5 Announcement of contract notices/invitation for tenders

Contract notices/invitations to submit tenders will be publicly announced in the Norwegian national tender notification service DOFFIN. In addition certain suppliers will be notified.

## 1.6 Site visits/vendor orientation conferences

There will be no visits to the site or vendor orientation conferences.

## 1.7 Other information

In the event a supplier feels that the guidelines in the tender document are unclear, or that there are errors in the document, the supplier may submit a written request for more information to the customer through Merzell Sourcing Service's Procurement Tool, KGV (Norwegian, "Merzell Konkurransgjennomføringsverktøy").

## 1.8 Corrections, supplementary information, or changes to the tender document

The customer reserves the right to make corrections, provide supplementary information or make changes to the tender document as long as these adjustments are not of a substantial nature.

Revisions, corrections, supplementary information, or changes to the tender document will be sent to all recipients of the original document immediately. Announcements concerning revisions, corrections, supplementary information or changes to the tender document will be made electronically on DOFFIN through the Merzell Procurement Tool (KGV).

## 1.9 Progress schedule

The customer has established the following timescale for the process:

Task	Target dates
Announcement of invitation to submit tenders in DOFFIN	16 <sup>th</sup> march 2016
Deadline for submission of tenders	25 <sup>th</sup> april 2016, 12:00
Opening of tenders	25 <sup>th</sup> april 2016 , 12:00
Possible meetings for negotiations	N/A
Evaluation of submitted tenders	Week 17 and 18, 2016
Awarding of contract and notification to other tenderers	Week 19, 2016
Disputes – deadline for submission of tenderer complaints	10 days after awarding of Contract
Signing of contract	Week 21, 2016

Please note that the target dates following the opening of tenders are intended as a guideline only and may be subject to change.

## **2 RULES FOR THE SUBMISSION OF TENDERS**

### **2.1 Procurement procedure**

Procurements are to be made according to the Law of Public Procurement of 16 July 1999 (Norwegian, "Lov om offentlige anskaffelser av 16. juli 1999" or LOA), and the Regulations Governing Public Procurements of 7 April 2006, no. 4022 (Norwegian, "Forskrift om offentlige anskaffelser (FOA) av 7. april 2006 nr. 4022). The procurement process will be conducted through the system of open tendering in accordance with Part I and Part II of the Regulations (under the EEA threshold value). The type of procurement is "Purchase of goods" and negotiations are permitted.

The system of open tendering offers all interested bidders the opportunity to submit tenders in free and open competition. There is no pre-qualification of vendors, and tenderers should submit supporting documentation proving their qualifications with the submission of their bids.

Tenderers are recommended to give their best offer within the specified closing date of the competition, because FFI has decided not to negotiate with any of the tenderers.

Norwegian Ministry of Defence regulations on procurement will be adhered to where the Law of Public Procurement (LOA) or the Regulations Governing Public Procurement (FOA) do not apply.

### **2.2 Language**

All written and oral communication with regards to this competition shall be in Norwegian or English.

### **2.3 Merzell Sourcing Service's Purchasing Tool (KGV)**

The competitive tendering process will be administered through use of Merzell Sourcing Service's Purchasing Tool (KGV). All inquiries concerning the invitation to tender should be made through the Merzell communication module so that they may be documented and registered. Verbal responses and descriptions will not be considered unless they are formally documented in writing.

Please contact Merzell support, e-mail [support@merzell.no](mailto:support@merzell.no) with questions.

### **2.4 Qualification requirements**

The supplier must fulfil the qualification requirements for participation in the selection process in the competition:

Documentation of the qualification requirements is added under "Kvalifikasjonskrav" in Merzell and answered as described under pkt 3 "Qualification Requirements" in the Tender Document.

To be qualified for participation in the competition all the requirements must be answered with "Ja" and valid documentation must be attached.

## 2.5 Formulation and submission of the tender document

Tenders should address all of the areas specified below. In order to facilitate a proper and thorough evaluation of bids, it is essential that tenderers adhere to the bid outline as shown.

Bids should be submitted through the Merzell Purchasing Tool (KGV).

The following files should be attached to all bids:

- Formal written letter of tender providing a short description of the vendor/supplier and an accept of the terms of the purchaser's tender document
- Price according to the specification of the requirements (see specification in Annex A). It can also be included in the letter of tender.
- Eventually other attachments or technical documentation. Fulfilment of specification requirements. Description of how the offered goods/service fulfils each point of customer's specifications and requirements.

The letter of tender shall also include

- Reference to the tender document number and title.
- The vendors address, telephone/fax number and VAT number
- Contact person at the vendor with telephone number and e-mail address
- Accept of all terms applied in the tender document. Any reservations shall be listed in the letter of tender with reference to the actual point in the tender document.
- The tender document shall be dated and signed by a person who has power to commit the company.

Bidders should address all questions, requirements and clarification points requested in point 4 "Specifications of requirements" in the tender document.

FFI will not reimburse bidders for expenses incurred in connection with the preparation, submission, or following up of a tender, nor for product demonstrations or showings etc.

Submitted tenders and their accompanying documentation and materials are considered FFI property and will not be returned.

## 2.6 Electronic signature

In this connection there will be asked for electronic signature for validation of the identity of the supplier. Electronic signature can be provided from [www.comfides.com](http://www.comfides.com), [www.buypass.no](http://www.buypass.no) or [www.bankid.no](http://www.bankid.no). We call attention to that it may take some weeks to receive electronic signature.

Suppliers who download tenders after the tender due date will be rejected.

Merzell Kundesenter, tlf +47 21 01 88 60 will assist suppliers who need technical support regarding the Merzell tool or electronic signature.

## 2.7 Confidential information

According to § 23 in the Law Relating to Public Access to Documents in the Public Administration (Norwegian Freedom of Information Act or in Norwegian, "*Offentleglova*"), information contained in

public procurement tenders may be held in confidentiality until the contract has been awarded. After that, barring other extenuating circumstances such as business confidentiality or issues of national security, the information contained in the tenders may be made public. If the tender or parts of it should remain confidential, also after the contract has been awarded, this should be clearly stated in the tender at the time it is submitted.

## **2.8 Client Confidentiality**

FFI and its employees are obliged to prevent that persons not concerned are admitted access or knowledge to information concerning technical arrangements, procedures, management or business matters that for security reasons should be kept secret. cf. FOA § 3-6, jf. forvaltningsloven § 13.

## **2.9 Exceptions and deviations**

If a tenderer wishes to make certain exceptions and stipulations to certain parts of the tender document, this should be clearly stated in the tender. These provisos should be clearly specified in the bid, and their implication for performance, price or other relevant factors should be clearly stated.

The same terms apply to deviations. Exceptions and deviations should be formulated precisely and clearly so that the purchaser can assess them without having to contact the supplier. Exceptions and deviations should refer to the relevant point in the tender document and should be specified and discussed in a separate enclosure (see point 2.5). Exceptions and deviations of a substantial nature will result in the tender being refused.

## **2.10 Disclosure requirements**

Tenderers will receive written notification from the purchaser with a short explanation in the event that:

- The tender is refused
- All submitted bids are rejected or if the competition is cancelled.

Suppliers may make a written request for:

- Why the tender was refused or rejected.

The customer must reply within 15 days of having received the tenderer's request.

## **2.11 Subcontractor**

FFI desires to work with a single source vendor who can document the desire and capability of assuming responsibility for the entire delivery. If in order to be able to furnish a bid for complete delivery of goods or services, the vendor wishes to include sub vendors, the applying vendor should appear in the tender document as the primary tenderer. FFI reserves the right to disallow the tenderer's choice of sub vendor. The main supplier should be able to enter into a long term cooperative effort with FFI for common administration of the system described in the invitation for tenders. FFI should be advised of any changes of sub vendors well ahead of time, and the primary supplier agrees to provide any analysis certificates that may be requested in the transition phase.



## **2.12 Alternative offers**

Alternative offers will be accepted.

FFI defines an alternative offer as:

“Offers, prepared according to our requirements, functionality or any special requirements, with an alternative offer where the supplier deliberately deviates from specification on one or more points may be considered if the solution offered meets the same functionality specified in article 4.1

## **2.13 Validity of offer**

Offers should be valid for a minimum of 60 calendar days after the closing date for submission of tenders.

## **2.14 Withdrawal of tender and/or changes**

Submitted tenders may be withdrawn or changed until the submission deadline. Withdrawal of tenders should go through the Merzell Purchasing Tool (KGV). Changes in the tender will be considered to be a new offer.

### 3 QUALIFICATION REQUIREMENTS

The separate points in the qualification requirements in the suppliers start menu is answered in the following way:

- Choose "Ja" from the drawdown menu to the question: Er du kvalifisert? (Are you qualified?)
- Attach necessary documentation to the qualification requirements.
- Eventually give your comments to the requirements and answers in the writing area to the left.

#### 3.1 Vendor's organisational and juridical position

Requirements - examples	Documentation requirements - examples
The vendor shall be a legally established business enterprise.	<ul style="list-style-type: none"> <li>• Norwegian firms: Company registration certificate.</li> <li>• Foreign enterprises: Official documentation that the company is formally registered in the relevant business directory or formal registry of business enterprises in the country in which it is established.</li> </ul>

#### 3.2 Mandatory requirements

Requirement	Required documentation
The vendor should be current and up to date in the payment of income tax and value added tax.	Value added tax certificate issued by the Department of revenue, not more than six months old. <ul style="list-style-type: none"> <li>• Further information is to be found at: <a href="http://www.skatteetaten.no">www.skatteetaten.no</a></li> <li>• The certificate may be requested from Altinn <a href="http://www.altinn.no">www.altinn.no</a> og and cannot be dated more than six months before the deadline in this documents article 1.9.</li> </ul>
Ethical statement for suppliers to the royal Norwegian Ministry of Defence	A template for the statement are provided with the tender document. The statement must be printed, signed and scanned.

Foreign vendors should provide certificates of compliance issued by the relevant authorities in their own countries.

#### 3.3 Vendor's economic and financial position

Requirements - examples	Documentation requirements - examples
The vendor shall have the economic capacity to deliver/carry out the contract.	<ul style="list-style-type: none"> <li>• Credit check/rating within 6 months based on the last publicly available accounting figures. Credit rating to have been assessed by a publicly approved credit rating institution. The rating should be creditworthy or higher.</li> </ul>

If there are legitimate reasons that prevent the vendor from providing the specific documentation the customer requests, the vendor may provide other supporting documentation acceptable to the customer which proves his economic and financial position.

### 3.4 Vendor's technical and professional qualifications

Requirement	Documentation requirement
The vendor should be experienced in the relevant line of work and should have successfully executed similar contracts on earlier occasions	A list of references for 3 comparable system delivered within the last 3 years. The list shall include the time the system was delivered and contact name and telephone of a reference person in the firm commissioning the contract and to whom the delivery was made. If such information cannot be disclosed, please provide as much information as possible and FFI will assess whether the information is sufficient. The references will be contacted if needed.
The vendor should have a functional support and service organization and service policy	A description of the Tenders support- and service organization and support policy.

## 4 SPECIFICATION OF REQUIREMENTS AND ASSIGNMENT CRITERIA

### 4.1 Specification of technical requirements

The kit will be used as a learning by doing project to identify areas in which FFI need to develop knowledge and expertise as well as identifying which internal resources that can contribute in the development and building of a satellite in the future. FFI has multiple payload types to be integrated as test scenarios.

The tender can suggest a suitable combination of structure, sub-systems, batteries, antennas, tools and software required for a complete, stand-alone, functional satellite platform for test purposes. Space qualified, or radiation hardened, components or sub-systems are not required. There are no limits on the size of the structure, but information regarding the launch vehicle interface is required.

The tender is open to suggestions for optional extras such as:

- Solar cells
- More powerful payload computer suitable for on-board processing of large data sets (if applicable)
- Spare sub-systems for development
- Support (if not included with main procurement)
- Training
- Reaction wheels
- Coarse attitude sensors (e.g. magnetometer, sun/horizon sensors, if not included)
- High performance attitude sensor (e.g. fine sun sensor, star tracker).
- Transmit and/or receive antennas (everything from UHF to W band is of interest).
- Wideband software defined radio receiver
- Propulsion devices
- Software packages (e.g. attitude determination and control simulation and algorithms, power simulator, thermal simulator, command and data handling etc.)
- Flight versions of sub-systems, batteries, structure etc. offered in the training kit (if applicable)

***Delivery conditions: DAP, FFI, Kjeller Norway with ref to Incoterms 2010.***

***FFI reserves the right to both accept and deny offers that deviate from the technical requirements.***

### 4.2 General Purchase Conditions

General Purchase Conditions, Form 5052 (March 2008), of The Armed Forces of Norway will be applied in this competition.

### 4.3 Technical specification and documentation

The tender must include a description of the items offered in terms of capabilities, space heritage, and accompanying documentation level (interface control document, drawings, CAD models etc), including a unit cost breakdown.

#### **4.4 Prices**

Prices should be given in accordance with requirements in section 4.1, i.e. broken down per unit cost and per total satellite kit and per optional extras. The prices shall be fixed for 60 days from the tender due date and not subject to changes due to later currency amendments in that period.

#### **4.5 Delivery time**

For a maximum delivery time score, delivery after 3 months of contract award is required. Delivery after 3 months, but before end of November 2016 will be awarded 50% of the delivery time score. Deliveries after November 2016 will be awarded with 0% of the delivery time score. Offers with delivery dates after December 2016 will not be considered.

Delivery times given must include time spent for processing of export licenses or similar if such licenses are required.

Any license applications or equivalent is the vendor's responsibility. FFI will send signed documents, without delay, to the vendor if this is requested for submitting the applications..

#### **4.6 Assignment criteria**

FFI will award the contract to the tenderer who submits the most advantageous tender based on the following criteria set up in priority:

- Technical specifications and documentation – 50 %
- Cost of procurement – 30 %
- Delivery time – 20 %

## **5 PROCESSING OF SUBMITTED TENDERS**

### **5.1 Registration of tenders**

All incoming tenders are registered in the Mercell Purchasing Tool (KGV).

FFI reserves the right to request additional information from tenderers that it considers of interest on the basis of the offers presented. FFI also reserves the right to adjust or modify recommended solutions, as well as to accept any offer, in whole or in part, or to reject all of the submitted bids.

Tenderers of rejected bids will receive written notification thereof.

### **5.2 Opening of tenders**

The opening of tenders will not be public.

### **5.3 Rejection of tenderers**

Tenderers who fail to submit income tax statements and workplace health and safety statements by the closing date of the invitation to tender will be rejected, likewise tenderers who do not fulfil the established and announced qualification requirements.

Furthermore, the customer may refuse tenderers for other reasons, cf. FOA § 11-10 (Regulations Governing Public Procurement), or for grounds and procedures that fall under Part I and Part II of the above-mentioned Regulations, such as:

- bankruptcy, if the company is in receivership or in the process of liquidation, suspension of business operations or in the process thereof according to national laws and regulations;
- petitioning for bankruptcy, initiation of debt settlement procedures or compulsory dissolution of the enterprise according to national laws and regulations;
- the company has, by legally enforceable judgment, been found guilty of unlawful conditions with respect to its professional conduct;
- the company has breached professional and ethical norms in its branch of operations;
- failure to pay social security insurance in the company's country of establishment or in Norway;
- failure to pay taxes and public duties according to the statutes of law in the country in which the company is established or in Norway;
- grossly misleading or falsification of information and/or withholding of information mentioned herein; likewise falsification/withholding of information with respect to the customer's stated requirements for suppliers.

### **5.4 Rejection of tenders**

A tender will be rejected if:

- a). the tender is not submitted by deadline;
- b). the tender submitted is not in accordance with the invitation to tender;
- c). the tender takes the form of an alternative offer not in keeping with the tender document;
- d). the tender contains provisos and exceptions to tender document stipulations on:

- the conditions of contract;
- specification of requirements;
- partial offers;
- time duration of offer's validity;
- withdrawal or alteration of offer.

A bid may be refused if:

- a). the bid does not contain all requested information;
- b). the bid does not give a price as assumed in the tender document;
- c). the bid seems abnormally low in relation to the service being offered;
- d). the bid is not signed.

Before an offer is rejected because it seems abnormally low, the customer shall make written request for relevant information about individual components of the bid and check this against the presentation that has been given. The customer may consider factual explanations such as savings in production costs, technical solutions, or unusually favourable conditions made possible by new development.

## **6 DECISION ON AWARDING OF CONTRACT**

### **6.1 Cancellation of the invitation for tenders and rejection of all bids**

The customer may cancel the invitation for tenders or, if there are legitimate grounds, reject all bids.

### **6.2 Information and basis for award of contract**

All tenderers will be notified in writing of the customer's decision on the recipient of the contract and in good time before the contract is formally entered into and signed. The term "contract is entered into", means the point in time that both parties sign the contract.

The final date for lodging a complaint is ten calendar days after notification of the award of the contract. Upon the elapse of this deadline, the intent of the customer is to enter into and sign the contract.