



Ministry
of Defence

**MOD Terms and Conditions for Contracting
for Innovation – Core Terms**

Advanced Vision for 2020 and Beyond

1 Definitions - In the Contract:

The Authority means the Secretary of State for Defence of the United Kingdom of Great Britain and Northern Ireland, (referred to in this document as "the Authority"), acting as part of the Crown;

Authority's Representative shall be those person(s) defined in Schedule 3 (Contract Data Sheet) who will act as the Authority's Representative(s) in connection with the Contract.

Business Day means 09:00 to 17:00 Monday to Friday, excluding public and statutory holidays;

Contract means the agreement concluded between the Authority and the Contractor, including all terms and conditions, , specifications, plans, drawings, schedules and other documentation, expressly made part of the agreement in accordance with Clause 2.b;

Contract Price means the amount set out in Schedule 2 (Schedule of Requirements) to be paid (inclusive of Packaging and exclusive of any applicable VAT) by the Authority to the Contractor, for the full and proper performance by the Contractor of its obligations under the Contract;

Contractor means the person, firm or company specified as such in the Contract;

Contractor Commercially Sensitive Information means the information listed as such in the Contract, which is information notified by the Contractor to the Authority, which is acknowledged by the Authority as being commercially sensitive;

Contractor Deliverables means the goods and / or services including packaging (and supplied in accordance with any QA requirements if specified) which the Contractor is required to provide under the Contract in accordance with the schedule of requirements.

Effective Date of Contract means the date stated on the Contract or, if there is no such date stated, the date upon which both Parties have signed the Contract;

Firm Price means a price excluding Value Added Tax (VAT) which is not subject to variation;

Legislation means in relation to the United Kingdom any Act of Parliament, any subordinate legislation within the meaning of section 21 of the Interpretation Act 1978, any exercise of Royal Prerogative or any enforceable community right within the meaning of Section 2 of the European Communities Act 1972;

Notices means all notices, orders, or other forms of communication required to be given in writing under or in connection with the Contract;

Parties means the Contractor and the Authority, and Party shall be construed accordingly;

Subcontractor means any subcontractor engaged by the Contractor or by any other subcontractor of the Contractor at any level of subcontracting to provide Contractor Deliverables wholly or substantially for the purpose of performing (or contributing to the performance of) the whole or any part of this Contract and 'Subcontract' shall be interpreted accordingly

2 General

a. The Contractor shall comply with all applicable Legislation, whether specifically referenced in this Contract or not
b. If there is any inconsistency between these terms and conditions and the associated documents expressly referred to therein, the conflict shall be resolved according to the following descending order of priority:

- (1) the terms and conditions;
- (2) the schedules; and
- (3) the documents expressly referred to in the agreement.

c. Neither Party shall be entitled to assign the Contract (or any part thereof) without the prior written consent of the other Party.

d. Failure or delay by either Party in enforcing or partially enforcing any provision of the Contract shall not be construed as a waiver of its rights under the Contract.

e. The Parties to the Contract do not intend that any term of the Contract shall be enforceable by virtue of the Contracts (Rights of Third Parties) Act 1999 by any person that is not a Party to it.

f. The Contract and any non-contractual obligations arising out of or in connection with it shall be governed by and construed in accordance with English Law, and subject to Clause 16 and without prejudice to the dispute resolution procedure set out therein, the Parties submit to the exclusive jurisdiction of the English courts. Other jurisdictions may apply solely for the purpose of giving effect to this Clause 2.f and for enforcement of any judgement, order or award given under English jurisdiction.

g. This Contract comes into effect on the Effective Date of Contract and will expire automatically on the date identified in Schedule 3 (Contract Data Sheet) unless it is otherwise terminated in accordance with the provisions of the Contract, or otherwise lawfully terminated.

h. This Contract constitutes the entire agreement between the Parties relating to the subject matter of the Contract. The Contract supersedes, and neither Party has relied upon, any prior negotiations, representations and undertakings, whether written or oral, except that this condition shall not exclude liability in respect of any fraudulent misrepresentation.

i. In addition to any other rights and remedies, the Authority shall have the right to terminate the Contract (in whole or in part) with immediate effect by giving written notice to the Contractor where the Contractor is in material breach of its obligations under the Contract. Where the Authority has terminated the Contract under Clause 2.i the Authority shall have the right to claim such damages as may have been sustained as a result of the Contractor's material breach of the Contract.

j. The Authority shall have the right to terminate the contract if the Contractor is declared bankrupt or goes into liquidation or administration. This is without prejudice to any other rights or remedies under this Contract.

3 Amendments to Contract

a. Any variation to the Contract shall have no effect unless expressly agreed in writing and signed by both Parties

b. All amendments to this Contract shall be serially numbered, in writing, issued only by the Authority's Representative (Commercial), and agreed by both Parties.

- c. Without prejudice to Clause 3.a, where the Authority or the Contractor wishes to introduce a change which is not minor or which is likely to involve a change to the Contract Price, the provisions of Schedule 4 (Contract Change Control Procedure) shall apply.
- d. The Contractor shall not carry out any work until any necessary change to the Contract Price has been agreed and a written amendment in accordance with Clause 3.a above has been issued.

4 Severability

- a. If any provision of the Contract is held to be invalid, illegal or unenforceable to any extent then:
- (1) such provision shall (to the extent that it is invalid, illegal or unenforceable) be given no effect and shall be deemed not to be included in the Contract but without invalidating any of the remaining provisions of the Contract; and
 - (2) the Parties shall use all reasonable endeavours to replace the invalid, illegal or unenforceable provision by a valid, legal and enforceable substitute provision the effect of which is as close as possible to the intended effect of the invalid, illegal or unenforceable provision.

5 Transparency

- a. Subject to Clause 5.b, but notwithstanding Clause 6, the Contractor understands that the Authority may publish the Transparency Information to the general public. The Contractor shall assist and cooperate with the Authority to enable the Authority to publish the Transparency Information.
- b. Before publishing the Transparency Information to the general public in accordance with Clause 5.a, the Authority shall redact any information that would be exempt from disclosure if it was the subject of a request for information under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004, including the Contractor Commercially Sensitive Information.
- c. The Authority may consult with the Contractor before redacting any information from the Transparency Information in accordance with Clause 5.b. The Contractor acknowledges and accepts that its representations on redactions during consultation may not be determinative and that the decision whether to redact information is a matter in which the Authority shall exercise its own discretion, subject always to the provisions of the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.
- d. For the avoidance of doubt, nothing in this Clause 5 shall affect the Contractor's rights at law.

6 Disclosure of Information

- a. Information received or in connection with the Contract shall be managed in accordance with DEFCON 531 (ISC) and Clause 5.

7 Publicity and Communications with the Media

- a. The Contractor shall not and shall ensure that any employee or Subcontractor shall not communicate with representatives of the press, television, radio or other media on any matter concerning the Contract unless the Authority has given its prior written consent.

8 Notices

- a. A Notice served under the Contract shall be:
- (1) in writing in the English Language;
 - (2) authenticated by signature or such other method as may be agreed between the Parties;
 - (3) sent for the attention of the other Party's representative, and to the address set out in the Contract;
 - (4) marked with the number of the Contract; and
 - (5) delivered by hand, prepaid post (or airmail), facsimile transmission or, if agreed in the Contract, by electronic mail.
- b. Notices shall be deemed to have been received:
- (1) if delivered by hand, on the day of delivery if it is a Business Day in the place of receipt, and otherwise on the first Business Day in the place of receipt following the day of delivery;
 - (2) if sent by prepaid post, on the fourth Business Day (or the tenth Business Day in the case of airmail) after the day of posting;
 - (3) if sent by facsimile or electronic means:
 - (a) if transmitted between 09:00 and 17:00 hours on a Business Day (recipient's time) on completion of receipt by the sender of verification of the transmission from the receiving instrument; or
 - (b) if transmitted at any other time, at 09:00 on the first Business Day (recipient's time) following the completion of receipt by the sender of verification of transmission from the receiving instrument.

9 Change of Control of Contractor

- a. The Contractor shall notify the Representative of the Authority at the address given in Clause 9.b, as soon as practicable, in writing of any intended, planned or actual change in control of the Contractor, including any Sub-contractors. The Contractor shall not be required to submit any notice which is unlawful or is in breach of either any pre-existing non-disclosure agreement or any regulations governing the conduct of the Contractor in the UK or other jurisdictions where the Contractor may be subject to legal sanction arising from issuing such a notice.
- b. Each notice of change of control shall be taken to apply to all contracts with the Authority. Notices shall be submitted to:

Mergers & Acquisitions Section
Strategic Supplier Management Team
Spruce 3b #1301
MOD Abbey Wood,

Bristol, BS34 8JH

The Representative of the Authority shall consider the notice of change of control and advise the Contractor in writing of any concerns the Authority may have. Such concerns may include but are not limited to potential threats to national security, the ability of the Authority to comply with its statutory obligations or matters covered by the declarations made by the Contractor prior to Contract Award.

c. The Authority may terminate the Contract by giving written notice to the Contractor within six months of the Authority being notified in accordance with clause 9.a. The Authority shall act reasonably in exercising its right of termination under this condition.

d. If the Authority exercises its right to terminate in accordance with clause 9.c the Contractor shall be entitled to request the Authority to consider making a payment representing any commitments, liabilities or expenditure incurred by the Contractor in connection with the Contract up to the point of termination. Such commitments, liabilities or expenditure shall be reasonably and properly chargeable by the Contractor, and shall otherwise represent an unavoidable loss by the Contractor by reason of the termination of the Contract. Any payment under this clause 9.d must be fully supported by documentary evidence. The decision whether to make such a payment shall be at the Authority's sole discretion.

e. Notification by the Contractor of any intended, planned or actual change of control shall not prejudice the existing rights of the Authority or the Contractor under the Contract nor create or imply any rights of either the Contractor or the Authority additional to the Authority's rights set out in this condition.

10 Progress Monitoring, Meetings and Reports

a. The Contractor shall attend progress meetings and deliver reports at the frequency or times (if any) specified in the Contract and shall ensure that its Contractor's representatives are suitably qualified to attend such meetings.

11 Supply of Contractor Deliverables and Quality Assurance

a. This Contract comes into effect on the Effective Date of Contract.

b. The Contractor shall supply the Contractor Deliverables to the Authority at the Firm Price stated in the Contract.

c. The Contractor shall ensure that the Contractor Deliverables:

(1) correspond with the specification;

(2) are of satisfactory quality (within the meaning of the Sale of Goods Act 1979, as amended) except that fitness for purpose shall be limited to the goods being fit for the particular purpose held out expressly by or made known expressly to the Contractor and in this respect the Authority relies on the Contractor's skill and judgement; and

(3) comply with any applicable Quality Assurance Requirements specified in the Contract.

d. The Contractor shall apply for and obtain any licences required to import any material required for the performance of the Contract in the UK. The Authority shall provide to the Contractor reasonable assistance with regard to any relevant defence or security matter arising in the application for any such licence.

12 Delivery / Collection

a. The Contract shall specify whether the Contractor Deliverables are to be delivered to the consignee by the Contractor or collected from the consignor by the Authority.

b. Title and risk in the Contractor Deliverables shall pass from the Contractor to the Authority on delivery or on collection in accordance with Clause 12.a.

c. The Authority shall be deemed to have accepted the Contractor Deliverables thirty (30) days after title and risk has passed to the Authority unless it has rejected the Contractor Deliverables within the same period.

13 Third Party Intellectual Property

a. The Contractor shall as its sole liability keep the Authority fully indemnified against an infringement or alleged infringement of any intellectual property rights or a claim for Crown use of a UK patent or registered design caused by the use, manufacture or supply of the Contractor Deliverables.

b. The Authority shall promptly notify the Contractor of any infringement claim made against it relating to any Contractor Deliverable and, subject to any statutory obligation requiring the Authority to respond, shall permit the Contractor to have the right, at its sole discretion to assume, defend, settle or otherwise dispose of such claim. The Authority shall give the Contractor such assistance as it may reasonably require to dispose of the claim and will not make any statement which might be prejudicial to the settlement or defence of the claim

14 Payment

a. Payment for Contractor Deliverables will be made by electronic transfer.

b. Where the Contractor submits an invoice to the Authority in accordance with Clause 14.a, the Authority will consider and verify that invoice in a timely fashion.

c. The Authority shall pay the Contractor any sums due under such an invoice no later than a period of 30 days from the date on which the Authority has determined that the invoice is valid and undisputed.

d. Where the Authority fails to comply with Clause 14.b and there is undue delay in considering and verifying the invoice, the invoice shall be regarded as valid and undisputed for the purpose of Clause 14.c after a reasonable time has passed.

e. The approval for payment of a valid and undisputed invoice by the Authority shall not be construed as acceptance by the Authority of the performance of the Contractor's obligations nor as a waiver of its rights and remedies under this Contract.

f. Without prejudice to any other right or remedy, the Authority reserves the right to set off any amount owing at any time from the Contractor to the Authority against any amount payable by the Authority to the Contractor under the Contract or under any other contract with the Authority, or with any other Government Department.

15 Subcontracting and Prompt Payment

- a. Subcontracting any part of the Contract shall not relieve the Contractor of any of the Contractor's obligations, duties or liabilities under the Contract.
- b. Where the Contractor enters into a Subcontract he shall cause a term to be included in such Subcontract:
 - (1) providing that where the Subcontractor submits an invoice to the Contractor, the Contractor will consider and verify that invoice in a timely fashion;
 - (2) providing that the Contractor shall pay the Subcontractor any sums due under such an invoice no later than a period of thirty (30) days from the date on which the Contractor has determined that the invoice is valid and undisputed;
 - (3) providing that where the Contractor fails to comply with Clause 15.b(1) above, and there is an undue delay in considering and verifying the invoice, that the invoice shall be regarded as valid and undisputed for the purposes of Clause 15.b(2) after a reasonable time has passed; and
 - (4) requiring the counterparty to that Subcontract to include in any Subcontract which it awards, provisions having the same effect as Clauses 15.b(1) to 15.b(4).

16 Dispute Resolution

- a. The Parties will attempt in good faith to resolve any dispute or claim arising out of or relating to the Contract through negotiations between the respective representatives of the Parties having authority to settle the matter, which attempts may include the use of any alternative dispute resolution procedure on which the Parties may agree.
- b. In the event that the dispute or claim is not resolved pursuant to Clause 16.a the dispute shall be referred to arbitration and shall be governed by the Arbitration Act 1996. For the purposes of the arbitration, the arbitrator shall have the power to make provisional awards pursuant to Section 39 of the Arbitration Act 1996.

17 Termination for Corrupt Gifts

The Authority may terminate the Contract with immediate effect, without compensation, by giving written notice to the Contractor at any time after any of the following events:

- a. where the Authority becomes aware that the Contractor, its employees, agents or any sub-contractor (or anyone acting on its behalf or any of its or their employees):
 - (1) has offered, promised or given to any Crown servant any gift or financial or other advantage of any kind as an inducement or reward;
 - (2) commits or has committed any prohibited act or any offence under the Bribery Act 2010 with or without the knowledge or authority of the Contractor in relation to this Contract or any other contract with the Crown;
 - (3) has entered into this or any other contract with the Crown in connection with which commission has been paid or has been agreed to be paid by it or on its behalf, or to its knowledge, unless before the contract is made particulars of any such commission and of the terms and conditions of any such agreement for the payment thereof have been disclosed in writing to the Authority.
- b. In exercising its rights or remedies to terminate the Contract under Clause 17.a. the Authority shall:
 - (1) act in a reasonable and proportionate manner having regard to such matters as the gravity of, and the identity of the person committing the prohibited act;
 - (2) give due consideration, where appropriate, to action other than termination of the Contract, including (without being limited to):
 - (a) requiring the Contractor to procure the termination of a subcontract where the prohibited act is that of a Subcontractor or anyone acting on its or their behalf;
 - (b) requiring the Contractor to procure the dismissal of an employee (whether its own or that of a Subcontractor or anyone acting on its behalf) where the prohibited act is that of such employee.
- c. Where the Contract has been terminated under Clause 17.a. the Authority shall be entitled to purchase substitute Contractor Deliverables from elsewhere and recover from the Contractor any costs and expenses incurred by the Authority in obtaining the Contractor Deliverables in substitution from another supplier.

18 Termination for Convenience

- a. The Authority shall have the right to terminate the Contract in whole or in part at any time by giving the Contractor at least 20 (twenty) business days written notice (or such other period as may be stated Schedule 3 – Contract Data Sheet).
- b. Subject to Clause 18.d, the Authority shall indemnify the Contractor against any commitments, liabilities or expenditure which would otherwise represent an unavoidable loss by the Contractor, subject to:
 - (1) the Contractor taking all reasonable steps to mitigate such loss; and
 - (2) the Contractor submitting a fully itemised and costed list of such loss, with supporting evidence, reasonably and actually incurred by the Contractor as a result of the termination of the Contract or relevant part thereof.
- c. The Contractor shall include in any sub-contract over £250,000 which it may enter into for the purpose of the Contract the right to terminate the sub-contract under the terms of Clauses 18.a to 18.b except that:
 - (1) the notice period for termination shall be as specified in the sub-contract, or if no period is specified 20 (twenty) business days; and
 - (2) the Contractor's right to terminate shall be restricted by including the following additional clause "Provided that this right is not exercised unless the main contract, or relevant part, has been terminated by the Secretary of State for Defence in accordance with the provisions of Clause 18".
- d. The Authority's total liability under the provisions of this Clause shall be limited to the total price of the Contractor Deliverables payable under the Contract (or relevant part), including any sums paid, due or becoming due to the Contractor at the date of termination.

19 Goods Specific Conditions

NOT USED

20 Project Specific Conditions

Contractors Personnel - Research Workers

a. The Authority accepts the following students, supervisors or other representatives, agents or employees of the Contractor (or any sub-contractor) to work directly on the contract ("Research Workers"):

[XXXX – To be inserted on Award of Contract]

b. The Contractor (and any sub-contractor) shall take all reasonable steps to avoid changes in the Research Workers once accepted. Where such a change is necessary, the Contractor shall obtain the prior written consent of the Authority, which shall not be unreasonably withheld.

c. Should it be necessary to change the Research Workers 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 Personal Particulars Form shall be completed for each additional person and sent to the Authority's Representative (Commercial – see Box 1 of Schedule 3 Annex A to the Contract – DEFFORM 111). The appropriate Dstl and MOD administrative 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.

d. All Research Workers engaged in support of the Contract shall have appropriate qualifications and competence and be in all respects acceptable to the Authority. The Authority reserves the right to reject any proposed Research Worker(s) whom it considers unsuitable for any reason. The decision of the Authority shall be final and it shall not be obliged to provide any reasons.

e. The only exception to process described in this condition is when all of the Contractors proposed Research Workers hold a full current SC clearance with no restrictions. In that case, even if the classification of the contract work is below SECRET a Personal Particulars form is not required. The SC provides the Authority with the requisite level of assurance that the individual is who they say they are and is appropriate to work on the contract. The Contractor will be required to provide appropriate evidence to demonstrate to the satisfaction of the Authority that the proposed Research Workers hold a full current SC clearance.

Invoice Submission

In order to obtain payment the Contractor shall:

a. submit an invoice to the Dstl Accounts Payable at the address set out in Box 11 of Schedule 3 Annex A to the Contract (DEFFORM 111) and send a PDF copy of the invoice to the Authority's Representative (Project – see Box 2 of Schedule 3 Annex A to the Contract – DEFFORM 111).

b. Invoices must quote the Contract number, Milestone number and Purchase Order number (where applicable).

Deliverable Report Marking

a. All Reports included as Deliverables under the Contract e.g. Progress and/or Final Reports etc. must comply with the Defence Research Reports Specification (DRRS) @ <https://www.gov.uk/guidance/submit-a-report-to-athena> which defines the requirements for the presentation, format and production of scientific and technical reports prepared for MOD.

b. Interim or Progress Reports: The report should detail, document, and summarise the results of work done during the period covered and shall be in sufficient detail to comprehensively explain the results achieved; substantive performance; a description of current substantive performance and any problems encountered and/or which may exist along with proposed corrective action. An explanation of any difference between planned progress and actual progress, why the differences have occurred, and if behind planned progress what corrective steps are planned.

c. Final Reports: shall describe the entire work performed under the Contract in sufficient detail to explain comprehensively the work undertaken and results achieved including all relevant technical details of any hardware, software, process or system developed there under. The technical detail shall be sufficient to permit independent reproduction of any such process or system.

d. The Contractor is to supply, at no additional cost to the Authority, a Minutes Secretary and produce minutes of the meetings if necessary.

e. The front page of any Minutes produced as a result of any Meeting between the Authority and the Contractor shall state:

"Nothing in these Minutes shall be construed as giving authority to proceed on work beyond that provided in the Contract or vary the terms and conditions of the Contract."

f. Reports shall be signed on the Contractor's behalf by a person authorised to commit the Contractor.

g. Marking of Deliverables (Documents)

(1) In accordance with DEFCON 705 there are two categories of Technical Deliverable:

- Full Rights Version
- Limited Rights Version

(2) In accordance with DEFCON 705 there are two categories of Technical Information:

- Full Rights Information
- Limited Rights Information

(3) In accordance with DEFCON 705 the Contractor shall provide a Full Rights Version of each specified Technical Deliverable.

(4) In any instance where the Full Rights Version does not provide all of the Technical Information the Contractor shall also provide a Limited Rights Version containing the balance of deliverable Technical Information.

(5) In accordance with DEFCON 705, the Contractor shall mark each Technical 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. For this purpose the Contractor shall follow the Document Marking Scheme attached at Schedule 6.

(6) If subcontractor information is to be included in reports subject to DEFCON 705 then, unless the IPR in that information is owned by the Contractor, the name of the subcontractor(s) should be entered in the bracketed fields below in addition to the name of the Contractor.

IPR - Subcontracts

a. The Contractor shall not place any subcontract or order involving the design or development of equipment required under this contract without the prior written consent of the Authority. Unless otherwise agreed, such consent will be conditional on the proposed subcontractor concluding a direct agreement with the Authority in the form set out in Schedule 8 to the Contract. Wherever possible the request for approval should be accompanied by two copies of the agreement signed by the subcontractor. If, in any case the Contractor is unable to comply with this condition he shall report the matter to the Authority's Representative (Commercial – see Box 1 of Schedule 3 Annex A to the Contract – DEFFORM 111) and await further instructions before placing the subcontract or order.

Government Furnished Assets

a. The Government Furnished Assets as detailed at Schedule 8 to the Contract shall be made available to the Contractor by the Authority, free of charge, for the purpose of performing the Contract under the loan terms of either contract embodiment item, contract support item, or contract work item as specified by the Authority. Any such issue shall be in accordance with the provisions of DEFCON 611 (ISC) and DEFCON 694 (ISC).

b. The Government Furnished Assets provided to the Contractor will be returned on completion of the Contract or disposed of with written consent.

Government Furnished Information

c. The Authority does not give any warranty or undertaking as to the completeness, accuracy or fitness for any purpose of any of the Authority provided information and neither the Authority nor its agents or employees shall be liable to the Contractor in contract (save as expressly provided elsewhere in the Contract), tort, statute or otherwise as a result of any inaccuracy, omission, unfitness for any purpose, or inadequacy of any kind in the Authority provided information.

Test and Evaluation

a. The Contractor shall provide the Authority's Representative (Project – see Box 2 of Schedule 3 Annex A to the Contract – DEFFORM 111) with all appropriate paperwork, to the requirements of the Authority's Representative to support conduct of test and evaluation; including but not limited to:

- (1) Trial Plans;
- (2) Evaluation Plans;
- (3) Risk Assessment;
- (4) Health and Safety;
- (5) Certificates of Insurance;

21 Project Specific DEFCONs

DEFCON 126	Edn 11/06	International Collaboration
DEFCON 514A	Edn 03/16	Failure of Performance under Research and Development Contracts
DEFCON 531 (ISC)	Edn 03/19	Disclosure of Information
DEFCON 532B	Edn 05/18	Protection of Personal Data
DEFCON 601 (SC)	Edn 03/15	Redundant Materiel
DEFCON 608	Edn 10/14	Access and Facilities to be provided by the Contractor
DEFCON 609 (ISC)	Edn 03/19	Contractor's Records
DEFCON 611 (ISC)	Edn 03/19	Issued Property
DEFCON 694 (ISC)	Edn 03/19	Accounting for Property of the Authority
DEFCON 705	Edn 11/02	Intellectual Property Rights - Research and Technology