



IAEA

Atoms For Peace

الوكالة الدولية للطاقة الذرية

国际原子能机构

International Atomic Energy Agency

Agence internationale de l'énergie atomique

Международное агентство по атомной энергии

Organismo Internacional de Energia Atómica

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In reply please refer to: RC-17116-R1

Dear Mr Svoboda,

2013-12-15

Renewal of Research Contract No. 17116/R0

Reference is made to Research Contract No. 17116/R0 between the IAEA and the Faculty of Nuclear Science and Physical Engineering (FNSPE) which entered into force on 08 October 2012.

The IAEA desires to renew the Contract No. 17116/R0 for the period 10 December 2013 to 09 December 2014 with the following modifications:

1. Programme of Work

1. Further investigation of RF pre-ionisation on GOLEM tokamak (tests of low-power ECR pre-ionization for plasma formation on GOLEM tokamak): optimisation of the use of high temperature superconductor (HTS) poloidal field coils on GOLEM requires modifications to the discharge scenario. To reduce AC losses during current ramp-up in HTS coils, reduction in the current ramp-up speed is needed, as this will result in a slower ramp-up of the current in coils. One of possible solutions may be reduction in the loop voltage needed for the plasma breakdown. It is well known that RF pre-ionisation is a powerful tool to achieve this goal. We propose to continue with experiments with the low-power magnetron at the EC fundamental harmonics for the toroidal field of 0.0875 T at 2.45GHz, ~1kW injected power with the aim to reduce requirements for the breakdown electric field.

2. The GOLEM tokamak has showed it's unique qualification to study MHD phenomena and plasma flow in the plasma edge, we plan to contribute to the development of these novel diagnostic techniques.

3. There is planned a second campaign to provide experimental data for the development of a new concept of advanced magnets in fusion devices, based on High Temperature Superconductors with a special focus on using poloidal field coils in realtime mode for the plasma stabilization.

4. Training of students via participation in operations of the GOLEM tokamak, participation in IAEA Joint experiments and other education activities. The work on fusion-oriented experiments requires a sufficient amount of expertise. Small tokamaks are the most suitable devices for practical training of young scientists, who just start their carrier in fusion-oriented research, because they offer more opportunities to be acquainted with all aspects of the experimental work than possible on large and quite complex machines.

2. IAEA's Contribution

The IAEA shall pay a sum not exceeding €5 000 (Five Thousand).

3. IAEA Financial Obligations

The financial contribution from the IAEA pursuant to Clause 2 ("IAEA Contribution") of this Renewal shall be paid to the Contractor in two installments as follows:

(i) An initial payment equivalent to €2 500 (Two Thousand Five Hundred) shall be paid within one (1) month from the entry into force of this Contract.

(ii) A final payment equivalent to €2 500 (Two Thousand Five Hundred) shall be paid upon the completion of the Research Project and on the certification by the appropriate officer of the IAEA for the Research Project that the reports required under Article 3("Reporting") of this Contract have been received in due time and accepted by the IAEA.

If, under this Contract, the Contractor requests partial or total payment by the IAEA to a third party, this shall be specified in Annex B "Bank Information Form", which shall be signed by the duly authorized representative of the Contractor and by the third party receiving payment on behalf of the Contractor.

Any payment to a third party named as Payee in Annex B "Bank Information Form" shall constitute a settlement of the financial obligations of the IAEA to the Contractor under this Contract.

The Parties may provide through an exchange of letters made pursuant to this Contract that a part or parts of the payment to be made by the IAEA under this Contract shall be used for a particular purpose. In that case, the part or parts of the payment shall be used only for the prescribed purpose.

With reference to Clause 3 ("IAEA's Financial Obligations") of this renewal of Contract, I should like to add that it is the policy of the IAEA to make payments by bank transfer in favor of the contracting Institute.

Subject to the above modifications, all the other terms and conditions of the Research Contract No. 17116/R0 shall remain valid.

If the above amendments are satisfactory, please have the renewal of the contract signed by the authorized person and return it to the IAEA Research Contracts Administration Section within 60 days or the offer of the renewal of contract may be withdrawn.

Mr Kamendje, Richard of the Physics Section has been named Project Officer for this contract.

For the IAEA:



Ms Nathalie COLINET
Head, Research Contracts Administration Section
Dept. of Nuclear Sciences & Applications

Date

For the Contractor:



Miroslav Cech - dean of FNSPE

Date

18 -12- 2013



Annex A - Preparation of Reports

Progress Reports

The Progress Reports shall cover the period since the Research Project commencement or the date of last Progress Report, as appropriate.

Final Report

The Final Report shall be comprehensive in nature and should cover the entire period of the Research Project.

1. The Progress and Final Reports should contain the following information:

a. (i) the Contract Number; (ii) the Title of the Research Project; (iii) the Institute where the research is being carried-out; (iv) the Chief Scientific Investigator; and (v) the period covered;

b. a description of the research carried-out;

c. the results obtained;

d. the conclusions drawn;

e. (i) Citation of periodicals reporting the work performed under this Contract, providing information concerning the author(s), title, journal, volume and page number(s); and (ii) Other relevant literature references; and

f. an explanation of any significant departure from the level of activity stipulated by this Contract.

2. Items b, c, and d above should be reported in sufficient detail as to permit a technical evaluation of the work performed.

3. The Final Report should be accompanied by a summary of some 300 to 500 words which describes in brief form the experimental method, the results (including any necessary tables or charts), and the conclusions drawn. This summary should give references to papers published on work performed under this Contract and shall be prepared in the following format:

a) Title; b) Research Institute; c) Chief Scientific Investigator; d) Period of Contract; e) Scientific Background and Scope of Project; f) Experimental Method; g) Results Obtained; h) Conclusions; and i) Papers Published on the Work Performed under this Contract.

4. If the Contractor either publishes the results of research under this Contract in a recognized journal, or presents such results in the form of a paper to a recognized scientific gathering, copies of the relevant reprint, preprint or manuscript may be accepted in lieu of the corresponding parts of a Progress Report or Final Report, as applicable, provided that the information is sufficiently complete.

Annex B - Bank Information Form

The payee is responsible for the accuracy and completeness of the data entered in this form. The IAEA is not responsible for any delay in payments resulting from incorrectly supplied banking information. Bank charges resulting from incorrectly supplied information may be deducted from any subsequent payment. Processing this form after receipt by the IAEA will take some time, so please allow time for this form to be processed.

Only one bank account per currency will be accepted.

Please complete electronically where possible, if completed by hand please use **BLOCK CAPITALS**.

(Turn over the form for the instructions on the correct completion of this form)

Is this form for: A new account for this payee
 A replacement for an account already existing on the IAEA system

¹Payee Type (please mark only one of the two types)	<input type="radio"/> A Person (An individual) <input checked="" type="radio"/> Organization (Enterprise or Trading partner of the IAEA)		
²Personal Information (only if the payee type is a person)	Family Name	First Name	Middle Name
³Organization Name (only if the payee type is an organization)			
⁴Person/Organization Address (as held by the bank)	Address		
	City		
	Postcode/ZIP		
	Country		
⁵E-mail for remittance advice			
⁶Bank Name			
⁷Branch Name			
⁸Branch Number			
⁹Branch Address	Address		
	City		
	Postcode/ZIP		
	Country		
¹⁰SWIFT/BIC			
¹¹Account Number			
¹²IBAN			
¹³Bank Account Name			
¹⁴Account Type	<input checked="" type="checkbox"/> Checking	<input type="checkbox"/> Savings	<input type="checkbox"/> Other <input type="checkbox"/> Unknown
¹⁵Bank Account Currency			
¹⁶ABA/BSB/ACH (non IBAN countries)			
¹⁷Bank Code			
¹⁸Intermediary Bank Name			
¹⁹Intermediary Branch Number			
²⁰Intermediary Branch Address	Address		
	City		
	Postcode/ZIP		
	Country		
²¹Intermediary Account Number			
²²Intermediary SWIFT/BIC or Bank Code			

I/we, as the Contractor of this Contract, hereby certify that the Payee information provided above is accurate and payments under this Contract should be made to the above named Payee by the IAEA in the fulfillment of its obligations herein.

Head of Institution Name:

Date: _____ Signature _____

I/we, as the above mentioned Payee, accept payment under this Contract on behalf of the Contractor.

Account Holder Name:

Date: _____ Signature _____

<i>(For IAEA Use only)</i>	
AIPS Supplier Number	34768
IAEA Reference Number	17116/R1

Detailed information on entering details into the Bank Information form

Please look at each section and complete where appropriate, not every field needs to be entered for every type of bank account, if you are uncertain about how to complete this form please e-mail your IAEA contact for guidance.

This form is to allow you to enter bank account information for any part of the world, please read **all** sections carefully.

- ¹Payee Type: Enter details for either the Person or the Organization, **never** both on the same form.
- ²Personal Information: Please enter the full details of the payee, note for the Person the Family Name is first.
- ³Organization Name: The full legal name of the Organization.
- ⁴Person/Organization Address:
The address for the Person/Organization as held by the bank. This **must** include the City and Country.
- ⁵E-mail address for remittance advice:
E-mail address to which information on payment will be sent.
- ⁶Bank Name: Registered bank name as communicated to you by the bank.
- ⁷Branch Name: This can be obtained from your bank branch.
- ⁸Branch Number: This can be obtained from your bank branch.
- ⁹Branch Address: The full postal address. This must include the City and Country.
- ¹⁰SWIFT: This is 11 alpha-numeric characters for the bank branch. In case of non-participants of SWIFT, the national bank code is needed. There are different formats used around the world with different names, e.g., BSB (Australia, 5 Characters), Transit No (Canada, 9 Characters) etc.
- BIC: Similar to the SWIFT, it may contain 8 or 11 alpha-numeric characters (where the final 3 characters are the branch indicators which are not mandatory). BIC can be usually found on a bank statement.
- ¹¹Account Number: The account number for the account.
- ¹²IBAN: It has different structures according to the national rules of the country, but it always begins with two letters to represent the country and two additional numbers. This is followed by the bank code and account number.
- ¹³Bank Account Name: The exact name of the bank account as held by the bank. This can be found on a bank statement for this account.
- ¹⁴Bank Account Type: Please indicate where applicable, this can be obtained from your bank branch.
- ¹⁵Account. Currency: Indicate the currency here if your bank account only accepts payments in one currency. This will usually be if you have a bank account that has a different currency from the currency of the country, where the account is held, e.g. a USD account in country that uses Euros as its base currency.
- Current IBAN Countries: Albania, Andorra, Austria, Republic of Azerbaijan, Bahrain, Belgium, Bosnia & Herzegovina, Bulgaria, Costa Rica, Croatia, Cyprus, Czech Republic, Denmark, Dominican Republic, Estonia, Finland, Faeroe Islands, France, Georgia, Germany, Gibraltar, Greece, Greenland, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kuwait, Latvia, Lebanon, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, Mauritius, Mauritania, Republic of Moldova, Monaco, Montenegro, Netherlands, Norway, Pakistan, State of Palestine, Poland, Portugal, Romania, San Marino, Saudi Arabia, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Tunisia, Turkey, United Arab Emirates, United Kingdom and Virgin Islands.
- ¹⁶ABA/BSB/ACH (non IBAN countries):
ABA - American Banking Association
ACH - Automated Clearing House (also called "Direct Deposit"), which is 9 digits long and unique for each branch of bank, which is an ACH participant.
BSB stands for Bank State Branch and used in Australia and New Zealand which is 5 Characters long.
Transit Number in Canada which is 9 Characters long.
- ¹⁷Bank Code: In case of non-participants of SWIFT, the national bank code is needed.

Intermediary Bank:

Some banks can receive fund transfers only through a third bank, also called intermediary or pay through bank.

- ¹⁸Intermediary Bank Name: *Full name as communicated to you by the bank.*
- ¹⁹Intermediary Branch Number: *As communicated to you by the bank.*
- ²⁰Intermediary Bank Address: *The full postal address, this must include the City and Country.*
- ²¹Intermediary Account: *This is the account number of the payee's bank with the intermediary bank.*
- ²²Intermediary SWIFT or Bank Code: *This is 11 alpha-numeric characters for the bank branch. In case of non-participants of SWIFT, the national bank code is needed. There are different formats used around the world with different names, e.g., BSB (Australia, 5 Characters), Transit No (Canada, 9 Characters) etc.*

Annex C - Research Institutes' Trust Fund (RITF)

The operation of the trust fund will be governed by the IAEA's Financial Regulations and Rules as well as supplementary criteria as specified below.

1. A separate account will be maintained for investment purposes, to keep funds not immediately needed. This account will be kept under the title "Research Institutes Trust Fund (RITF)".
2. The money transferred to the trust fund will be kept for the purchase of equipment and supplies upon request by the participating research institutes. The IAEA will not purchase items which it determines as being not related to the research work in question.
3. Net interest income derived from the unused portion of the trust fund will be credited to the IAEA in lieu of an administrative charge to cover the cost of providing the service.
4. A reserve account will be established within the trust fund to take small overruns and underruns resulting from the purchase of equipment and supplies (current limit set at €150 or less), and to absorb other charges or credits not attributable to individual research contracts.
5. Allotments will be issued in Euros for each contract separately, to protect the trust fund from overruns other than those mentioned in paragraph 4 above.
6. Underruns or savings exceeding the limit mentioned in paragraph 4 will be returned to the research institutes in question upon completion of the related research contract, submission of all reports and positive assessment of the reports by the IAEA project officer.
7. Financial statements in the form of status reports, by contract, will be prepared at least twice a year. Upon request by the research institute concerned, individual reports will be prepared by the IAEA's Secretariat. Upon request by the research institute concerned, a status report on the respective trust fund will be prepared by the IAEA's Secretariat.
8. The trust fund will be included in the IAEA's accounts document in a separate set of statements.
9. In case of a liquidation of the trust fund, the remaining assets will be returned to the research institute concerned, after settlement of all liabilities of the trust fund.