TECHNOLOGY TRANSFER – PROOF OF CONCEPT CONTRACT

Contract has been drafted to support the Proof of Concept venture between:

VERHAERT NEW PRODUCTS AND SERVICES

Hogenakkerhoekstraat 21

B-9150 Kruibeke

BELGIUM

hereinafter referred to as VERHAERT NEW PRODUCTS AND SERVICES located at Kruibeke, Belgium

represented by Frederik Wouters.

and

[Name Applicant] with legal personality having its administrative offices at [location], [VATnumber], duly represented by [project lead], who entrusts the execution of the present agreement to [Person X]

(together, hereinafter referred to as the “Parties” or individually as a “Party”)

PREAMBLE

**1.** WHEREAS VERHAERT NEW PRODUCTS & SERVICES is a company based in Belgium which acts as a broker of the European Space Agency in the field of technology transfer from space and leads the coordination of the ESA Technology Transfer Initiative Brokers’ Network;

**2.** WHEREAS the European Space Agency currently undertakes an initiative to encourage, by means of technology transfer and incubation, the utilization of space technology for general non-space industrial, scientific and commercial uses;

**3.** WHEREAS Verhaert New Products & Services has been appointed by the European Space Agency to set-up, administer and implement an Open Call for Technology Transfer Proof of Concept in Belgium,

**4.** WHEREAS this Call allows both Space and Non-Space organizations to submit a proposal, which may serve as a subject for this contract for transfer Proof of Concept in order to determine and eliminate any technical risk particular to the new terrestrial application,

**5.** WHEREAS [name Company / Applicant] has submitted such research proposal which has been approved for funding by VERHAERT NEW PRODUCTS & SERVICES

In Consideration of the mutual covenants contained in this Contract, the following has been agreed:

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# ARTICLE 1: DEFINITIONS, SCOPE, BASELINE AND FUNDING

## 1.1 DEFINITIONS

**“ACTIVITY”** shall mean carrying out the Proof of Concept-project based on the proposal submitted to and approved for funding by VERHAERT NEW PRODUCTS & SERVICES

**“AGENCY”** shall mean the European Space Agency.

**“BACKGROUND”** shall mean: information, techniques, know-how, software and materials regardless of the form or medium in which they are disclosed or stored – including any relevant intellectual property rights - that are provided by one party to the other for use in the project whether before or after the start date of this Contract;

**“CONFIDENTIAL INFORMATION”** shall mean any proprietary information, documentation or data of personal or technical nature, including but not limited to any ideas, know-how, concept, designs, drawings and specifications, whether in written, electronic, photographic and/or other forms disclosed by the Disclosing Party to the Receiving Party and identified in writing as confidential before or at the time of disclosure, or the confidential nature of which was confirmed by the disclosing party in writing within ten calendar days counting from the date of its disclosure

**“CONTRACT”** shall mean the present contract.

**“CONTRACT TERM”** shall be the period between the commencement date [Starting date] and the date of termination of the contract [State Date Termination]

**“DELIVERABLES”** shall have the meaning set out in Article 3.2.

**“DISCLOSING PARTY”** shall mean the Party disclosing Confidential Information.

**“EXECUTIVE SUMMARY”** shall concisely summarize the findings of the Proof of Concept project. It shall not contain any Confidential Information. The Executive Summary shall not exceed one (1) page of text with colored illustrations or

photographs, if appropriate.

**“INTELLECTUAL PROPERTY RIGHTS”** shall mean all registered intellectual property rights and unregistered intellectual property rights granted by law including all patents, trademarks, copyrights, design rights, database rights, topography rights, know-how and trade secrets or equivalent rights or rights of action anywhere in the world.

**“MIDTERM PROGRESS REPORT”** shall mean a report detailing the work carried out by the Contractor as part of the Activity in the first half of the Proof of Concept.

**“OPEN CALL” or “THE CALL”** shall mean the instrument by which proposals for technology transfer Proof of Concept are submitted to VERHAERT NEW PRODUCTS & SERVICES.

**“RESULTS”** shall mean the deliverables, know-how, materials and information first reduced to practice or writing in the course of the project, as reported to VERHAERT NEW PRODUCTS AND SERVICES;

**“RECEIVING PARTY”** shall mean the Party receiving Confidential Information.

**“THIRD PARTY”** shall mean any person or entity other than the Parties to this Contract or their personnel as well as the Agency and the Originator.

## 1.2 SCOPE

The scope of this Contract sets forth the terms and conditions governing the relationship and the undertakings of the Parties with regard to the Activity.

## 1.3 BASELINE

The Parties shall perform their undertakings for the Activity in accordance with the following documents listed in order of precedence:

- The present Contract;

- The Minutes of contract negotiation meeting, not attached hereto but

know to both Parties;

- The Contractor’s proposal [Name of the Venture]

# ARTICLE 2: PRICE

## 2.1 PRICE OF THE CONTRACT

As consideration for the execution of the Activity by [Company name / Applicant], the financial compensation paid by VERHAERT NEW PRODUCTS & SERVICES to [Company name / Applicant] , shall be: max. € 38.000,00 excl. VAT [Thirty height thousands EURO].

## 2.2 TYPE OF PRICE

The price type of the present Contract is stated to be a firm-fixed price type of contract and cannot extend the maximum amount stated above. VERHAERT NEW PRODUCTS AND SERVICES and THE EUROPEAN SPACE AGENCY are legitimate to request invoices that have been mentioned in the proposal provided by the applicant, [Company Name]

## 2.3 PAYMENT PLAN

**2.3.1** VERHAERT NEW PRODUCTS & SERVICES may authorize the payment of an advance payment in connection with this Contract.

**2.3.2** Advance payments are not final payments and shall be deducted from the sums due to [Company name / Applicant] under this Contract.

**2.3.3** The applicant shall be allowed to claim mid-term and final settlement when all their obligations under this Contract have been fulfilled. The mid-term and final payment is due by VERHAERT NEW PRODUCTS & SERVICES upon:

(a) certification by VERHAERT NEW PRODUCTS & SERVICES of the satisfactory completion of the Activity under this Contract and;

(b) receipt by VERHAERT NEW PRODUCTS & SERVICES of the relevant invoice(s) from the Contractor.

**2.3.4** Unless otherwise provided for in this Contract, a period of 30 (thirty) days shall be granted to VERHAERT NEW PRODUCTS & SERVICES for the execution of the mid-te rm and final payment according to the milestone plan. [reference 2.3.5].

**2.3.5** VERHAERT NEW PRODUCTS & SERVICES shall make the following payments:

**MILESTONE DESCRIPTION SCHEDULE DATES AMOUNT IN EURO**

MIDTERM PAYMENT: upon [Date mid-term] Max. 19.000 (50%)

acceptance by VERHAERT NEW

PRODUCTS & SERVICES

of the midterm of the deliverables expected for the Design Review. See article 3.2 for more information

**FINAL PAYMENT: upon acceptance** [Date final term] Max. 19.000 (50%)

by VERHAERT NEW

PRODUCTS & SERVICES

of all deliverable documentations

under this contract. See article 3.2 for more information

# ARTICLE 3: OBLIGATIONS AND DELIVERABLES OF THE CONTRACTOR

## 3.1 OBLIGATIONS

The Contractor shall carry out the Transfer Proof of Concept project. The Transfer Proof of Concept project shall cover at least all items exposed in the Contractor’s proposal on the basis of which the Contractor was selected through the Open Call.

## 3.2 DELIVERABLES

1. **Business Canvass Model (BCM)**

The BCM document shall describe the various elements of the Business Model (as presented on the webpage linked below); for each element of the BCM, the available options at hand shall be explored, and their suitability shall be analysed. The choices made need to be justified in the light of such analysis. In addition, the assumptions underpinning the choices made should be clearly identified, and their robustness should be discussed.

Presentation of the business canvass model:

[*https://en.wikipedia.org/wiki/Business\_Model\_Canvas*](https://en.wikipedia.org/wiki/Business_Model_Canvas)

1. **Risk Mitigation & Implementation Plan toward commercial operations (RMIP)**

The RMIP shall identify and describe the main difficulties and critical risks related to implementing the business model, covering all \*relevant aspects (technical, organizational, legal, financial, operational). Mitigation strategies shall be discussed and chosen.

The RMIP shall also present a route to commercial operations, starting from the completion of the Proof of Concept. It should address all aspects relevant to implementing the commercial undertaking. For each of those aspects, the implementation plan should describe the following:

* + The current situation
  + The objective(s), at onset of operation (or early commercial operations)
  + The approach / strategy and the plan to reach the objective(s)
  + The risks and foreseen difficulties
  + Timeline
  + Resources and budget
  + The mitigation plan, and the overall implementation plan.

\*Relevant aspects include:

* + Technical & product development
  + IP management
  + Acquisition & retention of required skills
  + Customer acquisition, market capture, market retention
  + Partnerships
  + Logistics (supply, distribution, etc.)
  + Sourcing of supplies
  + Industrialization & scale up
  + Financing

1. **Requirement document (RD)**

The purpose of the Requirements Document is to make sure that all the needs from the relevant stakeholders are listed, agreed, and covered by suitable requirements for the solution. These needs are turned into measurable requirements, the most critical and/or challenging of which will be later tested on a breadboard. The RD shall include stakeholder requirements, the system wide requirements and the sub-system requirements. Requirements (from stakeholder requirements down to sub-system requirements) shall be traced down in the form of a traceability matrix.

1. **System Architecture Document (SAD)**

The purpose of the System Architecture document is two-fold.

Firstly, it shall specify the overall system starting from the high-level architecture down to its constituent building blocks (Level 1 design). It is an elaboration of the conceptual design provided in the proposal. Functional and physical architectures are to be summarized in the form of charts. The choice for the constituent building blocks shall be justified, as well as the sourcing of it (in-house development, procurement, licensing). The description of the system architecture shall also include the interfaces between building blocks, and with the operational environment. The level-1 design shall be iterated in the light of the outcome of the breadboard testing. The Element of the SAD is called SAD1.

Secondly it shall provide an evaluation (qualitatively and quantitatively, whenever relevant) of the impact of implementing the new solution, relative to the reference scenario, when the solution was not implemented. Impacts shall be evaluated at the level of the item being changed, but also on the other subsystems, and eventually at the level of the wider system.

Impact can be related to a variety of aspects, e.g.

* + new functions,
  + weight, size, power consumption
  + operational performance
  + operational range; robustness to environmental conditions
  + logistics efficiency (e.g. in relation to the supply chain, procurement, assembly and/ or distribution)
  + production efficiency (e.g. at level of manufacturing, integration, quality assurance)
  + safety, etc.

Once the practical impacts (as exemplified above) are well evaluated, they should be translated into cost gains over the product life cycle, and consolidated into a single cost metrics.

This second element of the SAD is called SAD2.

The design (as documented in SAD1) shall be revisited and possibly iterated in the light of the impact assessment, with the objective to further improve the benefits of the new solution.

1. **Breadboard Design & Test Report (BDTR)**

The purpose of the BDTR is to report on the plan, implementation and outcome of the tests aimed at verifying the solution against the most critical and/or challenging requirements. The BDTR is composed of two elements, i.e.

* Element 1 – Breadboard requirements, description of the breadboard design, as well as test plan, i.e. Description of the test procedure & requirements, for the verification of each of the critical requirements (as identified in Element 1 of the BDTR).
* Element 2 – Test report, i.e. Report on the implementation of the breadboard and outcome of the verification tests.

1. **Summary slides (SS)**

The SS will be used by ESA to present the Proof of Concept in a nutshell. They are composed of two slides, covering the following elements:

* Space heritage technology (with illustrative image)
* Application (with illustrative image)
* Achievements of the activity and next steps.

1. **Executive Summary report & Achievement Summary (ES&AS)**

The Executive Summary report shall present in about 20-30 pages (pictures, Index and Appendix included) an overview of the project. It is “the business card” of the project presenting in a concise way the market opportunity, the technical solution being developed, the main activities carried out during the project, as well as the achievements and lessons learnt. Salient elements of the implementation strategy should also be reflected. The Executive Summary is intended for general audience and publication. Therefore, it shall not contain any sensitive information, nor complex technical details. It should provide meaningful and impactful pictures, graphs, diagrams and/ or tables.

The Achievement Summary provides a one-page overview of the activity (covering phase 1 and 2), as well as its main achievements and conclusions. This document will be used for reporting within and outside ESA.

1. **Technology description (TD)**

The TD is a short document (less than 2 pages) which describes the space technology under investigation in this demonstration activity, as a candidate for transfer into a terrestrial application domain. The TD is intended for publication. Therefore, it shall not contain any sensitive information. The TD shall provide an update of the information requested in the proposal.

## 3.3 WORK LOGIC, MILESTONES & REVIEWS

**WORK LOGIC**

Before embarking on a PoC activity, the contractors shall investigate the opportunity of the considered technology transfer, by answering two main questions, i.e. is there business opportunity? Is the space technology suitable to capture that opportunity? The main findings of this investigation shall be summarized in the proposal. Those questions shall be answered based on a thorough investigation, the elements of which are shown on the left side of the chart below.

Then the PoC work unfolds in two stages, i.e.

* + - 1. Contractors are first expected to focus on design work, i.e. design of the business model on the one hand; design of the technical solution (together with impact assessment) on the other hand. In addition, contractors shall design a breadboard aimed at testing the solution against the most challenging requirements. The test plan shall also be developed at this stage.
      2. The second stage is focused on implementation. Contractors are expected to build the breadboard and to execute the test plan, to assess the technical feasibility of the solution. In case the tested requirements are not fully satisfied, then the contractors shall iterate the design of the solution. On the business side, contractors shall elaborate the plan for implementing the solution and the business model, down to commercial operations.

The chart below depicts the work logic of the various aspects of the work, to be addressed prior to the PoC activity (and summarized in the proposal), as well as over the course of the PoC activity (right side of the chart).

**Timeline

Description automatically generated**

NB: The acronyms in brackets point to the deliverables wherein the work to be performed shall be reflected. The deliverables are described in detail in section XXX.

The activity has two milestones. Each milestone is achieved upon satisfactory completion of a design review, i.e.

* Design Review
* Final Review

#### Design Review (“DR”)

The DR is focused on reviewing the design of the undertaking, i.e. the business model, and the product design (complete solution and breadboard), as well as the impact of such design for the receivers. The approach and plan for verification testing of the critical/challenging requirements are also reviewed during the DR.

The DR shall take place upon completion of the system design and business canvas model.

### The following deliverables are expected for review:

### BCM.

### RD.

### SAD, elements 1 and 2.

### BDTR, element 1

#### Final review (“FR”)

The FR is focused on reviewing the verification testing, and the route to commercial operations. Contractors are also expected to summarize the activity and its achievements.The FR is shall take place upon completion of all work packages.

The following deliverables are expected for review:

RMIP

BDTR, element 2

Update of SAD element 1 (System design), in the light of outcome of the tests.

ES&AS

SS

TD

The Contractor may be required to attend the Final Review meeting at ESA/ESTEC or an alternative location in the ESA Member States or other medium suitable to all involved parties.

# ARTICLE 4: COMMUNICATIONS AND KEY PERSONNEL

## 4.1 COMMUNICATIONS

4.1.1 All correspondence affecting the terms and conditions of this Contract and concerning

its execution shall be made or confirmed in writing. All communications or correspondence between the Parties shall be in English.

4.1.2 All correspondence for either Party shall be sent to the representative of each Party

indicated in Articles 4.1.3 and 4.1.4.

**4.1.3** For the purpose of this Contract VERHAERT NEW PRODUCTS & SERVICES representatives are:

**(a) For technical matters:**

Mr. Koen Vriesacker E-mail: Koen.Vriesacker@verhaert.com

Tel.: 32 3 250 19 00

Tel.: +32 479 710 651

or a person duly authorized by him/her.

**(b) For administrative matters:**

Ma. Thoen Veerle E-mail: veerle.thoen@verhaert.com

Tel.: +32 3 250 19 00

Fax.: +32 3 254 10 08

or a person duly authorized by him/her.

**4.1.4** For the purpose of this Contract, the Contractor’s representatives are:

**(a) For technical matters:**

[Name] E-mail: [XXX]

Tel.: [XXX]

or a person duly authorized by him/her.

**(b) For administrative matters:**

[Name]: [XXX]

E-mail: [XXX]

Tel.: [XXX]

or a person duly authorized by him/her.

## 4.2 KEY PERSONNEL

**4.2.1** The work shall be executed by the key personnel nominated in the Contractor’s proposal.

**4.2.2** Any replacement to other tasks of such key personnel, to the extent that they are not available as foreseen in the Applicant’s proposal, requires the prior written approval of the VERHAERT NEW PRODUCTS & SERVICES representative as mentioned in Article

**4.1.3** Appropriate requests shall be accompanied by a justification for the proposed change and by a comprehensive CV of the new key personnel proposed.

# ARTICLE 5: LIABILITY

## 5.1 LIMITATION OF LIABILITY

**5.1.1** If a party infringes any laws or bylaws in force in Belgium or in any other country whatsoever, the other party shall not be held responsible for it.

**5.1.2** Each Party shall indemnify the other Party from and against all claims, damages, costs and expenses arising out of any infringement of either Party’s obligations under this Contract.

**5.1.3** Subject to Article 5.2.3, the liability of one Party towards the other under or in connection with this Contract whether arising from negligence, breach of contract or any other obligation or duty shall not exceed the amount of the Fee set forth in Article 2 above.

## 5.2 INDIRECT OR CONSEQUENTIAL DAMAGES

**5.2.1** The Parties shall in no circumstances be liable for indirect or consequential damages such as loss of use, loss of business, loss of data, loss of rights, loss of services, loss of goodwill, Third Party claims to the extent that they represent the indirect loss of a Third Party, loss of revenues or anticipated savings, or for any indirect financial loss or indirect economic loss or for any indirect or consequential loss or damage whatsoever suffered by the other Party.

**5.2.2** The Parties shall in no circumstances be liable for loss of profit, whether direct or indirect.

**5.2.3** Neither Party excludes its liability to the other Party for:

(a) death or personal injury caused by its negligence or that of its employees or

agents;

(b) fraud, including fraudulent misrepresentations; and

(c) liability under Article 6.

(d) Gross-negligence, willful misconduct

# ARTICLE 6: CONFIDENTIALITY, USE OF INFORMATION AND PUBLICITY

## 6.1 CONFIDENTIALITY AND USE OF INFORMATION

**6.1.1** The contents of this Contract constitute Confidential Information.

**6.1.2** Neither Party shall during the Contract Term and for a period of three years thereafter, disclose to any Third Party except the Agency, nor use for any purpose except the carrying out of the Activity, any of the other Party's Confidential Information

**6.1.3** Upon the end of the Contract Term, or [earlier termination or cancellation] of this Contract in accordance with Article 9, the receiving Party shall promptly return to the Disclosing Party or otherwise certify the destruction of all Confidential Information, both parties are allowed to keep 1 digital copy for legal purposes

## 6.2 PUBLICITY

6.2.1 Subject to clause 6.2.2, for the purpose of this Contract, the applicant shall not produce

or disseminate any form of communication material, press releases or other publicity documents, including the Applicant’s advertising and news bulletins, which refer to the Activity under this Contract, VERHAERT NEW PRODUCTS & SERVICES or/and the Agency or any aspect of their activities, or permit any Third Party to do so, without the prior written consent of VERHAERT NEW PRODUCTS & SERVICES or/and the Agency’s contractual representative or their duly authorized representative.

**6.2.2.** For the duration of the confidentiality obligations as stipulated in Section 6.1.2,

[Name company / applicant] shall submit a draft of any proposed publication concerning the Activity in writing to VERHAERT NEW PRODUCTS AND SERVICES at least thirty calendar days before the date of the proposed (submission for) publication. VERHAERT NEW PRODUCTS AND SERVICES can, by giving written notice to [Name company / applicant ] (a “Confidentiality Notice”):

**(a)** prevent the publication of its Confidential Information; or

**(b)** delay the proposed publication for a maximum of four months after the date of

receipt of the Confidentiality Notice if, in its reasonable opinion, such delay is necessary

in order to seek patent or similar protection for any of its Background or any Results

which are the subject of the intended publication; or

**(c)** prevent the publication of specific Results where such publication would cause

disproportionate harm to its legitimate interests

**6.2.3**. A Confidentiality Notice must contain a precise and motivated request for necessary adaptations to the intended publication. If such an objection has been raised, the parties will discuss how to overcome the justified grounds for the objection on a timely basis (for example by adapting the planned publication and/or by protecting Background or Results before publication). The opposition to the intended Publication will not be unreasonably continued if appropriate actions have been taken following the discussion. Confidentiality Notices must be sent within fifteen calendar days after receipt of the draft Publication. The publishing party shall have the right to proceed with the proposed publication if it has not received a Confidentiality Notice within that fifteen calendar day period.

**6.2.4** The applicant shall not use the logo of VERHAERT NEW PRODUCTS & SERVICES or/and the official emblem of the Agency or any other logo or trademark they may own without the prior written consent of VERHAERT NEW PRODUCTS & SERVICES or/and the Agency’s contractual representative or his duly authorized representative.

# ARTICLE 7: INTELLECTUAL PROPERTY

## 7.1 OWNERSHIP

The Contractor shall own all Intellectual Property Rights arising out of the Activity performed under this Contract as may be granted by law, as far as no infringement of Third Party occurs.

## 7.2 USE OF INTELLECTUAL PROPERTY RIGHTS BY THE AGENCY

If the Agency or its Member States require the use of any Intellectual Property Rights, owned by the Contractor as described in Article 7.1, for the performance of the Agency’s programmes, the Contractor shall be invited to submit a proposal following a request for quotation issued by the Agency. If, for any reason, the Contractor is not able to submit a proposal within the determined tendering period, or following evaluation, said proposal is not recommended in-line with the ESA Rules and Regulations, the Agency is automatically entitled to a worldwide, irrevocable, transferable, non-exclusive license to use on “favorable conditions'' (i.e. more favorable for the Licensee than market conditions but still allowing reasonable profit for the Licensor) such Intellectual Property Rights for non-commercial purposes within its Scientific Research and Research and Development programmes, with the right to grant sub-licenses.

Notwithstanding the above provisions of this Sub-Clause, shall the Contractor provide the Agency with conclusive evidence that granting said license would cause it to suffer economic hardship, the Agency’s authorized representatives may jointly, on a case by case basis, waive this right.

## 7.3 IPR transfer

**When transferring any Intellectual Property Rights**, of which the Contractor retains the ownership in accordance with Article 7.1, to an assignee, the Contractor shall ensure that the assignee grants the Agency and its Member States the same rights, as set out in Article 7.2 of this contract.

## 7.4 IPR transfer outside ESA member states

**Transfer of Intellectual Property Rights outside the ESA Member States**; The Contractor shall inform the VERHAERT NEW PRODUCTS AND SERVICES technical representative, as stated in Article 4.1.3. well in advance of its intention to transfer outside the Agency’s Member States any Intellectual Property Rights arising from this Contract

# ARTICLE 8: APPLICABLE LAW AND DISPUTE SETTLEMENT

## 8.1 APPLICABLE LAW

This Contract shall be governed by the laws of Belgium.

## 8.2 ARBITRATION / DISPUTE SETTLEMENT

The courts of the judicial district of East Flanders, VERHAERT NEW PRODUCTS AND SERVICES and [Company name / applicant ] will have exclusive jurisdiction to deal with any dispute which has arisen or may arise out of or in connection with this Contract, except that either Party may bring proceedings for an injunction in any jurisdiction.

# ARTICLE 9: ENTRY INTO FORCE, TERMINATION AND MODIFICATIONS

## 9.1 ENTRY INTO FORCE

This Contract shall enter into force upon signature by the legal representatives of both Parties and shall continue in force until [date], unless it is canceled or otherwise terminated in accordance with Article 9.2.

## 9.2 TERMINATION

**9.2.1** Each Party reserves the right to terminate this Contract, with immediate effect, in the event that the other Party fails to fulfill its undertakings under this Contract.

**9.2.2** In no event shall termination of this Contract imply any payment or reimbursement of the cost incurred by either Party prior to termination, nor of any damages. Termination of this Contract shall not affect the Parties’ continuing rights and obligations under this Contract, Article 6 (Confidentiality, Use of Information and Publicity) in particular.

## 9.3 MODIFICATIONS

At the request of either Party, the modalities outlined in this Contract may be modified in writing by mutual consent. Such modification shall enter into force and have immediate effect at the date of signature by the legal representatives of both Parties.

Done in two originals, one for each party of this contract,

| In: Kruibeke, Belgium  On:  For  Name: Frederik Wouters  Function:  Signature | In:  On:  For……  Name……  Function……  Signature…..  For approval, [name and signature] |
| --- | --- |