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Institute of Plasma Physics of the CAS, v.v.i.

Dept. Research Centre for Special Optics and
Optoelectronic Systems TOPTEC
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Micos Engineering GmbH Contract no. M056CO18112002

with

Institute of Plasma Physics of the CAS, v.v.i.

Dept. Research Centre for Special Optics and Optoelectronic Systems TOPTEC

FLORIS Telescope Phases B2 and C/D

## CONTRACT

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Micos Engineering GmbH (hereinafter called "Micos"),

whose Registered Office is at: Sackmatt 10a 6242 Wauwil Switzerland

acting through its Office located at:

Überlandstrasse 129 8600 Dübendorf Switzerland

represented by Mr Roman Schönbächler - Managing Director,

of the other part,

and

Institute of Plasma Physics of the CAS, v.v.i.

Dept. Research Centre for Special Optics and Optoelectronic Systems TOPTEC (hereinafter called "the Contractor" or "TOPTEC"),

whose Registered Office is at:

Za Slovankou 1782/3 182 00 Praha Czech Republic

represented by RNDr. Radomír Pánek, - Director of the Institute,

the following has been agreed:

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#### Whereas:

Earth Explorer missions form the science and research element of ESA's Living Planet Programme. The Earth Explorers missions focus on the atmosphere, biosphere, hydrosphere, cryosphere and the Earth's interior with emphasis on the interactions between these components and on the impact that human activities have on the Earth's processes.

The Earth Explorer 8 (EE8) is a "Fast Track" (formerly known as Opportunity) Earth Explorer mission. Fast Track - Opportunity Missions are defined as having focused scientific goals and ability to react quickly to evolving needs and requirements. In the Earth Explorer line they are complementary to Core Missions defined as major missions led by ESA to cover primary research objectives as set out in the Living Planet Programme. Earth Explorer 8 is the 4th Fast Track Mission of the Earth Observation Envelope Programme.

The Earth Observation Programme Board approved FLEX (Fluorescence Explorer) as the EE8 mission at its meeting on 18 & 19 November 2015.

The FLEX mission will quantify photosynthetic activity and plant stress by mapping vegetation fluorescence. It will advance our understanding of the functioning of the photosynthetic machinery and the actual health and performance of terrestrial vegetation. The monthly global maps will have an on-ground spatial resolution of  $300\times300$  m2 with a swath width of 150 km. The FLEX mission concept foresees a small satellite flying in tandem with Sentinel-3.

The FLEX space segment consists of a single satellite carrying the Fluorescence Imaging Spectrometer – FLEX Instrument - (hereinafter FLORIS) push broom instrument, subject of this Contract. This high-resolution imaging spectrometer will acquire data in the 500–780 nm spectral range, with a sampling of 0.1 nm in the oxygen bands (759–769 nm and 686–697 nm) and 0.5–2.0 nm in the red edge, chlorophyll absorption and Photochemical Reflectance Index bands.

The procurement approach for the FLEX mission is characterized by two distinct and successive steps:

- first, a procurement action in open competition covering the technologically challenging FLORIS;
- second, a procurement action, independent from this first step, in open competition covering the FLEX Satellite and Prime Contractor activities, including the Platform, planned to be released during the first quarter 2017. This second contract, subject to successful negotiation, will eventually subsume the instrument contract (and the contract in subject) by novation (placement of such contract currently foreseen in the 4th quarter of 2017).

The Earth Observation Envelope Programme hereinafter referred to as "the Envelope Programme", is the backbone for implementing the Living Planet Strategy and the related selected Missions and is an optional Programme of the Agency.

Leonardo has signed a contract with ESA, for the FLEX Instrument (hereinafter FLORIS) Phases B2, C/D and E1, accepting to see its rights and obligations under this contract novated under the FLEX Satellite Prime contract.

The activities, which are the subject of this Contract, are related to the development, design, manufacturing, integration, testing and verification activities of the Telescope to be integrated in FLORIS PFM model.

Micos and TOPTEC have submitted a tender ref. B0510F17122602, dated 22/1/2018 in response to the Leonardo's Invitation To Tender AO130155, for the Telescope for FLORIS Phases B2, C/D, accepting to see its rights and obligations under this contract novated under the FLEX Satellite Prime contract Micos signed a contract with Leonardo and now is going to sign a subcontract with TOPTEC.

Detailed negotiation has been conducted on the above-mentioned proposal with the Contractor, as reflected in the Minutes of Meeting ref. FLX-MIN-FNM-INS-0074 Rev. 1 dated 2-3/05/2018.

Now therefore, the Parties hereto have agreed as follows:

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## ARTICLE 1 OBJECTIVES AND DOCUMENT OUTLINE

## 1.1 SUBJECT OF THE CONTRACT

The Contractor shall perform the design, development, qualification and delivery for integration into FLORIS and then to the Satellite of the Telescope, supporting equipment, hardware, software and documentation, as defined in Appendix C hereto, in full support up to the successful Acceptance Review of the Telescope as defined into the section 11.3 of Generic SOW in the Appendix C hereto, in accordance with the tasks description and the requirements of this Contract (hereinafter referred to as the "Contract") as further detailed by B051OF17122602 as well as in Appendix C section "Summary of TOPTEC's scope of work and document deliverables", and deliver the items defined in the SSOW in Appendix C hereto following B051OF17122602 as well as in Appendix C section "Summary of TOPTEC's scope of work and document deliverables".

On the basis of this contract, TOPTEC will undertake manufacturing, assembly and integration and other activities that are further specified in the submitted proposal to tender ref. B051OF17122602 and agreed according to the Minutes of Meeting ref. FLX-MIN-FNM-INS-0074 Rev. 1 dated 2-3/05/2018 (i.e. the task of TOPTEC). Micos is required to comply with the terms and conditions set forth in its agreement with Leonardo, which are also described in this agreement. TOPTEC undertakes to fulfil these conditions adequately to its task, so that Micos can meet conditions set forth in its agreement with Leonardo.

In case of Post Delivery Support is required in the Specific SOW in the Appendix C hereto, the Contractor shall perform the requested activities up to the successful Satellite Qualification Acceptance Review (date is defined into the section 1.2.6 of Generic SOW in the Appendix C hereto), in accordance with the tasks description and the requirements of this Contract as further detailed by B0510F17122602, and deliver the items defined in the SSOW in Appendix C hereto following B0510F17122602.

## 1.2 PHASING

- 1.2.1 The work shall be performed in the following contractual phases, as further defined in Appendix C hereto:
  - Phase B2;
  - Phase C/D including Post Delivery Support.
- 1.2.2 The Agency/Leonardo/Micos reserves the right not to proceed with the Phase C/D.
- 1.2.3 The decision whether to proceed further or not with the subsequent phase shall be taken after completion of the preceding Phase and after acceptance, by Leonardo/the Agency/Micos, of the deliverables due under such preceding Phase. In addition, the decision to proceed or not with Phase C/D shall be subject, without being limited to, the successful the Telescope Preliminary Design Review and closure of all related actions.
- 1.2.4 Micos will not assume financial liability for Phase C/D work performed by the Contractor unless prior authorisation to commence the relevant phase has been notified, in writing, by Micos' representatives nominated in Clause 5 of Article 5.
- 1.2.5 This notwithstanding, the Contractor will, during Phase B2, use its best efforts to ensure that the Deliverables or part thereof covered by the Phase C/D are completed by no later than any planned completion date specified in the Statement of Work. In particular, but not exclusively, the Contractor hereby undertakes, subject to prior written approval of Micos, to start to perform any activity related to phase C/D at any time that shall be required in order to timely meet the delivery dates agreed with Micos.
- 1.2.6 Should the Agency/Leonardo/Micos decide not to proceed with the work at the end of Phase B2, Micos shall not be obliged to pay the compensation foreseen in Clause 31.3 of the General Clauses and Conditions for ESA Contracts unless Micos itself gets paid.

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## 1.3 APPLICABLE DOCUMENTS

The work shall be performed in accordance with the specific articles of this Contract and with the following Appendices, which constitute an integral part hereof (The Contractual Baseline) and are listed in order of precedence in case of conflict:

#### This Contract

- o Appendix A: Financial Appendix (including Payment Plans and Advance Payment(s) and other Financial Conditions);
- Appendix B: The General Clauses and Conditions for ESA Contracts (herein referred to as GCC), reference ESA/REG/002, rev. 2 not attached hereto but known to both Parties and available on http://emits.sso.esa.int/emits/owa/emits.main - "reference documentation" -"administrative documents", as amended by this Contract;
- Appendix C: Leonardo's Generic Statement of Work FLX-SOW-FNM-INS-0001 Rev 2 (GSOW) and Specific FLX-SOW-FNM-INS-0004 Rev3 (SSOW), its Annex and Applicable Documents (ADs) (the latter are quoted in Appendix C - Specific Statement of Work section 2.1). SSOW if contradictory to the GSOW, shall prevail;
- Appendix C: Minutes of Negotiation Meeting (including agreed WPDs, key personnel, PSS forms etc) ref. FLX-MIN-FNM-INS-0074 Rev. 1;
- Micos / TOPTEC Proposal ref. B0510F17122602 (not attached hereto but known to both Parties):
- Micos Design Specification ref. FLX-DS-MCS-TEL-0001 (not attached hereto but known to both Parties);
- Appendix D: Agency's Procedure for the Selection of subcontractors and the Best Practices for the Selection of Subcontractors by Prime Contractors in the Frame of ESA's major Procurements (ref: ESA/IPC(2012)65,rev.2): Applicable only for chapter VII (Ombudsman) and Appendix 2 (Code of conduct) (not attached hereto but known to both Parties);
- Appendix E: The Contractor's List of Background IPR;
- Appendix F: Contract closeout certificate, including inter alia the Statement of Invention and List of Fixed Assets;
- Appendix G: N.A.;
- Appendix H: Inventory/fixed asset record;
- Appendix I: CCN template;
- Appendix J: N.A.;
- Appendix K: Milestone Achievement Certificate (MAC) template;
- Appendix L: N.A.;
- Appendix M: Procurement and Financial Report template.

For the avoidance of doubt, reference herein to a document shall be deemed to constitute a reference to such document including its specific applicable documents and its appendices/annexes.

The contractual baseline is the current agreed issue and revision status of this Contract and its appendices. The issue and revision status of the contractual baseline shall be kept up to date as required by means of the agreed change procedures defined in Article 5, Clause 13 hereinafter.

The Contractor shall not deviate from these requirements until formally authorized to do so in writing by Micos.

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## 1.4 THE CONTRACTOR'S OBLIGATIONS

#### 1.4.1 General

1.4.1.1 In view of the present contract being subsumed within the FLEX Satellite Prime Contract under Leonardo and Leonardo under the FLEX Satellite Prime Contractor to be selected in a second step through a separate and independent procurement action, the Contractor shall:

at ESA/Leonardo/Micos first demand, agree to modifications due to the contract novation at ESA/Leonardo/FLEX Satellite Prime level, as the FLEX Satellite Prime may need to adapt. In addition, the present Contract identifies any surviving rights of the Agency and, where necessary, the tailoring of the FLEX Satellite Prime Contractors' rights with respect to the original Agency's rights under the Contract, as further detailed in Article 5 below; and in order to guarantee a fair selection of the FLEX Satellite Prime Contractor, commit to grant equal and neutral conditions to all potential FLEX Satellite Prime Tenderers approaching him for the constitution of their consortium and the preparation of their offers, for any additional tasks that would be deemed necessary by Leonardo/Micos and/or the potential FLEX Satellite Prime Tenderers and/or eventual Contractors.

- 1.4.1.2 The Contractor undertakes to perform, in accordance with the requirements of this Contract all tasks necessary for the successful completion of the activities foreseen under the Contract, except those tasks, which are specifically stated to be undertakings of Leonardo/the Agency/Micos and to deliver all the deliverables specified in the Specific SOW in Appendix C to this Contract as further detailed by B051OF17122602.
- 1.4.1.3 The Contractor shall provide the necessary professionally qualified personnel, material, equipment, services and facilities, except those specifically mentioned in section 1.4.3 as being undertakings of the Agency, to perform the work under the present Contract (the task of TOPTEC), including any other activity required for the execution of the Project (task of TOPTEC) up to and including the successful completion of the Qualification (Acceptance) Review (QR) of the Telescope, as defined in section 11.3 of GSOW in Appendix C hereto and any other activities reflected in Leonardo's and Micos' requirements, in accordance with the provisions of this Contract and its Appendices and shall deliver to Leonardo the items as required therein (e.g. Post Delivery Support as required in the Specific SOW in the Appendix C hereto).
- 1.4.1.4 Any insurance which may be taken by the Contractor to cover his liabilities hereunder shall include a provision of non-recourse against Micos/Leonardo/the Agency/The FLEX Satellite Prime or their agents, with the exception of negligence or wilful act. The Contractor shall indemnify Micos and hold Micos/Leonardo/the Agency/the FLEX Satellite Prime harmless against all consequences derived from his failure to include such a provision.

## 1.4.2 Particular provisions

In the discharge of his obligations under this Contract, without prejudice to the relevant clauses of the ESA GCC, the Contractor shall additionally:

- i. exercise an effective, transparent and economic management, including inventory management;
- ii. make use of material, including applicable documentation, hardware and software, developed for other projects of the Micos/Leonardo/the Agency/FLEX Satellite Prime and, following agreement on the specifications, shall accept the technical and financial responsibility for such use as though developed by himself;
- iii. afford and ensure to Micos/Leonardo/the Agency/FLEX Satellite Prime full visibility and timely information (on request) into the performance of the Contractor tasks, the selection of his subcontractors, the management of his subcontractors and the performance of their tasks; this shall include access to all documentation associated with the execution of the project;

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iv. afford to Micos/Leonardo/the Agency/FLEX Satellite Prime the right to participate in negotiations with such subcontractors;

- v. demonstrate to Micos/Leonardo/the Agency/FLEX Satellite Prime that Leonardo's requirements are met and the manner in which they are met. The Contractor shall not conclude waivers or deviations without first obtaining the approval of Micos;
- vi. notify Micos of all changes notified to him by subcontractors even if the Contractor considers that such changes have no impact on this Contract and Micos' requirements;
- vii. hold meetings and reviews as specified in Appendix C and accept that Micos/Leonardo/the Agency/FLEX Satellite Prime may participate in all formal progress meetings and reviews, at all levels of contracting, and shall be timely invited to any formal meetings and reviews;
- viii. anticipate the risks associated with the implementation of the tasks, their planning and costs, and define and implement mitigation actions to minimize risk materialisation;
- ix. n.a.
- x. ensure a swift time to contract and payment process of its subcontractors through the contractual chain and comply with relevant reporting conditions of the contract.

#### 1.4.3 Coordination activities

The Agency will be responsible for the co-ordination of any and all related activities with the following parties:

- Scientific bodies, including any advisory group;
- FOS and PDGS groups;
- User and Ground Processor Level 2 and Level 3 groups;
- Entities referred to herein and any other party connected with the mission not specified herein;
- all establishments of the Agency with the exception of the Test Facilities;
- the launch service providers and the launch site authorities for the baseline tasks as described in Appendix C hereto.

In the discharge of his obligations under this Contract, the Contractor shall not make, unless expressly authorised to do so by the Representatives of the Agency as identified under in Article 5, Clause 5, direct contact with the parties identified here above.

## 1.4.4 Additional technical assistance

In addition to the baseline activities, the Contractor shall provide such technical support as may be required by Micos/Leonardo/the Agency/FLEX Satellite Prime, on terms no more onerous for Micos/Leonardo/the Agency/FLEX Satellite Prime than those on which similar work is undertaken under the terms of the present Contract, to be agreed between the Parties following the procedure foreseen in Article 5, Clause 13.

In that frame, the Contractor shall, upon fairly request by Micos/Leonardo/the Agency/FLEX Satellite Prime, undertake, amongst others any post-delivery and post-launch support activities (if not specifically requested in the Specific SOW in Appendix C hereto) maintaining knowhow and records until IOCR.

## 1.5 PREVIOUS CONTRACTS - NO UNDERTAKINGS

No previous and/or parallel Micos/Leonardo/FLEX Satellite Prime/ESA contracts shall entail any liability or implicit obligation whatsoever for TOPTEC with respect to their output or impact on the performance of FLORIS or parts thereof.

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## **ARTICLE 2 DELIVERY**

## Place and Dates of Delivery/Delivery Requirements

Part 1 Clause 14 of the ESA GCC is amended/complemented as follows (see also Article 5 Clause 14 below):

- Engineering Model Items / Flight Items

Delivery of Telescope OM(R), EM and PFM by the Contractor shall take place upon successful completion of the Preliminary Acceptance / successful completion of sub-system Delivery Review Board (DRB) as defined in section 11.4 of GSOW in Appendix C hereto, releasing the consent to ship and successful Post-Delivery Inspection at Micos premises (Überlandstrasse 129, 8600 Dübendorf, Switzerland).

The physical delivery shall take place immediately after the Consent to Shipment as defined in Article 5 Clause 16 herein.

The items, other than the ones specified in Specific Statement of Work (SSOW) to Appendix C of this Contract, shall be available as necessary to meet programme schedule requirements described therein or in accordance with Micos/Leonardo/the Agency's/ FLEX Satellite Prime instructions and; shall in any case be delivered in Europe, within 6 months following the launch of the FLEX Satellite, or shall be handled as per Micos/Leonardo/the Agency's/ FLEX Satellite Prime instructions, or shall otherwise be disposed of in accordance with the provisions of Article 4 below.

Residual items, not specified in Specific Statement of Work (SSOW) to Appendix C of this Contract and covered by Article 4 shall be delivered to ESTEC within 6 months following the launch of the FLEX Satellite, or shall otherwise be disposed of in accordance with the provisions of Article 4 below.

For the purpose of Clause 14 to the General Clauses and Conditions, delivery, for all items (hardware, software and documentation) other than the PFM Subsystem shall be deemed effected after acceptance by Micos/Leonardo/the Agency as defined in Clause 16 and actual physical delivery.

Documents

The documentation specified in the Specific Statement of Work (SSOW) to Appendix C to this Contract shall be delivered as defined therein as further detailed by B051OF17122602 and as specified in Appendix C section "Summary of TOPTEC tasks and deliverables".

Contract Closure Documentation

The Contract Closure Documentation (Appendix F and its Annexes) shall be delivered in one (1) set of documentation each, to Micos' authorised representatives not later than the time of submitting the invoice(s) for the Final Settlement (see also Article 3.2.2).

## ARTICLE 3 PRICE & PAYMENT

Part 1 clauses 27, 28 and 29 are implemented/complemented as follows:

## 3.1 PRICE TYPE

The price type of this Contract is:

a) Phase B2 (including advanced C/D activities):

Firm Fixed Price (FFP), as defined in Section 2.1 of Annex II to the General Clauses and Conditions for ESA Contracts, including advanced Phase C/D activities and Long Lead Items (LLI).

b) Phase C/D (including Post-Delivery Support):

Firm Fixed Price (FFP), as defined in Section 2.1 of Annex II to the General Clauses and Conditions for ESA Contracts.

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## 3.2 PRICE OF THE CONTRACT

The price of this Contract is expressed solely in EURO.

The total price of this Contract amounts to:

(Six hundred Twenty-three thousand Four hundred Sixty-six EURO)

broken down per Phase as follows:

a) Phase B2:

The total price for Phase B2 is:

45.414,00 EUR (FFP),

b) Phase C/D and Post-delivery support:

The total price for Phase C/D is:

578.052,00 (FFP),

Within the above stated price, the following item shall upon its acceptance by Leonardo become ESA Fixed Asset (until integration):

	Telescope PFM model
Fixed Asset	Telescope OM(R) model

Within the above stated price, the following item shall upon its acceptance by Micos become Micos Fixed Asset:

Fixed Asset	EM Telescope

Micos will loan EM Telescope to Leonardo only in case PFM Telescope schedule delay as mitigation action.

Micos/Leonardo may decide that certain items produced or purchased under the Contract during its implementation (see Article 4 below) shall become ESA Fixed Assets. Such items shall be added to the above list through the means of a Contract Change Notice.

- c) Options
  - Option#1, One-year Warranty extension:

9.964,00 Euro (FFP)

The validity of the Option#1 is until Final acceptance of the Telescope

• Option#2, Flight Spare Kit to be delivered 4/11/2019:

38.118,00 Euro (FFP)

The validity of the Option#2 is until 17/9/2018

#### 3.2.1 Taxes

The above amount does not include any taxes or duties in the Member States European Community.

The price is deemed to include all applicable fees for licences to be purchased and delivered in the frame of the Contract, indicating the Agency as the end user. The price is further deemed to include any and all licence fees payable according to Clause 43.7 of the GCC.

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#### 3.2.2 DDP

The price is Delivered Duty Paid for all deliverables, exclusive of import duties and VAT in accordance with the INCOTERMS 2010, to the addressee(s) specified in Article 5, Clause 5, Sub-Clause 5.1 a) of the Contract. Reference to INCOTERMS in this provision is exclusively for the purpose of price definition.

- 3.2.3 N.A.
- 3.2.4 N.A.

#### Price Level and Price Type 3.2.5

Unless otherwise stated in Appendix A to the Contract, all Fixed Prices with variation are at July 2016 price levels and are subject to adjustment by application of the price variation formulas contained in Appendix A.

#### Price Changes: 3.2.6

A change in the price, or in the apportionment of the price as set forth in Appendix A hereto, can only be made in accordance with the change procedure defined in Article 5, Clause 13 hereto.

## 3.3 PAYMENT

#### 3.3.1 General provisions

NOTE: Micos' payment obligations identified hereto (Sub-Clauses 3.3.1 to 3.3.6 inclusive) shall be adapted at the time of the Micos/Leonardo/ESA/FLEX Satellite Prime Contract novation to reflect the payment scheme adopted for the FLEX Satellite Prime Contract. The Payment Plan and advance payment off-setting conditions applicable to this Contract are specified in Appendix A hereto.

The advance payment(s) constitutes a debt of the Contractor to Micos until it has been set-off against subsequent milestone(s) as shown in Appendix A hereto.

In the event that the achievement of a milestone is delayed but the milestone is partially met at the milestone planning date foreseen, Micos may as an exception, effect a payment against an approved confirmation of the partially achieved milestone, not exceeding the value of the work performed at the date of payment and reduced by any advanced payment made to be off-set against the relevant milestone.

Payments shall be made within thirty (30) calendar days from invoice and MAC approval from Micos of the documents listed and fulfilment of the requirements as specified in 3.3.2 below. Only upon fulfilment of these requirements shall the invoice be regarded as due by Micos.

Micos shall be under no obligation to pay an invoice should the Contractor and Micos together not agree that the milestone is achieved.

Payments shall be made by Micos in EURO to the account specified by the Contractor. Such account information shall clearly indicate the IBAN (International Bank Account Number) and BIC/SWIFT (Bank Identification Code). The Parties agree that payments shall be considered as effected by Micos on time if Micos' orders of payment reach Micos' bank within the payment period stipulated in the paragraph above.

The Contractor, furthermore, undertakes to provide further supporting documentation as required by the Contract, with the invoices and confirmations in support of the claims (see also Clause 3.3.3 below).

Any special charges related to the execution of payments will be borne by the Contractor.

If applicable, invoices shall separately show all due taxes or duties.

Invoices submitted by the Contractor, which are free of VAT due to the applicable national law, shall make reference to the relevant piece of national legislation.

Requirements for Advance Payment Requests (APR) and invoices being regarded as due:

Advance Payment (if applicable):

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- Advance Payment Request (APR): to be submitted after signature of this Contract by both Parties.

## <u>Progress Payment(s):</u>

- Milestone Achievement Confirmation (MAC) hereinafter referred to as "confirmation" with supporting documentation sent together with the invoice. The supporting documentation as described in Clause 3.3.3 below shall justify the actual achievement of the milestones as defined in the Payment Plan specified in Appendix A hereto.

- Invoice(s);

## Final Settlement:

- MAC, with supporting documentation as described in Clause 3.3.3 below sent together with the invoice. The supporting documentation shall justify the actual achievement of the milestones as defined on the Payment Plan Specified in Appendix A hereto; and
- Invoice(s); and
- Receipt and/or acceptance, by Micos, of all deliverable items, of the services to be rendered and other obligations to be fulfilled, in accordance with the terms of this Contract;
- The Contract Closure Documentation using the template provided in Appendix F and its Annexes. In case of non-authorisation by Micos/Leonardo/the Agency at the end of a Phase to proceed with

the subsequent Phase, the last payment milestone of the last authorised Phase shall be deemed to constitute the Final Settlement of the Contract and all conditions associated to the Final Settlement shall be fulfilled for payment of such milestone.

## Implementation of payments conditions

Micos shall credit the account of the Contractor to the Contractor's benefit and to the benefit of the Contractor's Subcontractors/suppliers.

The Contractor shall also be responsible for paying the accounts of its Subcontractors/suppliers for this Contract in accordance with the applicable law and normal commercial practices.

## The Contractor shall be responsible for:

- Approving or rejecting Subcontractors' invoice and MAC (for Subcontractors who are paid directly by the Contractor) within 5 (five) working days from their submission and receipt (invoice with MAC together with the related supporting documents), whichever the latter, provided that the relevant milestone has been achieved. The date of submission of both MAC and related invoice for processing is defined as the Working day following the latest day of receipt by the Contractor of the MAC and of the related invoice submitted by the Subcontractors. In view of this, both MAC and related invoice shall be submitted for processing by the Contractor at the same time (same day) by the Subcontractors; Working days are all days the Contractor is in operation.
- Paying the accounts of its Subcontractors paid directly by the Contractor, for this Contract, within 30 (thirty) calendar days from the approval of invoice and MAC (invoice with MAC together with the related supporting documents), whichever the latter, provided that the relevant milestone has been achieved.
- The Contractor shall indemnify Micos/Leonardo/the Agency/FLEX Satellite Prime against any claims arising from Subcontractors, caused by the Contractor's failure to pay the Subcontractors. The Contractor shall supply to Leonardo, upon request, evidence of payments made to its Subcontractors.
- Micos/Leonardo/the Agency/FLEX Satellite Prime reserve the right to visit the Contractor's and/or Subcontractors' premises and ascertain the progress of the work being performed under the Contract, prior to making the progress payment concerned.

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- The Contractor shall, upon request at any time by Micos, submit the payment conditions provisions of individual subcontracts to Micos for approval (if requested before subcontract is placed) or verification.

- Complete visibility shall be furthermore afforded to Micos as to the dates of invoicing, Milestone achievement dates and payment dates, or any information related thereto.
- To this end, the Contractor shall supply quarterly to Micos, and/or upon request, evidence and date of MAC/invoice approval and payments made to the Subcontractors at any level with the corresponding Milestone achievement date, invoice date and actual payment date (e.g. in the form of extract from the relevant Subcontractor accounting system). See also Clause 3.3.3 a)ii) below.
- The Contractor shall flow-down the above provisions to all levels of subcontractors properly tailored in order to meet his obligations as specified hereinabove.

## 3.3.3 Supporting Documentation

The Contractor undertakes to provide further supporting documentation as required by the Contract, with the invoices and MACs in support of the claims.

- i. For each payment a Milestone Achievement Confirmation (MAC) is required by Micos as per the conditions of Clause 3.3.2 above. The MAC shall be submitted by the Contractor's Project Manager, certifying that the claim is correct, that the milestone has been achieved and is commensurate with the stage reached in the programme. Supporting documentation, like Minutes of Meeting or other documents demonstrating the achievement of the milestone shall be provided in support of the MAC as necessary. The milestone achievement may be audited by the Leonardo.
- ii. Furthermore, the Contractor shall provide quarterly the following (where sub-contractors are applicable):
  - Dates of the invoicing and payment status of invoices for Subcontractors milestones achieved in the current quarter and the previous ones;
  - Forecast of milestones to be achieved and/or invoiced in the succeeding quarter;
  - Reporting on cash-flow of subcontractors and PATPs, as needed;
  - Reporting on (calculation of) escalation for any level, based on achievement of payment milestones (if applicable).

NOTE: The Contractors shall use and fully and duly complete the Procurement and Financial Report template referenced in Appendix M hereto.

With a view to optimise time to payment and to facilitate, when needed, the resolution of issues arising in the payment process of Subcontractors the Agency has established a centralised email address.

Should any subcontractor (i.e. TOPTEC) encounter serious difficulties in the process leading to:

- i. payment of invoices due which is to be paid by its direct customer (not through ESA), i.e. related to a milestone already achieved,
- ii. contractual coverage of activities already kicked-off, they may contact the Agency at:

This communication channel does not replace the normal communication lines within the consortium, and the overall responsibility of the Prime Contractor to ensure proper and timely contractualization and payments throughout their consortium remains. Any entity contacting the Agency through the above email shall document the steps already taken towards its direct customer in order to resolve the issue and shall document that the Prime has been informed of the issue.

In doing so, such subcontractor shall provide the Standard Contact Form available at: http://emits.sso.esa.int/emits-doc/ESTEC/Indirect-PaymentsQuery-Form.docx properly filled in or provide the same information in the email.

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3.3.4 Absence of user account for esa-p

N.A.

3.3.5 In case of esa-p not being operative

N.A.

3.3.6 Questions related to the esa-p system

N.A.

## 3.3.7 Payment of agreed Change Notices

Will be made in accordance with the payment plans established and approved for each Change Notice. Such payments plans shall be submitted with the Change Notice and shall be synchronised, as far as possible, with the payment plans already defined in Appendix A hereto.

## 3.3.8 Penalty

In accordance with the provisions of Article 5, Clause 17 below, should Micos decide to apply a penalty, the Contractor shall submit an invoice of the amount corresponding to the milestone concerned reduced by the Penalty Amount in accordance with the calculation conditions of ESA GCC. The Contractor shall also send a Confirmation documenting the achievement of the milestone and the Penalised Amount incurred.

3.3.9 N.A.

## 3.3.10 Milestone not achieved or partially achieved

In cases where the milestone is not achieved or partially achieved Micos may, at its discretion, withhold payments in part or in full until such time that the milestone has been achieved. Such withholding of payment shall not give rise to any claim from the Contractor concerning financial losses due to such withholding.

#### 3.3.11 Payment of Price Revision (if applicable)

Price revision adjustments of the Fixed Price to take account of changed economic conditions shall be made by applying the relevant price revision provisions contained in Appendix A. The financial basis for revisions shall be the nominal amount of the milestone payment.

When claiming price revision, the amount of escalation shall be invoiced only after achievement of the corresponding milestone and no later than six (6) months after that achievement. It is hereby noted that partial escalation on partially achieved milestones is now allowed.

The calculation of the price escalation invoice shall be based on the published price indices reflecting the nominal escalation period between milestones and shall be calculated using the relevant agreed price revision formula as shown in Appendix A.

After completion of the last payment milestone of the relevant milestone payment plan and upon availability of the published final index values for the last milestone, the Contractor shall submit its final recapitulative invoice or credit note for the price revision corresponding to all the milestones of that milestone payment plan with the supporting evidence and showing any credits or debits.

When claiming price revision, the invoice documents shall include sufficient evidence of correct application of the price revision formulae. The supporting evidence may be submitted separately of the invoices.

If the Contractor is late in meeting the nominal date agreed for achievement of a milestone, the price revision shall apply to the nominal and not to the actual achievement date of the milestone.

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## ARTICLE 4 MANAGEMENT AND CONTROL OF INVENTORY ITEMS/FIXED ASSETS UNDER THE CONTRACT

i. The following provisions apply to any items other than those items which fall within the scope of Article 2 and Appendix C of the Contract.

The Contractor shall specify, record, manage and control any and all Customer items and ESA Fixed Assets under Construction (reference is made to Article 3.2 above) that are subject of this Contract. Such items are: items produced or purchased under the Contract, including electronic components, special jigs, tools, test equipment, and which are paid for under the Contract with an individual or batch value (value of group of items) in the national currency equivalent to, or above 5,000 Euro;

- ii. items identified as becoming ESA Fixed Assets in Article 3 above or in a subsequent CCN;
- iii. if any, Customer Furnished Items (see Article 5 Clause 11 of the contract) and/or Items made available by Micos (see Article 5 Clause 12 of the contract).

The Contractor shall operate an inventory control system of all above mentioned items and shall mark them as falling under this Article of the Contract.

The Inventory Control System shall:

- record the existence, location, operational status and condition of all inventory items, and
- record the value and estimated life duration of all inventory items, and
- record changes in inventory value, and
- enable financial reconciliation to be made and status reports to be prepared for incorporation of the relevant data into the Agency's annual financial accounts.

The Contractor shall, as part of the Inventory Control System, maintain an Inventory/Fixed Asset Record (in an electronic tool of his choice) which shall, as a minimum, contain the information as shown in Appendix H to this Contract.

The Inventory/Fixed Asset Record shall be kept updated by the Contractor. It shall be made available to Leonardo upon request but as a minimum yearly during the execution of the Contract (and at completion of each Project Phase as per ECSS-MST-10 if applicable). A final consolidated record shall be submitted with the final contractual deliverables as described in SSOW under Appendix C hereto, as foreseen in Appendix H to this Contract.

If the Inventory/Fixed Asset Record also includes any of those items which fall within the scope of Article 2 of the Contract, these items are to be clearly set apart.

Upon completion of the work specified in the Contract and at the latest six months after the launch of the FLEX Satellite hosting FLORIS, Micos/Leonardo/the Agency shall take decisions regarding the final destination and final ownership of each item listed in the Record. Micos/Leonardo/the Agency shall be free to choose amongst the following options with respect to final destination and final owner of each such item:

- a) the right to claim delivery to Micos/Leonardo/the Agency and transfer of ownership (the latter if applicable) - with issue of appropriate instructions concerning packing and shipment (at the Contractor's expense),
- b) the right to claim or retain ownership and to negotiate with the Contractor a loan agreement if the Contractor is interested in keeping and using an item, with loan conditions making the Contractor responsible for the custody, the delayed delivery and the risks involved (at the Contractor's expenses),
- c) the right to extend the custody of an item to the Contractor and to postpone its delivery to Micos/Leonardo/the Agency and the associated transfer of ownership on conditions to be negotiated,
- d) the renunciation of any rights to claim delivery and to claim transfer of ownership, leaving definitively the item in the possession and in the ownership of the Contractor, with or without financial

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compensation for Micos/Leonardo/the Agency (e.g. repurchase by the Contractor) and with or without special instruction,

e) the right to request the Contractor to dispose of an item on conditions to be negotiated.

Should Micos/Leonardo/the Agency decide to transfer an ESA Fixed Asset to a third party or to dispose of the Fixed Asset, the Contractor shall provide the full inventory information of the Asset to Micos/Leonardo/the Agency and complete the transfer or disposal forms to be provided by Micos upon request by the Contractor. The information to be given by the Contractor in the forms shall be agreed with Micos/Leonardo/the Agency.

The decisions taken by Micos/Leonardo/the Agency shall lead to instructions or negotiations, as the case may be and the results shall be recorded in the relevant sections of the Contract Closure Documentation (CCD) as found in Appendix F of the contract. The CCD shall not be finalised and signed before a disposition of all items has been given by Micos/Leonardo/the Agency and recorded in the documentation.

Labelling and physical inspections, if any, shall be performed as detailed hereunder:

## - Labelling:

ESA Fixed Assets in the custody of the Contractor shall be labelled as ESA Fixed Assets.

The Contractor shall grant access to Micos/Leonardo/the Agency's representative to perform labelling of ESA Fixed Assets following a five (5) days prior notice.

The Contractor shall make the ESA Fixed Assets accessible to Micos/Leonardo/the Agency's representative. The access shall allow the label to be affixed in a visible, easily accessible and identifiable place where it cannot be damaged or destroyed.

The Contractor shall make its personnel available to support the labelling upon request by Micos/Leonardo/the Agency.

## - Physical Inspection:

The Contractor shall allow Micos/Leonardo/the Agency/FLEX Satellite Prime representatives to perform a physical inspection, as a minimum once every two years, of each ESA Fixed Asset that is under the Contractor's and /or subcontractor's custody in the frame of the present Contract and/or subsequent Loan Agreement if any.

The Contractor shall grant access to the ESA Fixed Assets, enabling Micos'/Leonardo's/the Agency/FLEX Satellite Prime representative to perform an inspection that allows to:

- verify the existence, location, operational status and conditions of the Fixed Asset as well as its suitable safeguarding.
- o confirm the existence and condition of the ESA label on the Fixed Asset
- o confirm the completeness and accuracy of the asset documentation (Inventory/Fixed Asset Record)

The Contractor shall make its personnel available to support the inspection upon request by Micos/Leonardo/the Agency/FLEX Satellite Prime.

Micos/Leonardo/FLEX Satellite Prime shall notify the Contractor about the inspection at least 14 (fourteen) calendar days in advance.

## ARTICLE 5 COMPLEMENTS AND AMENDMENTS TO THE GCC

The General Clauses and Conditions for ESA Contracts, ref. ESA/REG/002. REV 2 (GCC) apply to this Contract with the following complements and amendments, which shall prevail:

As described in Article 1.4 above, as from the Contract Novation, references in the "GCC" and in the specific provisions of this Contract to "The Agency" shall be replaced by references to the future FLEX Satellite Prime Contractor/Leonardo/Micos except with respect to the rights/undertakings identified under Articles 1.4.3, above, in Article 5 Clauses 6, 8.3 & 8.4, Part II (see also below) and Annex I, as well as Clause 15 ownership

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of the FLEX PFM Sub-systems and of other defined in SSOW in Appendix C deliverables, which shall be exercised exclusively by the Agency; or unless otherwise stated herein.

The reference in Article 1.4.2 (vi) Article 5, and Article 6.3 iii, is meant to remain to "Micos".

With respect to Articles, 1.4.2 (ii), (iii), (iv), (v) and (vii), 1.4.4, 3.2.1, Article 5 Clauses 15.3.6, and 17, Article 7 they shall be exercised in collaboration or alongside between the Agency and Micos/Leonardo/FLEX Satellite Prime Contractor or for Article 4, through Micos/Leonardo/FLEX Satellite Prime Contractor.

In relation to Article 1.4.1.4 and Article 5, Clause 15, the provisions of non-recourse within the Insurance policies shall also be maintained towards Micos/Leonardo/the Agency/FLEX Satellite Prime.

Micos' payment obligations identified hereto in Sub-Clauses 3.3.1 to 3.3.6 inclusive shall be adapted at the time of the Contract novation to reflect the payment scheme adopted for the FLEX Satellite Prime Contract.

For part II, Micos/Leonardo/the Agency is granted access to and rights to use all Intellectual Property Rights under the terms and conditions of the present Contract. However, the Contractor agrees that the same rights are granted to the future FLEX Satellite Prime Contractor, to the extent necessary in order to monitor and verify the performance of the work under this Contract and, more generally, as necessary for the fulfilment of its obligations towards the Agency in the frame of the Agency Project. Unless otherwise stated, where submission to and approval from the Agency is required, this will be done through the future FLEX Satellite Prime Contractor/Leonardo/Micos for the purpose of the Contract.

It is hereby agreed that, as from the Contract Novation, regarding Background Intellectual Property Rights (BIPR):

- the Agency shall be the only entity approving them irrespectively of the novation and
- no sub-licensing rights on BIPR (including source-code) are granted to the FLEX Satellite Prime but only to the Agency; unless otherwise agreed.

## PART I CONDITIONS APPLICABLE TO ESA CONTRACTS

## **CLAUSE 2: APPROVAL AND ENTRY INTO FORCE**

For the purpose of this Contract the authorised representative of Micos Engineering GmbH is Dr. Peyman Rahnama.

## **CLAUSE 5: THE PARTIES' REPRESENTATIVES**

## **SUB-CLAUSE 5.1: MICOS'S REPRESENTATIVES**

Micos' representatives are:

a) Mr Mauro Melozzi for technical matters or a person duly authorised by him/her ("Technical Officer").
 All correspondence for technical matters will be addressed as follows:

	To:	With copy to:
Name		
Telephone No.	·	·
Fax No.	·	·
E-Mail	@micos.ch	@micos.ch
Mail Address	Überlandstrasse 129	Überlandstrasse 129
	8600 Dübendorf	8600 Dübendorf
	Switzerland	Switzerland

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b) Mr Peyman Rahnama for contractual and administrative matters or a person duly authorised by her ("Contracts Officer").

All correspondence for contractual and administrative matters (with exception of invoices as mentioned in Article 3.3) will be addressed as follows:

	То:	With copy to:
Name		
Telephone No.		
Fax No.		
E-Mail	@micos.ch	@micos.ch
Mail Address	Überlandstrasse 129	Überlandstrasse 129
	8600 Dübendorf	8600 Dübendorf
	Switzerland	Switzerland

## **SUB-CLAUSE 5.2: THE CONTRACTOR'S REPRESENTATIVES**

The Contractor's representatives are:

a) Mr Lukáš Steiger for technical matters or a person duly authorised by him/her ("Technical Officer"). All correspondence for technical matters will be addressed as follows:

	То:	With copy to:
Name		
Telephone No.	+420	+420
Fax No.	+420	+420
E-Mail		@ipp.cas.cz
Mail Address	TOPTEC Centre	TOPTEC Centre
	Sobotecka 1660	Sobotecka 1660
	51101 Turnov	51101 Turnov
	Czech Republic	Czech Republic

b) Mrs Jana Kovačičinová for contractual and administrative matters or a person duly authorised by him/her ("Contracts Officer").

All correspondence for contractual and administrative matters will be addressed as follows:

	То:	With copy to:
Name		
Telephone No.	+420	+420
Fax No.	+420	+420
E-Mail		@ipp.cas.cz
Mail Address	TOPTEC Centre	TOPTEC Centre
	Sobotecka 1660	Sobotecka 1660
	51101 Turnov	51101 Turnov
	Czech Republic	Czech Republic

## **CLAUSE 9: KEY PERSONNEL**

The Contractor's key personnel are:

Mr. Lukáš Steiger: Project Manager

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Mr. Radek Melich: Technical Development Supervision

Mr. Vít Lédl: PA/QA Manager

Key personnel are defined as individuals whose skills, knowledge and/or experience are considered essential for the successful accomplishment of the Work under the Contract including higher-level management under the Contractor's Project manager even if not specifically identified in the document Project Organisation Breakdown Structure as approved by Micos.

## **CLAUSE 10: SUBCONTRACTS**

## SUB-CLAUSE 10.1 IS IMPLEMENTED/COMPLEMENTED AS FOLLOWS:

Part of the work is to be subcontracted to the subcontractors listed in Appendix A hereto.

The Contractor shall supply copies of all subcontracts including appendices for information at the time of signature of the sub-contract.

The prior written consent of Micos shall be required for any contract entered into by the Contractor with any firm(s) proposed to replace any of those listed in Appendix A for any of the activities to be performed under this Contract.

## SUB-CLAUSE 10.2 IS IMPLEMENTED/COMPLEMENTED AS FOLLOWS:

The inclusion of subcontractors shall be made by means of the Change Procedure defined in Article 5, Clause 13. The Contractor shall supply copies of all Subcontracts including appendices for information at the time of conclusion of the subcontract.

Furthermore, the following provisions shall apply with respect to subcontractors to be selected during the execution of the Contract: The full responsibility of the incorporation of a subcontractor, especially the liability as to performance and schedule requirements of the subcontracting of the work and its effects on the overall planning and performance shall be with that Contractor, into the industrial team of which a given subcontractor is incorporated, while maintaining on all other levels of contracting responsibilities/liabilities as contractually defined.

In view of the importance of the timely award and timely payment of the subcontracts placed in the frame of the above, the Contractor agrees to provide a contractual coverage in time for kick-off of selected subcontractors either on the basis of a signed contract if this can be achieved promptly after selection or on the basis of Preliminary Authorisations To Proceed (PATP), which include the release of Payment Milestones. The above provisions shall be flown down through the contractual chain at any level of subcontracting.

The Contractor shall enter into subcontracts for any of the activities to be performed pursuant to this Contract that are entrusted to any Third Party for a price higher than  $100,000 \in$ , with the exception of a) off-the-shelf items that may be the subject of purchase orders and b) items for which the Contractor can demonstrate that the individual recurring elements of the procurement are below the limit and only the sum of procuring multiple exceeds the  $100,000 \in$ . Micos reserves the right to reject a request for a purchase order when circumstances, such as e.g. the technical importance of the procurement or the high visibility of the item or any industrial policy reason would forbid a purchase order approach for the requested procurement item.

## **CLAUSE 11: CUSTOMER FURNISHED ITEMS (CFI)**

Micos will provide any items (defined in Section 10 of the SSOW in Appendix C hereto) in accordance with Clause 11 of the GCC to the Contractor.

## **CLAUSE 12: ITEMS MADE AVAILABLE BY THE AGENCY (IMA)**

It is not foreseen that Micos will make any items available to the Contractor in accordance with Clause 12 of the GCC.

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## **CLAUSE 13: CHANGES**

The template of a Contract Change Notice (CCN) is in Appendix I hereto. Clause 13 is amplified and superseded by the provisions of Article 6.

## CLAUSE 14: TIME-LIMITS FOR THE PROVISION OF DELIVERABLES AND **SERVICES**

The time limits for the provision of deliverables in Clause 14.1 are specified in Article 2 of this Contract.

## SUB-CLAUSE 14.2 SHALL BE IMPLEMENTED/AMENDED AS FOLLOWS

The Contractor shall, without delay and in any case at the latest within 48 hours of its coming to his notice or of the time when the Contractor should have come into notice, had the Contractor used its best diligence in the Contract's performance, notify and consult with Micos of any occurrence likely to affect the satisfactory performance of the Contract and in particular of the agreed schedule. At the same time, the Contractor shall analyse the impact of any such occurrence and propose corrective action, to be agreed with Micos for implementation. If within a period of ten (10) working days, the Contractor has not complied with the above, the Contractor shall be precluded from making any claim resulting from such occurrence.

## CLAUSE 15: HANDLING, PACKING AND TRANSPORT, STORAGE, INVENTORY **OBLIGATIONS, TRANSFER OF OWNERSHIP AND RISK**

Clause 15.1 is complemented as follows (Responsibility for Handling, Packing and Transport, Storage, Inventory Obligations):

The Contractor shall ensure the appropriate packing to protect the equipment from the environment conditions experienced during future transit (or storage). It is the Contractor's responsibility to define the appropriate requirements for transport (and storage) and have them implemented up to the place of delivery to the final destination.

The Contractor shall notify Micos of the pending shipment 3 working days prior to the actual shipment date.

The Contractor shall comply with such shipping instructions as Micos may give him.

The Contractor shall be responsible for the maintenance, operation, handling, storage and transport (including customs clearance, import/export licences and/or permits) of all hardware, software and documentation including Customer furnished items as well items made available covered by this Contract until launch of the FLEX Satellite and subsequent return of all items for disposal or storage in accordance with Micos' instruction referred to in Article 4.

The Contractor shall provide storage facilities for the Telescope, as needed, and all associated support equipment (required for de-storage, validation and launch) and shall maintain these items during the full storage period as appropriate, consistent with the planning defined in Appendix C hereto (Specific Statement of Work).

The Contractor shall maintain and store until the successful completion of the Satellite In-Orbit Commissioning Review (IOCR) of the FLEX Satellite on which the Instrument is embarked any equipment and software required for fault diagnosis and repair of items covered by this Contract.

Following the launch of the FLEX Satellite, the Contractor shall dispose of all items acquired under the Contract in accordance with Micos' instruction.

The following provisions are added to 15.3 Import/Export licences/authorisations and related Documentation:

For the purpose of clause 15.3.2.i) of the GCC, the Parties agree that the Contract is not dependent on items from outside ESA Member States at Contract signature. The list of such items is still under evolution and shall be provided by the Contractor, upon Micos request, during the contract execution through Contract Change Notice (CCN).

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The following provision is added as Sub-Clause 15.3.6 of the GCC: Should in the execution of the Contract a need arises to provide Leonardo with information which is subject to export control laws and regulations, the Contractor shall secure that such information is only passed on to Leonardo in accordance with the provisions of such export control laws and regulations.

The Contractor undertakes to inform Micos immediately about any issues related to export control authorisations/licences, which may have an adverse impact on his capacity to perform his obligation under this contract.

The following provisions are added to Clause 15.4 (Transfer of ownership and risk):

## A. Flight items:

Risk on the Telescope shall pass to the Micos upon successful completion of the incoming inspection following the physical delivery at FLORIS Prime Contractor premises.

The risk for damage shall lie with the custodian of the item.

Ownership of the Telescope models shall pass to Micos at final acceptance.

## B. Non-Flight Items:

Transfer of ownership to Micos in all items other than the Flight Items shall take place upon their acceptance by Micos in accordance with the provisions of Clause 16, below. Transfer of risk in these items shall, however, not occur until their physical delivery to Micos or any destination in Europe stipulated in Leonardo's instruction referred to in Article 2 upon completion of the contract as foreseen in Article 4 above.

Transfer of ownership of, and risk to, Customer Furnished Items and Items made available are regulated under clauses 11 and 12 respectively (if applicable).

## **CLAUSE 16: ACCEPTANCE AND REJECTION**

Clause 16 is complemented and amended by the following provisions:

1. Acceptance of Hardware and Software

Acceptance or rejection of the items to be delivered under the Contract shall be determined on the basis of the Contractor's evidence that the items have been constructed in accordance with the appropriate specifications and have satisfactorily concluded testing in accordance with the test plans and procedures approved by Micos in related ADs herein.

Acceptance of the Telescope EM, OM(R) and PFM including its associated supporting hardware, software and documentation and all other items covered by this Contract shall take place as follows:

- The Preliminary Acceptance of the Flight HW shall take place at successful completion of the Subsystem Delivery Review Board (DRB), as defined in the GSOW in Appendix C hereto;
   Such acceptance shall release the consent to ship.
- ii. The Final Acceptance (as defined in section 11.3.5 of GSOW in Appendix C) of the Flight HW shall take place after review of the delivered documentation (updated EIDP), closure of all actions from DRB, after successful completion of the Post Delivery Inspection (according to the procedure outlined in section 11.3.4 of GSOW in Appendix C hereto), successful integration/test of the Subsystem at Instrument level and successful completion of Sub-system Final Acceptance (AR) as defined in GSOW section 11.3.4 and closure of the actions of Qualification Review (QR) defined in the section 1.2.1.5.
- iii. Acceptance of all other items shall take place after successful completion of their DRBs, having gone through and successfully passed the individual acceptance tests and Post-Delivery Inspection (according to the procedure outlined in section 11.3.4 of GSOW in Appendix C hereto). Procedure shall be proposed by the Contractor and agreed by Micos.

## 2. Approval of Deliverable Documentation

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Deliverable documentation shall be submitted to Micos for approval or review as required in the SSOW of Appendix C to this Contract. Micos will then ascertain whether the document is in conformance with the requirements of the Contract. Documentation requiring the approval of Micos shall be reviewed within 20 working days or in accordance with the relevant Review Procedure as defined in Appendix C hereto.

In the event that Micos considers that a submitted document does not fulfil the contractual requirements, the Contractor shall, at the justified request of Micos, bring the document up to the appropriate standard at his own expense.

Micos' review, approval and acceptance of documentation to be submitted by the Contractor shall neither constitute an incremental certification of the Contractor's design nor shall it constitute release from his responsibilities before the performance of the subject of the Contract has been shown fully to comply with the specified requirements and formal acceptance has been certified by Micos.

## **CLAUSE 17: PENALTIES/INCENTIVES**

The clause is complemented as follows:

Penalty on Successful Completion of Milestone and Final Acceptance Delivery Review Board of the Telescope:

Penalty as provided for under Clause 17 of the General Clauses and Conditions shall apply as follows: Should the Contractor fail to achieve successful completion of the following Milestones not later than dates in the following table. Milestones are as defined in SSOW in Appendix C hereto.

Milestone	Date	Penalized Value [kEURO]	Note
Successful completion of the Telescope TRR OMR	KO + 9.5 months	200	-
Successful completion of the Telescope TRR PFM	KO + 17 months	420	-

A grace period of 30 (thirty) calendar days shall be apply to each penalized event. After this grace period, liquidated damages shall apply retroactively from the date of the penalized event.

For the purpose of Clause 17.1.1 of the General Conditions, it is agreed that the penalty shall apply even though the Contractor meets the required date, Micos rejects such completion with written justification. In such a case, penalty shall apply with effect from the date of rejection or from the date of such completion, whichever is the later.

No further penalty on the delivery of any other item shall be applied.

For the purpose of clause 17.1.3 second paragraph, the total amount of any penalty applied by the Contractor to its subcontractors shall accrue directly to the Contractor (if applicable).

The provisions of Clause 17 of the General Conditions, with the penalty scale included in Annex III, paragraph 1.1 shall be applied.

- In taking any decision on the application of such penalty clause or on waiving the same, the Contractor shall first require agreement of Micos/Leonardo/FLEX Satellite Prime and the Agency.
- The Contractor and any subcontractors participating in the penalty scheme described above shall not charge to Micos/Leonardo/FLEX Satellite Prime/the Agency any insurance premium to cover against any losses which may be incurred as a result of the application of this Article.
- A dedicated list of subcontractors' Penalties shall be maintained by the Contractor (if applicable).

## **CLAUSE 18: DAMAGE TO STAFF AND GOODS**

The following provision is added to Sub-Clause 18.2: The limit of liability of the Contractor under this sub-clause shall not apply in case of gross negligence and/or wilful misconduct.

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## **CLAUSE 21: SCOPE OF WARRANTY**

The following provision is added to Clause 21.1:

The provisions set forth hereafter shall apply to all Deliverables, including but not limited to all documentation, services, hardware and software items, together with the designs. The Contractor warrants that the Deliverables and services supplied under the Contract are in all respects in compliance with both the contractual requirements and with any statutory rule or regulation which may be in force at the time of delivery and free from any defects which would lead to not fulfilling the applicable performance requirements covered by the Contract.

Defect shall be deemed to also include:

- defects in material and defects due to workmanship regardless of the origin of the material;
- defects due to the design, including defects resulting from the choice of the material and/or components, if any;
- defects in the manufacturing process.

If the Contractor is not the manufacturer, the Contractor shall obtain the same warranty as specified herein from the manufacturer or extend at its own expenses this warranty by appropriate maintenance agreements, and the complete warranty will pass to Micos/Leonardo/the Agency/FLEX Satellite Prime. The Contractor shall assist and co-operate with Micos in making claims under such warranty. The warranties will not be affected by removal or relocation of the Deliverable(s).

## **CLAUSE 22: WARRANTY PERIOD**

Clause 22.1 and 22.3 are implemented as follows:

The warranty period for the PFM model Subsystems HW shall start after successful Final Acceptance described in clause 16 herein and shall end twenty (24) months after Final Acceptance or at lift-off of the FLEX Satellite hosting the Instrument, whichever the earliest.

The warranty for non-flight items shall start after acceptance of the Deliverable(s) (hardware and software) as per clause 16 herein and shall end twelve (12) months later.

Warranties shall survive inspection, acceptance and payment and shall benefit to Micos/Leonardo/FLEX Satellite Prime/the Agency, its agents, successors in interest, assigns and clients, if any.

## CLAUSE 23: PROCEDURE APPLIED IN THE EVENT OF DEFECTS OR FAILURES

The following provisions are added to Clause 23.1:

- 23.1.1 On receipt of notification of the defect, the Contractor shall indicate whether he wishes to repair or replace the item. However, after receiving the Contractor's proposal, Micos shall decide whether such supplies shall be replaced free of charge by the Contractor, whether their cost shall be reimbursed by him at replacement prices, or whether they shall be repaired or modified by him at his expense.
- 23.1.2 Micos shall determine a reasonable time limit for such repair or replacement, in the understanding that after expiration of such period, and after serving due notice to the Contractor, Micos either itself or by ways of a replacement contract, shall be entitled to correct the defect at the Contractor's expenses and to assert any other rights accruing in relation to the failure.

## **CLAUSE 27: PRICING**

Please see reposting provisions contained in Article 2 of this Contract.

Furthermore, Sub-Clause 27.3 shall not apply, unless in case of termination as per Clause 30 of the GCC.

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## **CLAUSE 33: TERMINATION IN SPECIAL CASES**

For the purpose of Clause 33.4, the Parties may only terminate the Contract in case the delay caused by the Force Majeure Event exceed 12 months or any shorter period beyond which the Telescope sub-systems could not be embarked any more on FLORIS and FLORIS could not be embarked any more on the FLEX Satellite. Clause 14.3 of the GCC shall be interpreted accordingly.

## **CLAUSE 34: APPLICABLE LAW**

The substantive law referred to in Clause 34 of the GCC is the law of Switzerland.

## **CLAUSE 35: DISPUTE RESOLUTION**

The arbitration proceedings referred to in Clause 35 of the GCC shall take place in Zurich, Switzerland.

# PART II CONDITIONS CONCERNING INTELLECTUAL PROPERTY RIGHTS FOR ESA STUDY, RESEARCH AND DEVELOPMENT CONTRACTS

For the purpose of this Contract:

- For the purpose of the FLEX Satellite Prime selection, any deliverables or documents produced up until Contract novation under the present Contract shall be made available to Leonardo for communication to the FLEX Satellite Prime Tenderers as specified in the clauses below.

Furthermore, with reference to any communication with and the transfer of all rights and obligations under the present Contract to the potential FLEX Satellite Prime, reference is also made to 1.4 above.

- Micos/Leonardo/the Agency is granted access to and rights to use all Intellectual Property Rights under the terms and conditions of the present Contract. However, the Contractor agrees that the same rights are granted to the future FLEX Satellite Prime Contractor, to the extent necessary in order to monitor and verify the performance of the work under this Contract and, more generally, as necessary for the fulfilment of its obligations towards the Agency in the frame of the Agency Project. Unless otherwise stated, where submission to and approval from Leonardo/FLEX Satellite Prime/the Agency is required, this will be done through Micos for the purpose of the Contract.

It is hereby agreed that, as from the Contract Novation, regarding Background Intellectual Property Rights (BIPR):

- the Agency shall be the only entity approving them irrespectively of the novation and
- no sub-licensing rights on BIPR (including source-code) are granted to the FLEX Satellite Prime/Leonardo/Micos but only to the Agency; unless otherwise agreed.
- Part II, Option A of the GCC shall apply, as modified by the special provisions below.
- The royalty free licenses provided for the benefit of FLEX Satellite Prime/Leonardo/Micos/ESA in the present Part II provisions, shall be deemed granted through signature of the present Contract and without the need to implement a separate license.
- With due regard to Clause 36.4 and 36.5 of the General Conditions, the Contractor shall submit for approval to the Agency, via Micos, the part of his Sub-Contract pertaining to this particular point.

The following provisions are added:

## **CLAUSE 36: GENERAL**

The following definition is added to Clause 36.2 of the GCC:

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"Agency Project" means the subject of the present Contract as defined under Article 1 above and all activities related to the FLEX Mission.

The term "documentation" as defined in Annex IV to the GCC shall be interpreted to also include data files, CAD files, EXCEL® files and similar electronic files, which shall not be considered as "software" in the sense of Clause 42 of the GCC.

The electronic files containing these items shall be delivered to the Agency in the format agreed with the ESA Technical Officer.

## **CLAUSE 37: INFORMATION TO BE PROVIDED**

Clause 37.2 is replaced by the following provisions:

The Contractor shall provide Micos/Leonardo/FLEX Satellite Prime/the Agency with comprehensive information in documentary or other appropriate form giving full details concerning the work performed for the purpose of the Contract and the results achieved, including information relevant to Background IPR, developed software and other information which may be required by Micos.

Dissemination and disclosure by Micos/Leonardo/the Agency/ FLEX Satellite Prime shall not be subject to restriction unless specifically required under the present Contract and/or agreed or unless otherwise provided for under Clause 43.

Clause 37.3 shall not apply.

The following provision is added to Sub-Clause 37.4 of the GCC:

- a) Micos/Leonardo/the Agency/the FLEX Satellite Prime shall have the right to disclose, at any time including throughout the duration of this Contract, the technical part of the Contractor's proposal and any Technical Documentation, information, data and results or any part thereof, generated, used or delivered in the frame of this Contract, to any Contractor/Subcontractor(s) performing work for Micos/Leonardo/the Agency/the FLEX Satellite Prime in the context of the FLEX Mission.
- b) If approved by the Member/Participating States, the Agency's right of dissemination is also extended to non-Member States and to individuals, companies, bodies or organisations, residing in non-Member States, collaborating or participating in official activities or programmes of the Agency, provided that the information concerned is exclusively used for the purpose of the said activities or programmes, namely FLEX Mission.

For both a) and b) reference is hereby made to the clauses of Article 37.2 here above.

## **CLAUSE 38: DISCLOSURE**

The provisions of Clause 38.1 shall apply to all documents, data and information supplied by Micos/Leonardo/the Agency/FLEX Satellite Prime to the Contractor in the frame of the Contract, whether marked or not "Proprietary Information" or "restricted use"

The following provisions are added to Clause 38.2:

Only information, Documentation and software (including Source Code) that relate to Background Intellectual Property Rights according to the licence granted under Clause 43.4, identified under Appendix E shall be marked "Proprietary Information" by the Contractor subject to prior written consent of Micos/Leonardo/the Agency.

The agreement of Micos/Leonardo/the Agency shall be requested only after the Contractor has submitted the corresponding justification.

For the purpose of the Agency Project defined in the Contract, the prior written consent from the Contractor, referred to under the present Sub-Clause 38.2 and Clause 43.8, is not required and the Agency and/or Micos and/or Leonardo and/or FLEX Satellite Prime may distribute such documentation or software to employees and Contractors involved in the FLEX Mission. It may also distribute the same to consultants and third parties, subject to confidentiality provisions, that require that documentation or software for using, modifying or

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maintaining any product, application or result within the frame of the FLEX Mission. The Contractor will be informed of the circulation of information, documentation and software identified as "Proprietary Information" to persons not employed by Leonardo/the Agency/ FLEX Satellite Prime.

## **CLAUSE 42: SOFTWARE**

Clause 42.2 is implemented and modified as follows:

In respect of any software (object and source code) developed wholly or primarily under this Contract, the Contractor hereby, also on behalf of his Subcontractors, grants to Micos/Leonardo/FLEX Satellite Prime/the Agency and the Member States a free of charge, non- exclusive, irrevocable worldwide license to operate, use, integrate, validate, maintain and modify the deliverable Software for the purpose to ensure proper execution of the FLEX Mission, as well as for their own requirements in the field of space activities, research and technology and their space applications. In addition, the Contractor hereby grants to the Agency and the Member States the right to further grant royalty free sublicenses of the object code of the Software without restriction and of the source Code of the Software under confidentiality terms for the above purposes to third parties residing within the territory of the Member and Participating States.

A copy of the modified Software, if any, shall be available free of charge to the Contractor.

The Contractor shall supply Micos/Leonardo/FLEX Satellite Prime/the Agency with sufficient number of user licences, for any commercially available software delivered, to ensure proper execution of the FLEX Mission.

The activities described in 42.2 (a) and (b), if foreseen to be performed by the Contractor under Appendix C hereto are deemed to be included in the price as defined in Article 3 of the Contract.

For the purpose of Clause 42.4 and 43.5, the Source Code shall be released directly to the Agency.

Clause 42.3 does not apply.

Clauses 42.10 and 42.11 shall not apply.

## **CLAUSE 43: BACKGROUND INTELLECTUAL PROPERTY RIGHTS**

Clause 43.1 is replaced by the following provisions:

The entire and exclusive Background Intellectual Property Rights agreed and recognised by Micos/Leonardo/the Agency are specified in Appendix E hereto.

The Parties agree that no further Background Intellectual Property Rights will be declared other than justified by a Change introduced in accordance with Clause 13 of the General Conditions. With exception for the case of Operational Software, the consent of the Agency through Micos to a change in accordance with Clause 13 of the General Conditions will not be withheld unless duly justified by operational constraints.

Clause 43.4 is complemented by the following:

The Agency shall be entitled to grant sub-licences, to the extent required by the Agency Project defined under the Contract, under licence agreement and confidentiality terms.

If Micos/Leonardo/the Agency/the FLEX Satellite Prime intends to modify the product, application or result covered by Background Intellectual Property Rights as provided under the present Clause, Micos/Leonardo/the Agency/the FLEX Satellite Prime shall offer the Contractor the prior right to modify these products, application or result subject to Background Intellectual Property Rights, if feasible within the operational Schedule constraints, and provided that the Contractor is able and willing to undertake the work at Favourable Conditions and Micos/Leonardo/the Agency/the FLEX Satellite Prime is satisfied as to the quality and the delivery dates.

## ARTICLE 6 CHANGES

Clause 13 is complemented as follows:

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## 6.1 GENERAL

The following provisions are added to Sub-clause 13.1 (Classification of changes):

Class A Changes are changes that result from Micos initiating a change in the documents of the contractual baseline as defined in 1.3 above.

No change to the Contractual Baseline, as defined in 1.3 above, and no change which establishes or may establish a financial or other obligation to Micos, shall be introduced, implemented, or approved by the Contractor, on any level of contracting, without the written consent of Micos' Representatives listed in Article 5 above.

## 6.2 CONSEQUENCES OF THE CHANGES ON THE CONTRACT'S TERMS

## Class A Changes

If any Class A change causes an increase or decrease in the cost of, or the time required for the performance of the Contract, an appropriate adjustment shall be made in the price, or the schedule, or both.

Each proposed modification shall be priced and submitted in the same detail and on the same basis as the original subject matter of the Contract (e.g. hourly rates, overheads, profit margins, price type, PSS forms, modified payment plans, etc.) unless otherwise specifically agreed.

In the event of cancellation of any work or hardware or software (negative Class A), Micos/Leonardo/the Agency reserves the right to audit the relevant costs, in accordance with Annex I to the General Conditions.

Notwithstanding the above, the Contractor shall be ready to offer maximum flexibility in the execution of its work with respect to changes to Interface and Operation requirements of Appendix C hereto, which shall not entitle the Contractor to claim Class A changes, when such are pursued by Micos until 3 months after PDR as long as such change does not require reiteration of significant design or development activities already performed.

In addition, the Contractor shall provide, as part of his baseline activities under the contract, any support requested by Micos/Leonardo/ FLEX Satellite Prime to analyse possible thermal, mechanical, EMC, radiation environment changes that flow down from changes of satellite to instrument interface. Actual implementation of such changes required until 3 months after the contractor's PDR will be treated as Class B within the constraints of AD-103 and AD-104 (where applicable) of the SSOW in Appendix C hereto.

## Class B Changes

The Contractor shall be responsible for all Class B changes and these shall not change the conditions of the Contract. In particular the cost and schedule impacts of changes deriving from changes necessary to make the subjects of subcontracts conform to their technical specifications shall not be borne by Micos.

All class B changes between the Contractor and subcontractors throughout the whole consortium shall be copied to Micos for information, with reference in particular but not limited to price changes and geographical distribution (if any).

## 6.3 LIMITATION OF LIABILITY FOR CHANGES

- i) The Contractor shall reduce to the minimum any delay to the programme caused by any changes. If a delay due to a Class A change causes extra costs, Micos shall pay such costs only insofar as this delay really occurred and the Contractor can prove that this change was the sole cause of the delay. Contractual dates shall be modified only if the Contractor can prove that the Class A change is the sole cause of his requesting a delay.
- ii) The conditions governing a change shall be those contained in the Contractor's Change Notice as approved by Micos; any documentation related to a change supplied by a subcontractor shall be considered as supporting information only and shall have no contractual implication whatsoever.

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iii) Micos shall not bear the cost of implementing changes deriving from any work for FLEX related activities which the Contractor and/or his subcontractors may be performing under a contract with Micos or a Third Party.

- iv) All tasks and activities relating to the contractual change procedure mainly consisting of, but not limited to:
  - establishment of the change proposal data package;
  - negotiation and implementation of the change;
  - updating or refocusing of contractual documentation (configuration management), etc.;
  - administrative effort associated with the updating of technical and other baseline documentation;
  - implementation of industrial policy directions;

shall form part of the Contractor's system routine activities covered by the Contract price and cannot be charged in addition to the baseline activities, unless the Contractor can demonstrate that, in case of a Micos requested Class "A" change, the associated effort and cost are of such magnitude that they are tantamount to new procurement.

v) Nothing contained in this Article or nothing contradictory in Appendix C hereto is to be construed as justifying any decision by the Contractor not to introduce or to suspend the introduction of a change approved or ordered by Micos.

## 6.4 CHANGE REVIEW BOARD AND CHANGE APPEAL BOARD

A Change Review Board (CRB) shall be set up consisting of Micos and the Contractor's Representatives designated in Article 5. The function of the Board shall be to review and decide upon all Contract Change Notices (CCNs) submitted to it. The members of the CRB may be assisted by specialists of their own staff or the staff of their subcontractors.

The Contractor shall make available to the CRB all data required by Micos to permit a complete evaluation of the implications of any proposed change.

When examining CCNs, the CRB shall either reach unanimous agreement or draw up a statement of disagreement. If a statement of disagreement is recorded, the matter shall be laid before the Change Appeal Board (CAB), unless either Party agrees in writing to accept the other's point of view. Upon reaching of an agreement, Micos and the Contractor's representatives shall sign the CCN.

The CAB shall consist of 2 high-level representatives of each Party to be nominated by Micos and the Contractor through an exchange of letters. One representative on each side shall be from the technical side, the other from the administrative side.

Within 15 days of the submission of the dispute or such longer time as the parties may agree, the CAB shall either arrive at a unanimous agreement or establish that a disagreement continues to exist. In the latter case, Micos shall immediately refer the issue to the FLEX Satellite Prime/ESA for final resolution.

Notwithstanding the aforesaid, even in case a matter was referred to FLEX Satellite Prime/ESA, the Contractor shall continue to implement the change unless otherwise requested by Micos/Leonardo/FLEX Satellite Prime/ESA.

## 6.5 CONSEQUENCES OF THE APPROVAL OF CHANGES

Approval by the CRB or CAB of a CCN constitutes:

- A confirmation of Micos' decision to introduce the change.
- An agreement on the classification of the change, its costs and the consequences of the change on the schedule and the other provisions of the Contract.

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Signature of the CCN by the Representatives of Micos (designated in Article 5 above), who are the only persons authorised to do so, shall render the change enforceable and the contract terms shall be deemed to be modified accordingly.

## ARTICLE 7 ACCESS TO WORK IN PROGRESS AND TO DATA

## 7.1 ASSESSMENT OF TECHNICAL PERFORMANCE

Micos/Leonardo/FLEX Satellite Prime/the Agency may assess the technical performance under this Contract, and for this purpose all work under this Contract and data and documentation generated hereunder by the Contractor and his subcontractors, including all design and test data, are subject to continuous examination, evaluation and inspection by Micos/Leonardo/FLEX Satellite Prime/the Agency during the period of this Contract. The Contractor shall, for the purpose of this Article, arrange access for the representatives of Micos/Leonardo/FLEX Satellite Prime/the Agency to those premises where work on or in connection with the subject of this Contract is being, has been or is intended to be performed.

Above responsibilities may be executed by representatives from Micos/Leonardo/FLEX Satellite Prime/the Agency, as will be notified by Micos to the Contractor.

## 7.2 SUSPENSION OF ANY WORK

Micos may call for the suspension of any work it may reasonably judge unsatisfactory as failing to comply either with the terms of the Contract or with the normal customs of the trade (Micos has to always provide written justification). The exercise of this right shall in no way and shall in no circumstances affect Micos' rights or lessen the Contractor's responsibilities regarding the due fulfilment of his obligations.

## 7.3 VISITS

Except in case of extreme urgency, Micos shall inform the Contractor in good time of any intended visit to a subcontractor and shall invite a representative or representatives of the Contractor to be present.

## 7.4 NOT PERMITTED WORK

Done in 2 (two) originals, one for each Party to this Contract,

The Contractor shall not permit work under this Contract to be performed in association with or in proximity to work subject to national security or similar restrictions such that access to the area in question by Micos'/Leonardo's/FLEX Satellite Prime/ESA representatives could be prevented for reasons of security restrictions.

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## APPENDIX A. FINANCIAL APPENDIX

## 1. Contract Structure

N.A

## 2. Price Breakdown (overall, per company, per phase, global amount for all unallocated items if applicable)

Table 1: Price Breakdown.

	TOPTEC
Type of price	FFP
B2	€ 45.414,00
C/D	€ 578.052,00
Tot	€ 623.466,00

## 3. Milestone Payment Plans

Table 2: Milestone Payment Plan - Phase B2.

Milestone number	Milestone Title	Achievement Date	Mile in E	estone Amount uro	Price Type
MIC-B2-10	Successful Floris Telescope User Requirement Review (URR) and acceptance of all deliverable documents	12 July 2018	€	10.000,00	FFP
MIC-B2-20	Successful Floris Telescope PDR data package delivery	09 Oct 2018	€	10.000,00	FFP
MIC-B2-30	Successful Floris Telescope Preliminary Design Review (PDR) closure and acceptance of all deliverable documents	16 Nov 18	€	25.414,00	FFP
Total B2			€	45.414,00	FFP

Table 3: Milestone Payment Plan - Phase C/D.

Milestone number	Milestone Title	Achievement Date	Milestone Amount in Euro	Price Type
MIC-C/D-10	LLI Procurements	Kick-off + 2 months	€ 80.000,00	FFP
MIC-C/D-20	Successful Floris MRR of OMR and EM Telescope and acceptance of all deliverable documents	12 Oct 2018	€ 110.000,00	FFP

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MIC-C/D-30a	Successful OMR Delivery and acceptance of all deliverable documents (upon Leonardo's acceptance of OMR)	31 May 2019	€	60.000,00	FFP
MIC-C/D-30b	Successful delivery of EM to Micos and Micos acceptance of EM upon Micos successful testing of EM and acceptance of EM deliverables documents	15 Aug 2019	€	50.000,00	FFP
MIC-C/D-40	Successful Floris Telescope PFM CDR data package delivery	15 July 2019	€	50.000,00	FFP
MIC-C/D-50	Successful Floris Telescope PFM CDR and acceptance of all deliverables (closure)	28 Aug 2019	€	50.000,00	FFP
MIC-C/D-60	Successful Floris Telescope PFM TRR and acceptance of all deliverables	25 Oct 2019	€	58.052,00	FFP
MIC-C/D-70	Successful Floris Telescope PFM DRB\QR	13 March 2020	€	120.000,00	FFP
Total C/D			€	578.052,00	FFP

## 4. Revision of Fixed Prices (pre-defined escalation rates by country and escalation formulae) for information

For TOPTEC in Czech

Economic Conditions - 07/2018

 $P1=P0(0.10 + 0.73 \times L1/L0 + 0.17 \times M1/M0)$ 

where:

P1 = revised price after escalation

P0 = contractually agreed milestone payment amount

Sogeti index labels<sup>1</sup>

 $L0 = Labour index 2^{nd} quarter 2018 = 113.5 / 128.0$ 

M0 = Material (Non Labour) index<sup>2</sup> 34.61.667; 01/2018 = 101.27 / 104.35

# Where escalation is to be based on Fixed scheduled milestones,

<sup>&</sup>lt;sup>1</sup> Indices for Labour and Material are those according to SOGETI "National Price and Salary Statistics – expressed in EURO", (especially produced for ESA), published on EMITS: <a href="http://emits.esa.int/emits/owa/emits.main.">http://emits.esa.int/emits/owa/emits.main.</a>

<sup>&</sup>lt;sup>2</sup> The values for L0 & M0 shall be stated in line with the economic conditions of July 2016 E.C.

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L1 & M1 = the arithmetic mean of monthly<sup>3</sup> cost indices, as defined above, related to the period of price revision, determined by the month of the contractual scheduled (nominal) milestone date and the month succeeding that of the previous milestone. \*Where more than one milestone shares the same contractually scheduled milestone date, their related escalation will be computed as if those milestones would form one single milestone. That is, the escalation will be based on the arithmetic mean of monthly cost indices defined in the Contract, related to the period of price revision, determined by the month of their contractual scheduled milestone date and the month succeeding that of the milestone preceding them.

Where labour is costed by means of annual average labour rates, no revision shall apply to the labour coefficient for the year of the economic condition specified in the contract.

\* The index applicable to the first milestone, is the arithmetic mean of the monthly indices, as defined above, related to the period from the beginning of work to the month of the first payment milestone.

Note: Indices are those according to SOGETI "National Price and Salary Statistics – expressed in EURO", (especially produced for ESA), published on EMITS at the internet address: http://emits.esa.int/emits/owa/emits.main.

## APPENDIX B. ESA GENERAL CLAUSES AND CONDITIONS FOR ESA CONTRACTS (ESA/REG/002)

http://emits.esa.int/emits/owa/emits.main

## APPENDIX C. STATEMENT OF WORK, ADS (IN THE SSOW SECTION 2 HERETO) and Summarized Tasks of TOPTEC

- FLEX Generic Statement of Work (GSOW) for Unit/Sub-system FLX-SOW-FNMINS-0001 Rev 2
- FLEX Specific Statement of Work (SSOW) for Telescope sub-system FLX-SOWFNM-INS-0004 Rev3
- Minutes of Negotiation ref. FLX-MIN-FNM-INS-0074 Rev. 1 dated 2-3/05/2018
- Micos / TOPTEC Proposal ref. B0510F17122602 (not attached hereto but known to both Parties);
- Micos Design Specification ref. FLX-DS-MCS-TEL-0001 (not attached hereto but known to both Parties).

## 1. Summary of TOPTEC's Scope of Work

## TOPTEC's Scope of Work

The activities of TOPTEC include (but not limited to) manufacturing, assembly, integration, optical testing and measurements (to support the manufacturing and integration activities) and pre-alignment of the FLEX Telescopes (the final alignment and extensive optical performance testing are responsibility of Micos).

These activities are to be undertaken for two engineering models (OMR and EM) and subsequently for one flight unit (PFM).

The manufacturing and integration activities include manufacturing of the lenses and the mechanical parts including telescope barrel, lens mount components and supporting structure.

<sup>&</sup>lt;sup>3</sup> Where indices are published quarterly, it is deemed that that value applies to each month of that quarter for the purposes of calculating the arithmetic mean.

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TOPTEC is responsible for all equipment, jigs, tools and GSEs needed for the manufacturing, assembly, integration and pre-alignment of the telescopes. TOPTEC is also responsible for all equipment and GSEs that are needed for optical testing and measurements to support the manufacturing, integration and pre-alignment activities.

TOPTEC is responsible for providing the documents related to their part of work, namely documents related to manufacturing, assembly, integration and qualification.

Processes applied by TOPTEC for the manufacturing and integration of the telescope shall be qualified and approved by the customer chain.

The scope of work of TOPTEC also include providing support to Micos for design and analyses activities, in particular for the manufacturability aspect. This support includes supporting Micos with design and analysis documents by providing inputs to Micos documents and by providing stand-alone documents as needed.

As required for any phase B2/CD space project, the Technology Readiness Levels of critical technologies must be brought to levels identified in ECSS. Therefore, TOPTEC is responsible for any breadboard and technology development activities required to achieve the technology maturity levels, as far as such technologies are related to scope of the TOPTEC's work (i.e. manufacturing, assembly and integration of the telescope).

TOPTEC is responsible to undertake any de-risking activities that are required to ensure successful delivery of the integrated and pre-aligned telescopes (OMR, EM and PFM) to Micos. The successful delivery includes compliant units, to the required quality and performance, within the agreed project schedule (negotiated and agreed by all parties at the FLX-TEL negotiation meeting).

These activities are for TOPTEC to deliver to Micos the integrated and pre-aligned telescopes (OMR, EM and PFM) along with the relevant documentation.

## 2. Summary of TOPTEC's Deliverable Documentation

The following documentation must be delivered by TOPTEC for the respective reviews, throughout the development.

## **Management documents**

DRD Code	Cat.	Project Managemen t	Bid KO	URR	PDR	CDR	QR	MRR	TRR	DRB	Comments
PM-01	A	Project Managemen t Plan (PMP)	X		X						DRD as per Annex A of [ND-M-02]
PM- 01b	A	Compliance Matrix to the Managemen t requirement in <ad04></ad04>	X								According to FLO- SPE0004-SOW-REQ- 0030

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DRD Code	Cat.	Project Managemen t	Bid KO	URR	PDR	CDR	QR	MRR	TRR	DRB	Comments
PM-02	R	Progress Report									Every 8-weeks from KO until PDR, 10 weeks afterwards. A short progress status provided by email is requested every month DRD as per Annex E of [ND-M-02] Includes PM-08, PM-10, PM-11, PM-15, PM-28, PM-35
PM-04	A/I	Minutes of Meetings/Re views		X	X	×	X	×	X	x	Established during the meeting and duly signed by all attending parties.  "A" it applies to the meeting with Customer.  MoM will be written/issued/configur ed and controlled by Contractor after KO.
PM-05	I	Project Directory	х								Further updates if Key Personnel changed
PM-07	R	Inventory List								х	As per DRD PM-07 of <ad09></ad09>
PM-08	R	Project Schedule relevant to TOPTEC work	X	x	x	X	×	X	x		sent with PM-02, according to GSOW
PM-09	A/R	Contract Change Notice (CCN)									As required. DRD as per Annex H of [ND-M-02] CCN within 15 working days after CR reception
PM-10	R	Contract Change Notice Status List			х	х			х	х	Included in PM-02
PM-11	R	Action Item List (AIL)			х	х					Included in PM-02 Data base: updated in real time, accessible to Customer. ESA Data Base is recommended.

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DRD Code	Cat.	Project Managemen t	Bid KO	URR	PDR	CDR	QR	MRR	TRR	DRB	Comments
PM-12	R	Input to Micos Product Tree (PT)	х	х	х			Х			DRD as per Annex B of ECSS-M-ST-10C, Rev 1
PM-14	R	Work Package Description (WPD)	X		X						Further updates as needed
PM-15	I	Invoicing and Payment Status List									Included in PM-02
PM-19	A	Configuratio n Control and Documentati on Managemen t Plan (CADM)	x								Update as needed DRD as per Annex A of [ND-M-03]
PM-20	A/R	Change Request and Document Change Requested									As required, "A" only for Class A change As per {PM-20} of <ad09></ad09>
PM-21	А	Contract Close-out					Х			Х	As per Contract
PM- 22a	A	Request for Deviations (as designed) related to requirement s relevant to TOPTEC's scope of work.					x	x	×	×	As applicable for any NC against applicable documents (SOW, specification and PA requirements, etc.); "A" is required for Customer's requirement
PM- 22b	Α	Request for Waivers (as built)					x	x	x	x	As applicable for any NC against applicable documents (SOW, specification and PA requirements, etc.);  "A" is required for Customer's requirement

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DRD Code	Cat.	Project Managemen t	Bid KO	URR	PDR	CDR	QR	MRR	TRR	DRB	Comments
PM-23	R	Input to Micos Project Organization Breakdown Structure	X	X	X						DRD as per PM-23 of <ad-09></ad-09>
PM-25	R	Input to Micos Configuratio n Items Data List (CIDL)			х	х	х	х	x	X	DRD as per Annexes B and C of ECSS- MST- 40C, Rev 1;
PM-26	R	Documentati on Status List for documents related to TOPTEC's documents		X	х	х	X	X	X	X	Included in the PM02
PM-27	A	Risk Managemen t Plan	X								DRD as per Annex B of ECSS-M-ST-80C and according to the GSOW
PM-28	R	Risk Register related to TOPTEC's scope of work	X	X	X	X	X	X	X	X	Included in PM-02
PM-28	R	List of Acronyms and Abbreviation s	х								Updated as required
PM-30	R	Input to Micos As built Configuratio n Data List (ABCL)			X	X	X	X	X	Х	DRD as per Annex D of ECSS-M-ST-40C, rev 1
PM-33	R	Change request									DRD as per Annex G of ECSS-M-40C rev 1
PM-35	I	RFD/RFW Status list (related to TOPTEC's scope of work)				Х	Х	Х	X	X	sent with PM-02

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DRD Code	Cat.	Project Managemen t	Bid KO	URR	PDR	CDR	QR	MRR	TRR	DRB	Comments
PM-37	R	Export Control Document (related to procurement of parts and material related to manufacturi ng, assembly, integration and any needed qualification activity.	×		×	×	×	×		X	
PM- 38a	А	Compliance Matrix vs SSOW/GSO W	х	X	х						

# APPENDIX D. PROCEDURE FOR THE SELECTION OF SUBCONTRACTORS

Agency's Procedure for the Selection of Subcontractors in the Frame of ESA's major Procurements (ref: ESA/IPC(2012)65,rev.2): Applicable only for chapter VII (Ombudsman) and Appendix 2 (Code of conduct) (not attached hereto but known to both Parties).

# APPENDIX E. LIST OF BACKGROUND IPR

N.A. as no Background IPR have been declared.

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# APPENDIX F. CONTRACT CLOSURE DOCUMENTATION (CCD) (TEMPLATE INCLUDING STATEMENT OF INVENTION AND LIST OF FIXED ASSETS)

Contract No. M056CO18112002

# (FLORIS PHASES B2, AND C/D FOR TELESCOPE)

<u>Between</u>
Micos Engineering GmbH
(hereinafter called "Micos"),
whose Registered Office is at:
Sackmatt 10a
6242 Wauwil
Switzerland
Represented by:
of the one part,
or the one part,
and:
XXXXX
(hereinafter called "the Contractor" or "XXXXX"),
represented by
of the other part,
SECTION 1 - CONTRACT DURATION AND TERMINATION
FLORIS Phases B2, C/D and Contract (hereinafter also referred to as "the Contract") for the Phase B2, C/D of the activity "XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
until [date to be inserted] shall be closed herewith.
SECTION 2 - CONTRACT FULFILMENT
The Destination of the Health of the string of the Control of the London Control of the London Destination

1. The Parties agree that all obligations arising from the Contract have been fulfilled by the Parties and that no contractual claim exists against one another, except for the potential warranty claims of Clauses 21 to 23 General Clauses and Conditions and for intellectual property rights and obligations of Part II General Clauses and Conditions as amended by the Contract which shall survive close-out.

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2. By signing the present Close-out Certificate, the Contractor eo ipso confirms that all obligations arising between himself and his sub- and lower tier Contractors at all levels have been fulfilled to the same extent. In particular, by signing this close-out certificate the Contractor certifies that all payments have been made to the subcontractors at all levels.

### **SECTION 3 - CONTRACT CHANGE NOTICES**

All Contract Change Notices and equivalent contractual agreements settled under the Contract are listed in the Financial Annex (Annex 1) hereto.

## **SECTION 4 - FINANCIAL MATTERS**

The final contract price as recapitulated in the Financial Annex hereto amounts to: € [amount to be inserted].

# **SECTION 5 - DELIVERABLE ITEMS**

The list of all deliverable items with appropriate reference numbers (for documents) or serial and part numbers (for items) are recapitulated in Annex 2 "List of Deliverables Items" hereto. Additionally, and in the same Annex the background information (if any) is recapitulated that has been incorporated in the deliverable(s).

### **SECTION 6 - INVENTORIES**

Any inventory items according to Article 4 of the Contract produced, procured or obtained under the Contract by the Contractor and/or his subcontractors at all levels are listed in Annex 3 "List of Fixed Assets" and "Inventory/Fixed Asset Record" (template to be created and provided by Leonardo) hereto.

The Contractor certifies on his behalf and on behalf of his subcontractors at all levels that all his obligations with regard to any inventory and fixed assets have been fulfilled, especially that those selected items have been delivered and their ownership transferred to the Agency. The decision of the Agency on the disposal of fixed assets is set forth in Annex 3.

# SECTION 7 – INVENTIONS/ INTELLECTUAL PROPERTY RIGHTS GENERATED UNDER THE CONTRACT

The list of all Inventions/ Intellectual Property Rights generated under the contract by the Contractor and/or by its Subcontractor(s) at all levels under the Contract, are listed in Annex 4 hereto.

In accordance with the provisions of the above Contract the Contractor hereby certifies both on its own behalf and on behalf of its consortium/Sub-Contractor(s) at all levels, that [no Inventions/Intellectual Property Rights (as defined in Annex IV of the General Clauses and Conditions for ESA Contracts, ref. ESA/REG/002, Rev. 2 ,the "GCC") have been generated in the course of or resulting from work undertaken for the purpose of this Contract] **or** 

[That for any and all Inventions/Intellectual Property Rights have been generated under the Contract, the Agency's rights in the Inventions/Intellectual Property Rights listed in Annex 4 hereto shall be in accordance with the General Clauses and Conditions for ESA Contracts, ref. ESA/REG/002, Rev. 2, the "GCC" - Part II provisions, as amended by the Contract].

# SECTION 8 – CUSTOMER FURNISHED ITEMS AND ITEMS MADE AVAILABLE BY THE AGENCY (IF APPLICABLE)

The list of all Customer Furnished Items and/or Items made available to the Contractor and/or its Subcontractor(s) at all levels under the Contract, are listed in Annex 5 hereto in the Lists of Customer Furnished Items (Annex 5 a) and Items made available (Annex 5 b). The Contractor certifies that all his obligations with regard to the Customer Furnished Items and to the Items Made Available have been fulfilled, especially that those selected items have been delivered as per the Agency instruction. The decision of the Agency on the disposal of Customer Furnished Items/Items made available is set forth in Annex 5.

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# **SECTION 9 - THIRD PARTY INTELLECTUAL PROPERTY RIGHTS**

In case of Intellectual Property Rights belonging to third parties, as declared at the signature or during the course of the Contract, which are required for the use of the deliverables, such third-party Intellectual Property Rights are recapitulated for memory in Annex 6.

# SECTION 10 - STATEMENT OF APPLICATION OF PENALTIES TO SUBCONTRACTORS

In case of Penalties applied at Subcontractor (any) level, such penalties are recapitulated in Annex 7.

# SECTION 11 - SUBCONTRACTS CLOSE-OUT

The close-out certificates of the subcontractors of the Contractor at all levels are shown in Annex 8 hereafter. (to be completed by the Contractor at a later stage)

#### **SECTION 12 - MISCELLANEOUS**

See Annex 9 hereto OUTPUT FROM / ACHIEVEMENTS UNDER THE CONTRACT

### **SECTION 13 – LESSON LEARNED**

To be completed by the Contractor at a later stage.

The above statements provided in the various sections/ annexes of this Contract Closure Documentation for Contract No. xxxxxx/XXXXX have been made after due verifications and are certified by the Contractor.

If required by Micos/Leonardo/FLEX Satellite Prime/ESA, an updated version shall be provided for incorporating amendments requested.

The Contractor shall flow down the provisions and Annexes of the Contract Closure Documentation to his subcontractors at all levels.

Nothing contained in the present Close-out Certificate shall be construed as altering FLORIS contractual framework as agreed by the Parties to-date.

Done and signed in two originals, one for each Party to the present Contract Closure Documentation,

On behalf of Micos Engineering GmbH, in	
On this day,	
	Name:
	Function:

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On behalf of XXXXX.	
On this day,	
	Name:
	Function:

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# **ANNEX 1: FINANCIAL ANNEX**

	١.	Contract	Price and	<b>CCNs</b>	List	and Pric
--	----	----------	-----------	-------------	------	----------

**Amount in EURO** 

Contract/CCNs Contract/CCN Title (e.c. XXX or FFP)

Original Contract

CCN1

CCN 2

Total CCNs

**Total Contract** 

Price (incl. CCNs)

Penalties applied

**Incentives earned** 

2. Contract Price & CCN List and Price Subcontractors at all levels

	Company A	<b>Prices Company B</b>	<b>Prices Company C</b>
Contract/CCNs	Price in EURO	Price in EURO	Price in EURO
	(e.c. XX or FFP)	(e.c. XX FFP)	(e.c. XX FFP)

Original Contract

CCN1 [topic]

CCN 2 [topic]

Total CCNs

# Total Contract Price (incl. CCNs) Penalties applied (if applicable) Incentives earned (if applicable)

3. Milestone Payments (for the Prime and Subcontractors at all levels)

Company	MPP-ID	Milestone title	Invoice Number	Baseline
				Amount/Escalation
Total				

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# **ANNEX 2: LIST OF DELIVERABLES ITEMS**

1. Items deliverable according to the AD-11 (DISL) to Appendix C (SoW) and Articles 1.1 and 2 of the Contract

If any of the columns do not apply to the item in question, please indicate "n/a".

Туре	Ref. No.	Name/Title	Description	Replacement Value (EUR)/ Other	Location (4)	Property of	Rights granted/ Specific IPR Conditions (5)
Documentation							
Hardware							
Software			(Delivery in Object code/ Source code?)				
Other							

2. Background Information used and delivered under the Contract (see Clause 43 of the General Clauses and Conditions, as modified by the Contract including Appendix E)

The following background information has been incorporated in the deliverable(s):

<sup>&</sup>lt;sup>4</sup> In case the item is not delivered to ESA, please indicate the location of the deliverable and the reason for non-delivery (e.g. loan agreement, waiver, future delivery, etc.).

<sup>&</sup>lt;sup>5</sup> e.g. IPR constraints, deliverable containing proprietary background information (see also Annex 2 2 below).

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Proprietary Information (title, description)	Owner (Contractor/ Subcontractor(s)/ Third Parties)	Affected deliverable (which documents, hardware,	Description impact on ESA's rights to the deliverable (6)	Other comments
		software, etc.)		

### ANNEX 3: LIST OF FIXED ASSETS INVENTORY/FIXED ASSET RECORD

1. List of Fixed Assets: Items deliverable under Article 4 of the Contract (if applicable)

				ESA DECISION			
Item name	Part/ Serial reference number	Location	Value	Deliver to ESA	Sell or Dispose of	Leave in (Sub-) Contractor's Custody	

#### 2. Inventory/Fixed Asset Record

The Contractor, after agreement with the Agency with respect to the disposal/transfer of inventory items/fixed assets under the contract, shall submit the Inventory/Fixed Asset Record as attachment to the CCD. For each item/fixed asset, the information as requested by Appendix H to the Contract shall be provided in the Record (for the Prime and Subcontractors at all levels).

#### A template will be provided at a later stage by Micos

	-	•	U	•
To be completed by ESA				

<sup>&</sup>lt;sup>6</sup> If not explicitly stated otherwise, the contractual stipulations shall prevail in case of conflict with the description provided in this table.

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# ANNEX 4: INVENTIONS/INTELLECTUAL PROPERTY RIGHTS GENERATED **UNDER THE CONTRACT (IF APPLICABLE)**

In accordance with the provisions of the Contract hereby certifies both on its own behalf and on behalf of its consortium/Sub-Contractor(s) at all levels that the following Inventions/Intellectual Property Rights (as defined in Annex IV of the "GCC") have been generated in the course of or resulting from work undertaken for the purpose of this Contract:

Intellectual Property Rights ("IPR") suitable for registration (i.e. "Registered Intellectual Property Rights" as per definition in Annex IV of the "GCC")

#### **Current status**

[delete non-applicable options]

Registered:

[insert information registration [insert title of IPR # 1 and give a short description]

granted]

In the process of being registered:

[insert information registration

process1

Foreseen for registration:

[indicate timeline]

Not foreseen for registration: [indicate

reason1 Registered:

[insert information registration on

granted]

In the process of being registered: [insert title of IPR # 2 and give a short description]

> [insert information registration

process]

Foreseen for registration:

[indicate timeline]

Not foreseen for registration: [indicate

reason1

Should any Intellectual Property Rights be indicated as being foreseen for registration or in the process of registration, the Contractor undertakes to notify the Agency's Technical Officer when:

- registration of any such IPR(s) is rejected
- registration of any such IPR(s) is obtained (and will provide the registration details)

Intellectual Property Rights ("IPR") not suitable for registration (i.e. not being "Registered Intellectual Property Rights" as per definition in Annex IV of the "GCC")

[insert title of corresponding IPR]

[give a short description of such IPR]

[insert title of corresponding IPR]

[give a short description of such IPR]

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# ANNEX 5: LIST OF CUSTOMER FURNISHED ITEMS / ITEMS MADE AVAILABLE (IF APPLICABLE)

The following tables certify which of the items have been returned to (Micos/Leonardo/FLEX Satellite Prime) the Agency and which of the items remain in the custody of the Contractor, and/or a Subcontractor(s) and/or a Third Party for further work or for other purposes.

### a) List of Customer Furnished Items

				ESA DE	CISION	
Item Name	ESA Inventory Number	Location	Insurance Value	Confirmation of Receipt	Deliver to ESA or to another entity	Leave at (Sub-) Contractor's Disposal under a loan agreement

# b) Items made available

				ESA	DECISION
Item Name	ESA Inventory Number	Location	Replacement Value	Deliver to ESA or to another entity	Leave at (Sub-) Contractor's Disposal under a loan agreement

# ANNEX 6: LIST OF THIRD PARTIES INTELLECTUAL PROPERTY RIGHTS (IF APPLICABLE)

# **ANNEX 7: PENALTIES**

[OPTION 1. PENALTIES HAVE BEEN APPLIED]

The Contractor certifies hereby that penalties have been applied on the subcontractors listed here below:

Contract-ID	Contractor	Subject	Total Amount of penalty

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### [OPTION 2. PENALTIES HAVE NOT BEEN APPLIED]

The Contractor certifies hereby that no penalties have been applied on its subcontractors.

# ANNEX 8: SUBCONTRACTS CONTRACT CLOSURE DOCUMENTATION

The Contractor will flow down their contract closure documentation clauses, provisions and Annexes to all their subcontractors at all levels.

### ANNEX 9: OUTPUT FROM / ACHIEVEMENTS UNDER THE CONTRACT

1. Technology Readiness Level (TRL)

Indicate the TRL of the technology developed under the Contract using the classification given below (for additional information on definitions, please refer to ECSS-E-AS-11C).

Initial TRL	Planned outcome	TRL	as	activity	Actual TRL at end of activity

1	Basic principles observed and reported
2	Technology concept and/ or application formulated
3	Analytical and experimental critical function and/ or characteristic proof of concept
4	Component and /or breadboard validation in laboratory environment
5	Component and /or breadboard critical function verification in a relevant environment
6	Model demonstrating the critical functions of the element in a relevant environment
7	Model demonstrating the element performance for the operational environment
8	Actual system completed and accepted for flight 'flight qualified'
9	Actual system 'flight proven' through successful mission operations

NOTE: The TRL shall be assessed by ESA. The Agency's responsible Technical Officer shall verify TRLs 1-4 while TRLs 5-9 shall be assessed through an ESA-internal formal procedure.

	2.	Achievements and Technology Domain
Drovid		
	ıe (i	ncluding main performances achieved): please refer to the final documentation (e.g. Final

Please indicate the Technology Domain (TD 1 to 25) of the development (please tick off):

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1	On-Board Data Systems	14	Life & Physical Sciences
2	Space System Software	15	Mechanisms & Tribology
3	Spacecraft Electrical Power	16	Optics
4	Spacecraft Environment & Effects	17	Optoelectronics
5	Space System Control	18	Aerothermodynamics
6	RF Payload and Systems	19	Propulsion
7	Electromagnetic Technologies and	20	Structures & Pyrotechnics
	Techniques		
8	System Design & Verification	21	Thermal
9	Mission Operations and Ground Data	22	Environmental Control Life Support
	Systems		
10	Flight Dynamics and GNSS	23	EEE Components and Quality
11	Space Debris	24	Materials and Processes
12	Ground Station System & Networking	25	Quality, Dependability and Safety
13	Automation, Telepresence & Robotics		

3. Application of the Output/ Achievements

Plea	ase ti	ick off as appropriate:
		Possible use in programme:
Plea	ase ii	ndicate the service domain (see table) relevant to a possible application
	1	Earth Observation
	2	Science
	3	Human Spaceflight and Exploration
	4	Space Transportation
	5	Telecommunications
	6	Navigation
	7	Generic Technologies and Techniques
	8	Security
	9	Robotic Exploration
		Actual use in programme:
		lescribe the specific programme and application or mission for which the output of this Contract is we used.

4. Further Steps/Expected Duration

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Please tick off as appropriate:
No further development envisaged.
Further development needed:
Please describe further development activities needed, if any, to reach TRL 5/6 including an estimate of the expected duration and cost.
5. Potential Non-Space Applications
Describe any potential non-space applications or products that may benefit from the technology that has been developed. Emphasize potential markets and customers where known.
Describe the principle features of technology that would be required in a technology demonstrator for any identified non-space application. Include an estimate of the resources in time and money that would be required.
ADDENDLY O N. A.

#### APPENDIX G. N.A.

N.A.

# APPENDIX H. INVENTORY/FIXED ASSET RECORD

1.1. Content of Electronic Inventory/Fixed Asset Record

The contractor shall establish an electronic Inventory/Fixed Asset Record with, as a minimum, the following information:

For all items:

- contract number / Sub-contract number if applicable
- unique item number
- confirmation that the item has been marked with the unique item number
- description of item
- part number/serial number/type code
- quantity
- system/subsystem
- property owner
- manufacturer
- classification (category see section 1.2 below)
- acquisition value (i.e. original purchase price or price at contract signature as applicable)

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• date of purchase or production ("in service date" if not corresponding with date of purchase/production)

- in-service date
- foreseen useful life (to be agreed with ESA)
- physical location (e.g. facility, building, room)
- entity responsible for care and custody
- related WBS code or other identifier to be coordinated with the Agency)
- description and date of any change to the property item
- planned method of disposal (if applicable)

In addition to the above, the following information shall be added to those items that are identified as becoming ESA Fixed Assets in Article 3 of the Contract, as applicable.

- Acquisition value
  - O revision of this value as a result of change(s) to the asset
- Impairment report of each ESA Fixed Asset remaining in the custody of the Contractor after its acceptance by ESA (using the template that will be provided by the Agency upon announcement by the Contractor that the item has been impaired)
- date of acceptance by Micos (planned date of acceptance)
- foreseen handling after Micos acceptance (e.g. transfer to ESA, continuing in custody of the Contractor)

### 1.2. Classification of Inventory/ Fixed Assets items

For the purpose of Inventory/Fixed Asset Control, items shall be classified into five categories, according to the source and intended use of the items, as follows:

Source / Purpose	Supplier acquired Items	Customer furnished Items
Consumable items (e.g. parts, materials, supplies)	Class 1	Class 2
Capital items/production support equipment and tools (e.g. instruments, jigs, fixtures)	Class 3	Class 4
Items purchased by the Supplier or his lower tier suppliers on their own account but amortised under the Contract.	Class 5	

- Note 1: Consumable items are parts, materials, supplies, components, modules, minor expendable tools, assemblies, units and subsystems which through the production process lose their identity and are absorbed directly or indirectly by the system/product to be provided under the Contract.
- Note 2 Consumable items in principle are not capitalised per item, however, before consumption they are identified as assets of the Agency under the collective term "Consumable".

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Note 3: Capital items/production support equipment and tools are jigs, fixtures, devises, apparatus, instruments, machines, installations, technical facilities, buildings, computer programmes, documentation, models, samples or any other item which, after their use in or in conjunction with the production process under the Contract, are expected to have a residual utility or other value for the Agency.

Note 4: Capital items have a useful life of more than one year and are identified as individual items in the Supplier and his lower tier suppliers list of Agency's assets.

# APPENDIX I. CONTRACT CHANGE NOTICE TEMPLATE

For submission of a change as per Clause 13 of the General Conditions, the Contractor shall submit his proposal in the format of a CCN using the cover page included below. The form shall be filled with the following information as a minimum:

- The Contractor's name and the Contract number
- The title of the area affected by the change (Work Package reference, new work, etc.)
- The name of the initiator of the change (Contractor, or TASF)
- The description of the change (including Work Package Descriptions, WBS, etc.)
- The reason for the change
- The price breakdown in €, if any (breakdown by company, Phase, etc., including PSS-A2 and PSS-A8 forms)
- The Milestone Payment Plan for the CCN if any
- Effect on other Contract provisions
- Start of work end of work (including contractual delivery dates and overall planning, milestones, etc.)

A CCN Form, as per the format below, signed by the Contractor's representatives.

The Contractor shall, on request of Customer, provide additional documentary evidence. At the request of either Party, the proposed change may be discussed at a Change Review Board, consisting of both the Contracts Officer and the Technical Officer of each Party.

	<b>A</b> flow
	flex
Date:	
Class:	

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Reason for change	
Price breakdown (currency) / Price-level in FFP	
Effect on other contract provisions	Start of work: End of work:
CONTRACTOR:	
Project Manager	Date:
Contracts Officer	Date:
CUSTOMER: Micos Engineering GmbH	
Project Manager	Date:
Contracts Officer	Date:

APPENDIX J. N.A.

N.A.

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# APPENDIX K. MILESTONE COMPLETION CERTIFICATE (MAC) TEMPLATE



### MILESTONE COMPLETION CERTIFICATE

Phasexx Modelxx		
Milestone 1 (milestone description)		
Pursuant to Contract No	(hereinafter referred to as ive of Contractor, hereby certifie	s "Contractor"), the undersigned, the es that the following tasks which are
Milestone Tasks	Date of Completion:	Scheduled Date:
The successful completion date for th countersigned by Micos Engineering Gr		te on which this certificate is duly
Contractor's Authorized Representative	Accepted by Mico	os Engineering GmbH
By:	By:	
Name:	Name: Mr Peyman	n Rahnama
Title:	Title: Project Man	nager
Date:	Date:	
APPENDIX L. N.A.		
N.A.		

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# APPENDIX M. PROCUREMENT AND FINANCIAL REPORT TEMPLATE

LORIS - Procurement and Financial Report										
rear ear										
Quarter										
D										
Prepared by										
Signature:										
Date:										
Approved by										
.,										
Signature:										
			_							
Date:										
Date:										

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# FLORIS Contract, subcontractors PO, CCN and PATP List

	1	ı	T	[		ı			
Nr Contract, PO, CCN, PATP, CR	Contractual Nature	Title Contract, PO, CCN, PATP, CR	Price Type	Amount EUR	Company involved	Class A / B	Class A to	Status	Comments

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#### **Contractor's Milestone Payment Plan (including all subcontractors)** Company Unique MS Title MS MS type Achievement Contract Country Price Contractual MS Invoice Payment MS MS Introduced Comments number Type date of MS date of MS Amount Due date Date status / Changed Number Name Amount EUR explanations EUR by CCN in case of PAID divergence

- End of Document -