MINISTRY OF DEFENCE

Contract No. DSTLX1000093220 (to be quoted on all correspondence)

Contractor's Address:

Research Operations Team The University of Manchester Christie Building, Oxford Road Manchester M13 9PL





SCHEDULE OF REQUIREMENTS For Centre for Defence Enterprise

CDE 36973 - Research and Development into 3D Inkjet Printed Micro Li Ion Batteries

Item No	Description	Firm Price (excluding VAT)
1	CDE 36973 – Research and Development into 3D Inkjet Printed Micro Li Ion Batteries in accordance with Condition 2 of the Contract terms and conditions.	£76,614.40

CONDITIONS OF CONTRACT

The Contract is subject to the terms and conditions detailed overleaf

1. GENERAL CONDITIONS

The DEFCONs applicable to this Contract are as detailed at Annex A.

2. PERFORMANCE

All work under the contract shall be carried out in accordance with the Contractor's proposal reference CDE 36973 dated 27 August 2014 as expanded by e-mail dated 04 November 2014. The acceptance of work compliant with the Contract requirements will be undertaken by the Dstl Project Manager (see Box 2 of the Appendix to Contract – DEFFORM 111).

3. PRICE

The price payable under the Contract for all work performed under Item No 1 shall be as shown in the Schedule of Requirements and shall be Firm (non-variable).

4. DURATION

With Work Commencing on 01 January 2015, all work under the Contract shall be completed by 30 June 2015.

5. PAYMENT

5.1 Payment shall be made upon satisfactory completion of the Contract

Invoices shall be submitted as follows:

All invoices must quote the Purchase Order Number and be sent to:

Dstl Ledgers Processing Team, PO Box 325, Portsdown West, Portsdown Hill Road, FAREHAM, HANTS PO14 9HL, United Kingdom Tel: 023 9253 2444 Fax: 023 9253 2043

To ensure prompt payment, the Contractor shall issue a copy of the invoice (clearly marked "COPY, NOT FOR PAYMENT") to the Project Management Branch (Box 2 of

the Appendix to Contract) at the same time as the original invoice is submitted to Bill Paying Branch.

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Only one invoice is to be submitted. The Contract Number should be prominently shown on all invoices. Any incorrect or incomplete invoices will be rejected.

- 5.2 All requests for Payment shall be submitted using a Commercial/Company Invoice to the Authority's Bill Paying Branch as set out in the Appendix to Contract. A copy, such as a photocopy or fax, is not acceptable.
- 5.3 The Authority shall pay all valid, properly completed claims for payment within 30 days of receipt in its Bill Paying Branch. Claims for payment must include the Contract number. Only one invoice is to be submitted per Milestone.
- 5.4 Notwithstanding any statement to the contrary on the Contractors Commercial Invoice, payment shall not be construed as acceptance by the Authority of the satisfactory performance of the Contractor's obligations nor as a waiver of its rights and remedies either under the Contract or otherwise.

- 5.5 Where the Authority is responsible for arranging all or any part of the transportation of Articles to be supplied under the Contract the Authority shall be deemed not to have received the Relevant Form until either:
 - a. the consignee has physically received the Articles; or
 - b. 5 days after the Articles are ready for collection as notified to the Authority's Transport Office.

whichever occurs first. Wherever possible, the Contractor shall inform the Authority's Transport Office at least 2 days in advance of the date upon which the Articles shall be ready for collection.

5.6 Where and to the extent that the debt would otherwise be a "qualifying debt" under the Late Payment of Commercial Debts (Interest) Act 1998 ("the Act") "qualifying contractors" may claim simple interest at the prevailing rate of statutory interest (as defined in the Act) as a contractual remedy. No interest shall be payable for any period of delay attributable to the conduct of the Contractor. All claims for interest made pursuant to this Condition shall be notified in writing to the Commercial Services Department shown in the Appendix to Contract.

6. TECHNICAL PUBLICATIONS

- 6.1 The Contractor shall ensure that the Authority has the right to copy, amend, extend or have copied, amended or extended any technical publication delivered under the Contract or any part thereof including any such part when incorporated in any amended or extended version of such technical publication, and to circulate, use or have used said technical publication including any amended or extended version and any copies thereof for any United Kingdom Government purpose but not for the purpose of manufacturing equipment to which the technical publication relates.
- 6.2 For the avoidance of doubt, the term "technical publication" in this context means equipment support publications such as handbooks, user guides, user manuals, repair and maintenance manuals and the like.

7. PROGRESS MEETINGS, PRESENTATIONS AND REPORTS

The requirements are set out in Annex B.

8. DOCUMENTS, DRAWINGS AND INFORMATION

- 8.1 All documents and drawings in whatever medium, delivered in accordance with the Contract shall become the property of the Authority. The terms of use of those documents and drawings are set out in DEFCON 705.
- 8.2 The Contractor shall complete and deliver all documentation, including forms, etc., in accordance with the date specified for completion of those events. The comments of the Authority on any documentation prepared by the Contractor, or his sub-contractor(s) shall not relieve the Contractor of his responsibilities under the Contract nor shall they be interpreted as "Approval".

9. SUB-CONTRACTS

The Contractor shall not place any sub-contract or order involving the creation of Foreground Technical Information and Foreground IPR (as defined in DEFCON 705) under the

Contract without the prior approval of the Commercial Officer (see Box 1 of Appendix to Contract) or his authorised representative, except as provided in Clause 4 of DEFCON 705. The Contractor shall not enter into any commitment in relation to that work until the proposed sub-contractor has entered into a Sub-Contract Agreement with the Authority in the form set out in Annex C, where so required by the provisions of Clause 4 of DEFCON 705.

Wherever possible the request for approval should be accompanied by two copies of the Agreement signed by the sub-contractor. If in any circumstances, the Contractor is unable to comply with this Condition he shall report the matter to the Contracts Branch and await further instruction before placing the sub-contract or order.

For avoidance of doubt, the Agreement will be required only when a sub-contractor is to retain ownership of the IP generated under the sub-contract. It will not be required where the Contractor will acquire <u>sole</u> ownership of the IP generated under the sub-contract. The Authority does not wish to mandate the ownership of IP between the parties to a subcontract.

10. RESEARCH DOCUMENT MARKINGS

In accordance with DEFCON 705 clause 17, the Contractor shall mark each contract deliverable in such a manner that the ownership of the Intellectual Property Rights and the rights of the Authority under DEFCON 705 are clearly stated. To effect this, the Contractor shall use the document marking scheme attached at Annex D hereto.

11. CONTRACT DELIVERABLES

The Contractor shall detail all Contract deliverables at Annex E. Where the Contractor and the Authority have agreed that limited rights should apply to any deliverable then both the "Full Rights" and the "Limited Rights" versions of the deliverable, as required by DEFCON 705, Clause 9, shall be included within Annex E.

12. ISSUED PROPERTY

12.1 In accordance with the provisions of DEFCON 611 the following items of Government Furnished Assets (GFA) shall be issued to the Contractor in support of the Contract:

Government Furnished Equipment (GFE)

- 12.2 It may be necessary for the Authority to issue to the Contractor an amount of Government Furnished Equipment (GFE) in support of the work to be performed under the Contract. The scope and scale of such issue shall be determined by the Project Management Branch (Box 2 of Appendix to Contract) prior to issue during the period of the Contract.
- 12.3 All GFE shall be issued on loan for the period of the Contract and shall be used solely for the execution of the Contract.
- 12.4 All GFE shall be returned to the Authority on completion of the Contract.

No GFE to be issued under this Contract.

Government Furnished Information (GFI)

12.5 It may be necessary for the Authority to issue to the Contractor an amount of Government Furnished Information (GFI) in support of the work to be performed under the Contract. The scope and scale of such issue shall be determined by the Project

Management Branch (Box 2 of Appendix to Contract) prior to issue during the period of the Contract.

- 12.6 Such GFI may be either Authority owned information or Third Party owned information and is provided to the Contractor only to facilitate performance of the Contract. Intellectual Property Rights (IPR) protects all GFI and the Contractor's obligation to protect the issued GFI is covered by DEFCON 531.
- 12.7 All GFI shall be issued on loan for the period of the Contract and shall be used solely for the execution of the Contract.
- 12.8 All GFI shall be returned to the Authority on completion of the Contract.

No GFI to be issued under this Contract.

Government Furnished Facilities (GFF)

- 12.9 The provision of the Authority's facilities may be necessary when there is no commercial alternative, when suitable facilities are not available within the necessary timescale, or when the cost of providing equivalent facilities is disproportionate to the value of the contract.
- 12.10 Facilities can range from office accommodation, telephone, computer and so on at a Government Establishment to the use of a Government owned facility.
- 12.11 Government owned facilities directly contracted for (where the Crown is a sub-contractor) or provided on repayment terms fall outside the scope of this guidance.
- 12.12 The following items of GFF have been/will be issued to the Contractor: (delete as appropriate)

No GFF to be issued under this Contract.

Government Furnished Resources (GFR)

- 12.13 Resources are normally taken to mean the allocation of military or Government personnel to carry out trials or tests.
- 12.14 The following items of GFR have been/will be issued to the Contractor: (as appropriate)

No GFR to be issued under this Contract.

13. QUALITY REQUIREMENTS

The Contractor shall be responsible for the Quality Control and Quality Assurance of all work carried out on the Contract. The necessary control shall be exercised by the Contractor's own Quality organisation to the satisfaction of the Authority.

14. ETHICAL REVIEW

It shall be a condition of the contract that as certain work must be justified ethically as well as scientifically that the Authority reserves the right to terminate any contract with immediate effect any work which requires mandatory ethical approval to proceed where such approval is not given by the relevant review body.

15. RESEARCH WORKERS

15.1 The contract is placed on the understanding that the following Research Worker(s) have been accepted to work on this Contract:

[REDACTED]

- 15.2 Subject to the Contractor's disciplinary procedures, all reasonable steps shall be taken to avoid changes of personnel assigned to, and accepted for work, under the Contract. However, if circumstances require a change of personnel clauses 15.3 and 15.4 shall apply.
- 15.3 Should it be necessary to change personnel assigned to, and accepted for the work, under the Contract the Contractor shall notify the Authority, in writing, prior to the personnel starting work on the Contract. A Dstl Form 388 Personal Particulars Research Workers shall be completed for each additional person and sent to the relevant Commercial Services Department (Box 1 of Appendix to Contract). The appropriate Dstl and MOD security procedures shall need to have been completed to the satisfaction of the Authority before any additional Contractor's Personnel may start work on this Contract.
- 15.4 All Research Workers employed in support of the Contract shall have appropriate qualifications and competence in accordance with the Contractor's recruitment procedures and be in all respects acceptable to the Authority.
- 15.5 The Authority reserves the right to veto the engagement of any proposed Research Worker. The decision of the Authority on the acceptance of Research Workers in support of the Contract shall be final.

DEFFORM 111

Appendix - Addresses and Other Information Box 1 Box 2 Name [REDACTED] Name [REDACTED] Commercial Officer Dstl Porton Down. Dstl Porton Down Salisbury. Salisbury SP4 0JQ Wiltshire SP4 0JQ Tel: [REDACTED] Tel: [REDACTED] Email: [REDACTED] @dstl.gov.uk Fax: 01980 65 8400 e-mail: [REDACTED] @dstl.gov.uk Box 3 Box 4 Drawings/Specifications are available from: Quality Assurance Authority: See box 2 Chief Executive, Dstl, or his duly authorised representative (see box 2). All Quality Assurance requirements should be listed in the Specification. AQAPS and DEF STANs are available from Stan 1, Kentigern House, 65 Brown Street, Glasgow, G2 8EX. A self addressed label should be sent with each application. Website is: https://www.dstan.mod.uk Box 5 Box 6 Consignment Instructions: Bill Paying Branch: N/A The Contract Number must be shown on all invoices **Dstl Accounts Payable** PO Box 325 Portsdown West, Portsdown Hill Road FAREHAM, HAMPSHIRE, PO14 9HL United Kingdom Tel: 023 9253 2444 Fax: 023 9253 2043 Invoices for payment may be submitted via e-mail in PDF format to accountspayable@dstl.gov.uk Box 7 Box 8 **Public Accounting Authority** Notes: For Government Furnished Assets issued or to The DEFCONs are available on the Internet at: be held by the Contractor shall be the DSTL https://www.aof.mod.uk/aofcontent/tactical/toolkit/ Demand Owner at Box 2 index.htm Where contract is with an overseas contractor RP (FIN) VAT Guidance Note No 3 should be consulted.

The following DEFCONs shall apply to the Contract:

DEFCON 608 (Edn 10/14)

DEFCON 23 (Edn 08/09) Special Jigs, Tooling and Test Equipment DEFCON 68 (Edn 11/14) Supply of Data for Hazardous Articles, Materials and Substances DEFCON 76 (Edn 12/06) Contractor's Personnel at Government Establishments DEFCON 92 (Edn 08/90) Failure of Performance DEFCON 127 (Edn 10/04) Price Fixing Condition for Contracts of Lesser Value DEFCON 501 (Edn11/14) **Definitions and Interpretations Specifications** DEFCON 502 (Edn 06/14) DEFCON 503 (Edn 06/14) Amendments to Contract DEFCON 507 (Edn 10/98) Delivery DEFCON 509 (Edn 09/97) Recovery of Sums Due DEFCON 513 (Edn 06/10) Value Added Tax DEFCON 515 (Edn 10/04) Bankruptcy and Insolvency DEFCON 516 (Edn 04/12) Equality DEFCON 518 (Edn 09/97) Transfer DEFCON 520 (Edn 08/09) Corrupt Gifts and Payments of Commission DEFCON 521 (Edn 10/04) Subcontracting to Supported Businesses Payment of Bills Using the Bankers Automated Clearing DEFCON 523 (Edn 03/99) Services (BACS) System DEFCON 524 (Edn 10/98) Rejection DEFCON 525 (Edn 10/98) Acceptance DEFCON 526 (Edn 08/02) **Notices** DEFCON 527 (Edn 09/97) Waiver DEFCON 529 (Edn 09/97) Law (English) DEFCON 530 (Edn 07/04) Dispute Resolution (English Law) DEFCON 531 (Edn 11/14) Disclosure of Information DEFCON 532A (Edn 06/10) Protection of Personal Data (Where Personal Data is not being processed on behalf of the Authority) DEFCON 534 (Edn 06/97) Prompt Payment (Sub-Contracts) DEFCON 537 (Edn 06/02) Rights of Third Parties DEFCON 538 (Edn 06/02) Severability DEFCON 539 (Edn 08/13) Transparency DEFCON 550 (Edn 02/14) Child Labour and Employment DEFCON 566 (Edn 07/14) Change of Control of Contractor DEFCON 604 (Edn 06/14) **Progress Reports** DEFCON 607 (Edn 05/08) Radio Transmissions

Access and Facilities to be provided by the Contractor

DEFCON 609 (Edn 06/14) - Contractor's Records

DEFCON 611 (Edn 07/10) - Issued Property

DEFCON 619A (Edn 09/97) - Customs Duty Drawback

DEFCON 621B (Edn 10/04) - Transport (if the Contractor is responsible for transport)

DEFCON 632 (Edn 08/12) - Third Party Intellectual Property Rights - Commercial and Non-

Commercial Articles and Services

DEFCON 642 (Edn 06/14) - Progress Meetings

DEFCON 649 (Edn 07/99) - Vesting DEFCON 656 (Edn 03/06) - Break

DEFCON 670 (Edn 07/14) - Tax Compliance

DEFCON 694 (Edn 06/06) - Accounting for the Property of the Authority

DEFCON 705 (Edn 11/02) - Intellectual Property Rights – Research and Technology

Note: For the purposes of DEFCONs 76, 530, 531, 607, 621B, 632 and 705, Clause 6 of DEFCON 501 (Edn 04/04) shall not apply. The processes described and documents required by these conditions are to be conducted or transmitted manually (i.e. not electronically) or as otherwise detailed in the Contract.

PROGRESS MEETINGS, PRESENTATIONS AND REPORTS

- 1. The Contractor shall participate in Progress Review Meetings as appropriate, each timed to follow shortly after an "initial brief" see paragraph 3 below. These meetings will focus on technical progress against the aims of the work, exploitation opportunities and schedule/budget issues and can include appropriate presentations to meet this need. The meetings shall be held at mutually convenient dates and locations (usually the contractor's premises or the Dstl offices at locations to be agreed with the Project Manager), as indicated in the Contractor's Proposal. The Contractor shall be responsible for arranging the meetings, taking the minutes of the meetings and disseminating the agenda, minutes and any other associated documents to interested parties.
- 2. Review meetings will usually be attended by the Dstl Project Manager, key MoD technical staff and stakeholders and sometimes by an independent expert drawn from the DSAC Register of Independent Experts. Contractor's representatives with good knowledge of both project management and technical aspects of the work are expected to attend.
- 3. The Contractor shall provide to the Dstl a brief (typically not exceeding two pages) report summarising progress and issues on technical, schedule and budget axes as agreed.
- 4. At the end of the project a Final Report will be required with the following sections:
 - Executive Summary
 - <u>Defence and Technical Context</u> what area(s) of defence need/application the project is relevant to and a technical overview that places the technical work of the project in context
 - <u>Aims of the Project</u> A clear statement of the original aims of the project and/or revised aims as agreed with the DSTL Project Manager.
 - <u>Scientific and Technical Progress</u> a clear and succinct explanation of what has been achieved (including areas where the research did not meet the original aims) avoiding jargon and making use of diagrams, graphs and illustrations as appropriate
 - Exploitation for Defence a description of any opportunities, instances or plans for exploiting the work of the project into MoD and/or its supplier base
 - References and Publications any technical articles/papers or other publications produced in connection with the project
 - <u>Abstract</u> the Final Report shall be accompanied by a separate document **concisely** stating the purpose, methodology, results and conclusions presented in the original Final Report document. It should be kept to unclassified level if possible, avoid acronyms, and be not more than 200 words of commercially non-sensitive text. [for guidance The abstract is intended to help readers decide whether they wish to consult the original report, and to help searchers decide whether a report is likely to provide the answer to a technical enquiry].
- 5. For the avoidance of doubt, the "initial brief", the Final Report and the Abstract shall be subject to the provisions of DEFCON 705.

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DESIGN RIGHTS AND PATENTS (SUB-CONTRACTORS) AGREEMENT

THIS AGREEMENT is made the day of

BETWEEN [INSERT NAME OF SUBCONTRACTOR]

whose registered office is at:

(hereinafter called "the Sub-Contractor") of the one part and **THE SECRETARY OF STATE FOR DEFENCE** (hereinafter called "the Secretary of State") of the other part.

WHEREAS:-

- 1. The Secretary of State has placed with University of Manchester (hereinafter called "the main contractor") a contract bearing the reference number DSTLX1000093220 (hereinafter called "the main contract"), the effect of which is that the costs of the studies, etc (including the cost referable to any sub-contracts hereinafter referred to) will be substantially borne by the Secretary of State.
- 2. The main contractor contemplates that certain elements needed for the performance of the main contract will be undertaken by various third parties in pursuance of sub-contracts made between them and the main contractor.
- 3. With a view to securing to the Secretary of State rights as regards inventions, designs and other related matters in respect of any such sub-contract the main contract provides that the main contractor shall not enter into any sub-contract for any component aforesaid without obtaining the prior approval of the Secretary of State.
- 4. The main contractor has now informed the Secretary of State that for the purpose of performing the main contract he wishes to place with the Sub-Contractor a sub-contract for the supply of the items described in the First Schedule hereto (hereinafter called "the sub-contract items") and has requested the Secretary of State's approval of the sub-contract accordingly.
- 5. The Secretary of State has signified his willingness to approve the sub-contract on condition that in consideration of his giving approval the Sub-Contractor enters into a direct Agreement with the Secretary of State concerning the matters hereinafter appearing and the Sub-Contractor has signified his willingness to enter into such an agreement.

NOW THIS AGREEMENT made in consideration of the premises and of the rights and liabilities hereunder mutually granted and undertaken **WITNESSETH AND IT IS HEREBY AGREED AND DECLARED** as follows:-

- 1. The Sub-Contractor and the Secretary of State hereby agree to be mutually bound to each other by the provisions of the Conditions as set out in the Second Schedule hereto.
- 2. No extension, alteration or variation in the terms of the sub-contract between the main contractor and the Sub-Contractor and no other agreement between the main contractor and the Sub-Contractor relating to the work to be done under the sub-contract or any modification now or hereafter made thereto shall prejudice the operation of this Agreement which shall in all respects apply to the sub-contract as so extended, altered, varied supplemented or modified as if such extension, alteration, variation, supplementation or modification had been originally provided for in the sub-contract and the expression "the sub-contract items" shall have effect accordingly.

IN WITNESS whereof the parties hereto have set their hands the day and year first before written

Signed on behalf of the Sub-Contractor		
	(in capacity of)
Signed on behalf of The Secretary of State for Defence		

THE FIRST SCHEDULE

The Sub-Contract Items are:-

THE SECOND SCHEDULE

The Conditions which apply to this Agreement are:

INTELLECTUAL PROPERTY

DEFCON 531 (Edn 11/14) - Disclosure of Information

DEFCON 632 (Edn 08/12) - Third Party Intellectual Property Rights - Commercial and

Non-Commercial Articles and Services

DEFCON 705 (Edn 11/02) - Intellectual Property Rights – Research and Technology

Except that the aforementioned conditions are amended as follows:

i. Where "the Contractor" is stated "the Sub-Contractor" shall be substituted.

- ii. Where "the Authority" is stated "the Secretary of State" shall be substituted.
- iii. Where "Contract" is stated "Sub-Contract" shall be substituted.
- iv. Where "Sub-Contractor" is stated "further Sub-Contractor" shall be substituted.
- v. Where "Sub-Contract" is stated "further Sub-Contract" shall be substituted.

DOCUMENT MARKINGS OF CONTRACT DELIVERABLES TO MOD

DEFCON 705 – FULL RIGHTS VERSION

Full Rights Version		
Protective Marking		
Copyright © [insert Company name] [enter the year of production of the document]		
CONDITIONS OF SUPPLY – FULL RIGHTS		

This document is supplied in confidence to MOD in accordance with Contract No [insert MoD Contract No]. The document comprises information proprietary to [insert Company name - (See Note below)] and whose unauthorised disclosure would cause damage to the interests of [insert Company name - (See Note below)].

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Requests for permission for wider use or dissemination should be made to [insert appropriate Company details].

DEFCON 705 – LIMITED RIGHTS VERSION

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Note: If subcontractor information is included in reports subject to DEFCON 705 then, unless the IPR in that information is owned by the Prime Contractor, the text in brackets should be amended, in the first case, to refer to the subcontractor(s) by name in addition to the Prime Contractor and, in the second case, by referring to the companies concerned.

LIST OF CONTRACT DELIVERABLES

Item No	Description	Target Due <u>Date</u>	State whether Defcon 705 "Full Rights" or "Limited <u>Rights"</u> <u>deliverable</u> *
1	Report on ink compositions & printing conditions	31/03/15	Full Rights Deliverable
2	Final report on electrochemical performance of printed battery cell, proposal for Phase 2 activity with completion of all work under this contract.	30/06/15	Full Rights Deliverable

^{*}Note: Where a Defcon 705 "Limited Rights" deliverable has been agreed (e.g. due to drivers like proprietary IPR) then this must be accompanied by the equivalent "Full Rights" deliverable, as required by Defcon 705 Clause 9. **Both types of deliverable must be separately included in the above list.**