



***Agreement No. 99292/ESO/22/106502/ADE  
for the  
Construction phases of the ArmazoNes  
high Dispersion Echelle Spectrograph (ANDES) instrument***

BETWEEN

the **European Organisation for Astronomical Research in the Southern Hemisphere**, hereinafter referred to as **ESO**, having its Headquarters at Karl-Schwarzschild-Strasse 2, D-85748 Garching bei München, Germany, represented by its Director General, Xavier Barcons,  
on the one hand,

AND

**Istituto Nazionale di Astrofisica (INAF)**, having its Headquarters at having its Headquarters at Viale del parco Mellini 84, I-00136, Roma, Italy, hereafter referred to as the **“Institute”**, represented by the President of INAF, Prof. Roberto Ragazzoni, in the name and on behalf of the **“ANDES Consortium”**,

on the other hand.



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The ANDES Consortium, hereafter referred to as the **Consortium**, consists of the following Consortium partners and associate partners (the “Consortium Members”), as defined in the ANDES Consortium Agreement signed by the following entities.

This list is the initial one and might evolve without the need to amend this Agreement.

- Federal University of Rio Grande do Norte, Board of Stellar Observational Astronomy, Brazil,
- Institut de Recherche sur les Exoplanètes and Observatoire du Mont-Mégantic, and Département de physique, Université de Montréal, Canada,
- Instrument Centre for Danish Astrophysics, on behalf of Niels Bohr Institute, Aarhus University, and Danmarks Tekniske Universitet (DTU), Denmark,
- Centre national de la recherche scientifique (CNRS) on behalf of Laboratoire Lagrange (LAGRANGE), Observatoire de la Côte d'Azur, CNRS, Université Côte d'Azur in Nice, Laboratoire d'Astrophysique de Marseille (LAM), Institut de Recherche en Astrophysique et Planétologie (IRAP/OMP) in Toulouse, Institut de Planétologie et d'Astrophysique de Grenoble (IPAG), Université Grenoble Alpes, Laboratoire Univers et Particules de Montpellier (LUPM), Université de Montpellier, Institut d'Astrophysique de Paris (IAP), Laboratoire de Météorologie Dynamique (LMD, France,
- Leibniz-Institut für Astrophysik Potsdam (AIP), Germany,
- Institut für Astrophysik und Geophysik, Georg-August-Universität Göttingen (IAG), Germany,
- Max-Planck-Institut für Astronomie, Heidelberg, Germany,
- Zentrum für Astronomie Heidelberg, Landessternwarte (ZAH), Germany,
- Thüringer Landesternwarte Tautenburg (TLS), Germany,
- Universität Hamburg on behalf of its Department of Physics, Hamburger Sternwarte (HS), Germany,
- Istituto Nazionale di Astrofisica (INAF) (Rome), the “Institute”, Italy,
- Nicolaus Copernicus University, Poland,
- Instituto de Astrofísica e Ciências do Espaço, Porto, Portugal,
- Centro de Investigação em Astronomia/Astrofísica da Universidade do Porto (CAUP), management institution of Instituto de Astrofísica e Ciências do Espaço at Universidade do Porto, Porto, Portugal,
- FCIências.ID - Associação para a Investigação e Desenvolvimento de Ciências, management institution of Instituto de Astrofísica e Ciências do Espaço, Lisboa, Portugal,
- Instituto de Astrofísica de Canarias, Spain,



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- Consejo Superior de Investigaciones Científicas (CSIC, Spain), on behalf of Instituto de Astrofísica de Andalucía and Centro de Astrobiología, Madrid, Spain,
- Lund University, Sweden,
- Stockholm University, Sweden,
- Uppsala University, Sweden,
- Université de Genève, Département d'Astronomie, Switzerland,
- Universität Bern, Physikalisches Institut, Switzerland,
- the Science and Technology Facilities Council (United Kingdom), as part of United Kingdom Research and Innovation, an executive non-departmental public body, sponsored by the Department for Science, Innovation and Technology whose principal office is at Polaris House, Swindon, SN2 1FL ("UKRI" or "STFC"), acting on behalf of the UK Astronomy Technology Centre, the Cavendish Laboratory & Institute of Astronomy, Institute of Photonics and Quantum Sciences, Heriot-Watt University, United Kingdom,
- University of Michigan, Department of Astronomy, USA.



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ESO and the Institute, which acts in the name and on behalf of the ANDES Consortium as defined in the ANDES Consortium Agreement, are hereinafter individually referred to as a “party” and collectively as the “parties”.

The ArmazoNEs high Dispersion Echelle Spectrograph (ANDES) for the Extremely Large Telescope (ELT) was formerly known as HIRES.

The agreement for the “HIRES Phase A Study” was signed on 29.03.2016 and was completed on 2 July 2018 under the agreement No. 67443/ESO/15/68696/OSZ.

The agreement for the Phase.B-One/ESO/22/106502/ADE for the ANDES instrument was signed on 11.08.2022 and was completed on 10.11.2023.

Now, the parties agree to proceed with the construction of the ANDES instrument in accordance with the present terms and conditions:

**ESO and the Institute, which acts in the name and on behalf of the Consortium, (hereinafter individually referred to as a “party” and collectively as the “parties”), agree as follows:**

## **Article 1. SUBJECT OF THE AGREEMENT**

- 1.1. The Institute shall perform the:

**Design, construction and commissioning of ANDES for the ELT**

in accordance with the present Agreement.

ANDES may also be referred to under this Agreement as ANDES Instrument or the Instrument.

- 1.2. The Instrument consists of modules, which are detailed in the Statement of Work (SOW), Annex 1.

- 1.3. The following order of priority shall apply to the Agreement:

- 1.3.1. the provisions of the present Articles;

- 1.3.2. the General Conditions of ESO Contracts, Munich, December 2014 (hereinafter referred to as the General Conditions of ESO Contracts or GCEC), not attached but available on the ESO website:

<http://www.eso.org/public/industry/cp/docs/gen-conditions.html>;

- 1.3.3. the Statement of Work (SOW), Doc. No. ESO-325159 (Annex 1) issue 2 and the Applicable Documents specified therein, which the parties declare to know and accept;

- 1.3.4. the Technical Requirements Specification (TS), Doc. No. ESO-391757 (Annex



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- 2) issue 2 and the Applicable Documents specified therein, which the parties declare to know and accept;
- 1.3.5. the ELT GTO Funding of Instruments, Doc. No. ESO-321600, as may be amended before the Funding Review (see Article 4.2.3), which the parties declare to know and accept;
- 1.3.6. the current ESO Policy for guaranteed time of observations (GTO) as described in the document ESO/Cou-1543 rev 2, available at [https://www.eso.org/sci/facilities/eelt/docs/Cou\\_1543\\_Public\\_EELT\\_GTO\\_Policy\\_051214.pdf](https://www.eso.org/sci/facilities/eelt/docs/Cou_1543_Public_EELT_GTO_Policy_051214.pdf);
- 1.3.7. the current ESO Policy for GTO as described in the Appendix 2 of the Council document ESO/Cou-996 (2004), with revisions implemented in ESO/Cou-1514\_rev (2013) and in ESO/Cou-1628 (2015), and available at [https://www.eso.org/sci/observing/policies/gto\\_policy.html](https://www.eso.org/sci/observing/policies/gto_policy.html).

A document higher on the priority list shall always take precedence over a document lower on the list.

- 1.4. The Instrument shall be installed on one of the Nasmyth Platforms of the ELT and in the Coudé rooms of the ELT due to an insufficient mass and/or volume allocation on the Nasmyth Platform, which will require a modification of the ELT infrastructure needed for the Instrument; the corresponding costs shall be borne by the Consortium as part of the hardware costs, unless differently agreed upon by the parties in the frame of the Funding Review process mentioned at Article 3.2.2.

## **Article 2. CONSORTIUM AGREEMENT**

- 2.1. The ANDES Consortium Agreement concluded among all the Consortium Members defines their rights and obligations in their internal relationship during the performance of the project.
- 2.2. The Project T0, T1 and T2 are defined in the Statement of Work (SOW).
- 2.3. The Institute shall inform ESO of any amendment to the ANDES Consortium agreement during the performance of the present Agreement.

## **Article 3. PROJECT PHASING AND FUNDING**

- 3.1. The “HIRES Phase A Study” was completed on 2 July 2018 under the agreement No. 67443/ESO/15/68696/OSZ.
- 3.2. The present Agreement consists of 4 consecutive phases, which are detailed in the SOW Section 3.2.
- 3.2.1. The ANDES (previously HIRES) Phase B-One, which covers the first part of the preliminary design phase, ended with the System Specifications and Architecture Review (SAR), and was completed on 10.11.2023 under the agreement No.



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Phase.B-One/ESO/22/106502/ADE.

The present Agreement starts at the SAR and its entry into force is the T1 of the project.

The second part of Phase B starts at T1 and ends with the Preliminary Design Review (PDR) of the project.

- 3.2.2. A Funding Review (FR) will be held between the PDR and the Final Design Review (FDR), during which the cost of the instrument will be defined and put in relation to the Consortium's funding available for the Instrument.

Depending on the availability of funding from the Consortium and the GTO that can be awarded by ESO to compensate for the Consortium's cash contribution, ESO and the Institute will discuss the following options and scenarios:

- a) The ESO Council might decide to award a number of GTO nights according to the ELT GTO policy formula corresponding to the Instrument's cost, subject to negotiation and within and up to the available GTO nights;
- b) ESO might provide a cash contribution for hardware cost, subject to availability;
- c) The parties might agree to descope the Instrument if not enough funding or GTO is available. In this latter case:
  - i. ESO and the Consortium mutually have to agree on which ANDES modules proposed by the Consortium shall be delivered, taking into account on the one side the Consortium' scientific interests and funding constraints and on the other side the ESO's programmatic aspects, subject to the recommendations of the ESO governing bodies; and
  - ii. The performances specified in the Technical Requirements Specifications (Annex 2) of each of the Instrument modules (e.g. resolving power, simultaneous wavelength coverage, accuracy, etc...) remain unchanged; and
  - iii. The Instrument is fully functional and includes all the necessary control software and data reduction; and
  - iv. The modularity of the Instrument's design guarantees future upgrades of the Instrument to restore compliance with the full specifications if more funding becomes available;
  - v. The GTO compensation will be calculated and negotiated based on the revised Consortium's contribution, subject to availability.
- d) The parties might agree to not proceed with the next phases of the Instrument, in which case Article 4.2.5 shall apply.

- 3.2.3. The moment that is considered the Project T2 shall be the date of the written agreement by the parties to proceed with the next phases of the Project, after





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the process laid down in Article 3.2.2 is completed and the ESO governing bodies have approved to continue.

- 3.2.4. Phase C is subject to the successful completion of Phase B and covers the final design phase. Its finalisation is subject to the approval by the ESO governing bodies after the Funding review and to the agreement of the parties to proceed further. Phase C ends upon the successful completion of the Final Design Review (FDR).
- 3.2.5. Phase D is subject to the successful completion of Phase C and covers the manufacturing, assembly, integration and test phase, ending upon the granting by ESO of the Preliminary Acceptance Europe (PAE).
- 3.2.6. Phase E covers the transportation to Paranal, Chile, the installation and commissioning phase, ending upon the granting by ESO of the Provisional Acceptance Chile (PAC).
- 3.2.7. Should the procurement of some long lead time items under Phase D be anticipated before successful completion of Phase C, this shall be at the Consortium's own risk. However, in no case shall the Consortium engage on any such procurements before the Project T2 as defined in Article 3.2.3.
- 3.3. Instrument funding and funding reviews
  - 3.3.1. The Consortium is the sole responsible for raising the complete design, construction and commissioning funding of the Instrument, including all appropriate contingencies, commensurate with the estimated project risks in accordance with the outcome of the process laid down in Article 3.2.2.
  - 3.3.2. In order for ESO to monitor that the Consortium has secured or is in a position to gather the funding required for this project, the Consortium shall provide, as part of the PDR data package, a funding plan, showing the requested or planned contributions from the different countries/agencies, as well as a costing budget and expenditure status.
  - 3.3.3. Such plan and report shall be updated for the Funding Review (FR) mentioned in Article 3.2.2 and in sections 3.2.3 and 4.1.5.3 of the SOW, to detail the total contributions from all the contributors of the Consortium and their status: contribution received, promised, reserved, pending next funding round etc... so as to reasonably demonstrate to ESO that the Consortium funding is secured.

This funding plan shall include at the FR stage, as far as possible:

    - Letters of strong support or intent from funding agencies, and/or
    - Official notification of funding awards from the relevant national funding agency, and/or
    - Funding received and reserved by ESO for the project, if any.
  - 3.3.4. The Institute will for information provide ESO with a report covering the project budget funding on a yearly basis on top of the above reviews.





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- 3.3.5. The funding plan and costing budget and expenditure status shall be updated for the FDR, to cover the projected full costing of the Instrument, which should fit within the budget confirmed further to the process laid down in Article 3.2.2.
- 3.3.6. The Institute shall deliver within the PAE (Provisional Acceptance Europe) documentation an update of the costing budget and expenditure status and the parties will discuss it at PAE.
- 3.3.7. The Institute shall deliver as part of the PAC (Provisional Acceptance Chile) documentation the final report of the full expenditures of the project.
- 3.4. The continuation of the project under this Agreement is subject to both parties' agreement to proceed to the next Phase, based on:
  - 3.4.1. the successful completion, within a reasonable period of time, of respectively the Phases B and C, and to
  - 3.4.2. the demonstration by the Consortium at each of the Funding Review (see Article 3.2.2) and FDR that the Consortium has reasonably secured the project funding.
- 3.5. In case ESO terminates the Agreement due to the Consortium failure to comply with Article 3.4, the Consortium may not claim any compensation whatsoever beyond the GTO mentioned in Article 4.2.5.

#### **Article 4. REMUNERATION - GUARANTEED TIME OBSERVATION (GTO)**

- 4.1. This Agreement does not entail any payment from ESO to the Consortium and none of the Consortium Members may claim any payment from ESO under the Agreement, unless the parties agree otherwise after the Funding Review, in accordance to Article 3.2.2.b.
- 4.2. A period of Guaranteed Time Observation (GTO) with ANDES installed at the ELT telescope will be granted by ESO to the Consortium Members in return for the financial, hardware and manpower contributions of the Consortium Members for the successful completion of the Agreement, according to the following principles:
  - 4.2.1. ESO shall grant the Institute up to 65 (sixty-five) nights of GTO over 10 years in return for the successful construction and commissioning of the Instrument, to compensate for the Consortium' staff effort, as follows:



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Description	Number of GTO nights
Completion of Phase B one under the agreement No. Phase.B-One/ESO/22/106502/ADE	1
Completion of the Funding Review	9
Provisional Acceptance Chile (PAC)	55

4.2.2. In addition, the total sum of cash contributions and capital investments covering the procurements required for this project will be compensated with GTO at the following rates, subject to ESO Council's approval after the Funding Review and subject to any cap set by the ESO Council:

- a) for ESO Member States' entities: one night per 367,000 EUR, and
- b) for entities outside ESO Member States: one night per 734,000 EUR.

4.2.3. The values defined in Article 4.2.2 are at the economic conditions of 2024 and will be indexed for inflation up to the year of signature of the present Agreement using the ESO budget indexation numbers approved by the ESO Council, in accordance with section 1 of the document No. ESO-391757 mentioned in Article 1.3.5.

However, the values defined in Article 4.2.2 might be revised and shall have to be approved by the ESO Council before the completion of the Funding Review process described in Article 3.2.2.

4.2.4. The total number of GTO nights granted by ESO to the Institute in accordance with Article 4.2.2 for the full Instrument shall be agreed and approved by the ESO Council after the Funding Review and subject to availability, to be taken over 10 years.

4.2.5. The total number of GTO nights granted by ESO to the Institute in case Article 3.2.2.d. applies is defined in Article 4.2.1, under conditions of actual usage to be agreed upon by the parties.

4.2.6. The distribution/use of this GTO among the Consortium Members is a matter for the Consortium, and ESO will not be involved.

4.2.7. The Consortium Members shall apply the following principles regarding their procurements under Article 4.2.2:

- a) Procurements shall be done according to the national rules applicable to the respective entities (as a general principle on a competitive basis);



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- b) Reporting of the procurement forecast and progress, the prices and the cumulative spend shall be made to ESO on an annual basis and at PDR, FR and FDR and for the PAE;
  - c) Detailed evidence of the Consortium's capital and cash expenditure for each procurement whose value exceeds 50,000 EUR (invoices, ERP extracts, etc...) shall be stored by the Consortium members. In case ESO expresses doubts about the fairness and reasonability of the total value of cash contributions and capital investments reported by the Consortium according to Article 4.2.7.b, which the Institute cannot satisfactorily answer, the Institute shall promptly make them available if so requested by ESO. For the avoidance of doubt, ESO's intention is not to conduct a financial audit but to check that the reported expenditure is fair and reasonable.
- 4.2.8. The addition of non ESO Member States' entities to the Consortium must be individually approved by ESO beforehand.
- 4.3. GTO policy
- The applicable policy for GTO, approved by the ESO Council, is defined in the ELT GTO Policy, mentioned in Article 1.3.7.

## **Article 5. INSTITUTE'S DELIVERABLES**

- 5.1. The list of Supplies to be delivered by the Institute is detailed in the SOW.
- 5.2. The project schedule and key milestones are defined in section 3.3 of the SOW.
- 5.3. Both ESO and the Consortia are interested to have the instrument commissioned as soon as possible. However, it should normally not be delivered before at least one year after the ELT Scientific First Light. Given the current uncertainty in their schedule and their higher priority, ESO reserves the right to define when the available period for the installation of the instrument at the telescope will be.
- 5.4. ESO will as far as possible keep the Consortium informed of any such changes.  
A clear status will be assessed at each Key Milestone, allowing the Parties to discuss the impact on the costs and schedule including the instrument installation period.
- 5.5. In case the proposed installation period at the telescope becomes incompatible with the resources available within the Consortium, the Instrument will be delivered to Chile and stored on Paranal Observatory site at ESO's cost until installation and commissioning.
- 5.6. Provisional Acceptance Chile (PAC) will be shifted according to the resulting storage duration and will become the corresponding new applicable contractual date.
- 5.7. The Consortium may not claim any compensation due to such changes.



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However, the Consortium is not committed to maintain the labour resources needed to install and commission the Instrument for an undefined time after shipment to ESO.

For these reasons, or in any case where a major delay due to ESO or telescope schedule results in costs or other consequences unaffordable by the Consortium, the parties agree to enter into negotiations aiming at finding a fair solution in the best interest of the instrument within the boundaries applicable to the parties at the time.

- 5.8. The delivery of the Instrument and related items (including all special handling devices and tools) shall be DAP ELT telescope, Armazones, Chile, Incoterms® 2020.

Transport and insurance from the Consortium's premises to the ELT Observatory in Chile shall therefore be under the Consortium's responsibility and at its cost, the risk passing to ESO upon the delivery to ESO's premises on the ELT site.

- 5.9. In accordance with article 8 of the *Protocol on the Privileges and Immunities of the European Organisation for Astronomical Research in the Southern Hemisphere* and according to Article IV of the *Agreement between the Government of Chile and ESO for the Purpose of Establishing an Astronomical Observatory in Chile*, with reference to section 10 of the agreement between the Government of Chile and CEPAL Regulating Conditions for the Operation, in Chile, of the Headquarters of the Commission, goods and materials intended for use in connection with the official activities of ESO, whether imported or exported by ESO, shall be exempt from all prohibitions and restrictions on import or export within the ESO Member States and Chile.

Shipments in the name of ESO shall be announced accordingly to ESO in accordance with the Annex 3 (Routing and Packing), so that the logistics responsible persons of ESO can guide, advise on, and support the import of the Instrument to Chile.

- 5.10. Classified items

In case of export-controlled or classified items, it shall be the responsibility of the entity that procures the item from a third party under export control rules or that provides it to ESO, to obtain from the relevant authorities(s) in a timely manner any required export license for the use of ESO, and where needed for the Consortium Members, on ESO's premises in Germany, Chile and where needed, at the premises of the Consortium Members.

## **Article 6. ESO'S UNDERTAKINGS**

Paragraph 9 of the GCEC is complemented as follows:

- 6.1. ESO has designed the ELT and is building the ELT and all the technical, scientific and logistical infrastructure required for the operation of the telescope



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and its facilities. ESO develops auxiliary equipment and provides organizational support required to install, operate and maintain the scientific instruments at the telescope including ANDES.

- 6.2. ESO will provide the Institute with the undertakings listed in section 3.6 of the SOW.
- 6.3. ESO will deliver to the Institute (place to be agreed upon) the ESO hardware deliverables listed in section 3.6.2 of the SOW (Equipment).

The Form 5 (Goods transfer-Acceptance Form) shall be signed by the parties upon delivery to formalise the transfer of risk and property.

This will take the form of a work-package under the Consortium project manager, and reporting will be done through a specific ESO work-package manager, who will be the point of contact for the Consortium (see Article 19.2 and section 3.7 of the SOW).

Both parties will identify at the Funding Review (FR) the overall costs of all said ESO Equipment. All procurement and associated costs (excluding the internal ESO FTEs) will be charged to the Consortium, unless the parties agree otherwise (see Article 3.2.2.b). For that purpose ESO will issue a sales invoice and the Institute will pay within 30 days.

Any subsequent increase of the costs of the ESO product deliverables listed in section 3.5.2 of the SOW that is not generated by the Consortium shall be borne by ESO. Any subsequent increase of the costs of any other hardware that would be procured by ESO in the frame of section 3.7 of the SOW shall remain with the Consortium.

- 6.4. The deliverables provided by ESO, if any, whose property is not transferred to the Consortium, shall remain the property of ESO and shall be used solely for the execution of the Agreement and for no other purpose, unless ESO prior approval in writing has been given.
- 6.5. ESO will provide the Institute with all the relevant technical information and documentation that is available in the course of the Agreement.

It is clear and understood that part of this documentation can also be provided by a third party and that ESO will share the details to its best knowledge with the Consortium *as is*.

## **Article 7. PROVISIONAL ACCEPTANCE**

Paragraph 15.1 of the GCEC is complemented as follows

- 7.1. Provisional Acceptance shall be granted by ESO on the ELT telescope in Armazones (Chile) after all deliverables as specified in the SOW have been reviewed and accepted by ESO and all requirements of the Agreement have been fulfilled, i.e. upon Provisional Acceptance Chile (PAC).



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- 7.2. To that effect, the Principal Investigator (PI, see Articles 19.2.1 and 19.3) shall submit to ESO a Request for Provisional Acceptance, using the Form 1.
- 7.3. ESO shall draw up a Certificate of Provisional Acceptance (see Form 2) and send it to the Principal Investigator.
- 7.4. Each deliverable of the Consortium specified in the Agreement and its Annexes shall become the property of ESO upon the granting of the Instrument Provisional Acceptance Chile.

## **Article 8. GUARANTEE**

- 8.1. The guarantee period of all Supplies shall be two years from the date of Provisional Acceptance.
- 8.2. Paragraph 16.2 of the GCEC is complemented as follows:
  - 8.2.1. The Consortium shall be responsible for all repairs, adjustments and/or modifications of ANDES during the guarantee period, which do not fall under the normal documented maintenance and which are necessary in order to comply with the technical requirements specified in this Agreement. Upon ESO's formal notification, the Consortium shall replace or repair the components and/or spares which failed during normal operation or need to be replaced due to modification.
  - 8.2.2. However, subject to prior authorization given by the Principal Investigator, which shall be promptly given in case of urgent need, ESO personnel may carry out minor repairs, adjustments and/or modifications where ESO considers that it is in a position to efficiently perform them. In such a case the responsibility will not be transferred from the Consortium to ESO.
- 8.3. Paragraph 16.6 of the GCEC is complemented as follows:

In any of the cases where the Consortium has to carry out the repair, adjustment and/or modification, ESO will organize and bear the cost of:

  - the travel within Chile, between Santiago and the site and
  - the board and lodging in ESO premises in Chile,

of the relevant Consortium's personnel.
- 8.4. Except as provided for in Article 8.2.2 above and in Paragraph 16.2 of the GCEC, the Institute shall not be held liable if components have been replaced, modified or repaired by ESO without the Principal Investigator's written consent.

## **Article 9. FINAL ACCEPTANCE**

Paragraph 17.2 of the GCEC is complemented as follows:

- 9.1. The Principal Investigator shall submit to ESO a Request for Final Acceptance,





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using the Form 3.

- 9.2. ESO shall draw up a Certificate of Final Acceptance (see Form 4) and send it to the Principal Investigator.

## **Article 10. PENALTIES FOR NON-COMPLIANCE**

Paragraph 25 of the GCEC is replaced by the following:

- 10.1. If the commissioned instrument does not comply with any of the critical performances, interfaces and/or critical requirements of the applicable technical specifications, the parties shall enter into a negotiation to discuss in good faith the impact of the non-compliance(s) and the GTO values agreed upon in accordance with Article 4 shall then be decreased accordingly. The impact of the non-compliance(s) will be applied to the overall cost of the Instrument as defined at the Funding Review before capping, if any, is applied in accordance with Article 4.2.2.
- 10.2. The above penalties shall apply as far as the non-compliance is not due to factors outside the control of the Consortium. Such factors include ESO delays in the definition of pertinent ELT interfaces and/or in the agreed dates of ESO deliverables impacting the project.
- 10.3. Any reduction of GTO shall be subject to the prior approval by the ESO Council.

## **Article 11. INTELLECTUAL PROPERTY**

- 11.1. Paragraph 23.1 of the GCEC is replaced by the following:

Newly developed data, information and knowledge:

The data, information and knowledge developed newly under or in consequence of the Agreement will be owned by the party that developed it. The Consortium Members agree that ESO is hereby granted an irrevocable, non-commercial, and unvarying license, free of any charge, to use, copy and disseminate any such data, information and knowledge supplied by the Consortium or a Consortium Member under the Agreement, for its own requirements in the field of scientific research and its applications.

ESO is entitled to transfer the above data to third parties working for ESO in the Member States of the Organisation. The above-mentioned third parties have the right to use the data in question free of charge, and allow the data in question to be used, free of charge, by third parties for this purpose.

All rights and obligations as defined in this Article shall remain fully valid and applicable for all legal successors or assignees of the Consortium Member owning the relevant data, information and knowledge.

The Consortium Members are obliged to include the rights and obligations as defined above in any contract or agreement of transfer or further licensing of the





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data, information and knowledge to any third party, including the provision that those third parties shall be required to bind their respective successors in the same way.

- 11.2. Paragraph 23.2 of the GCEC is replaced by the following:

Protected intellectual property:

The rights and obligations as described in Article 11.1 shall be applicable to any intellectual property title that a Consortium Member decides to take out regarding the newly developed data, information and knowledge owned by it.

- 11.3. Paragraph 23.5 of the GCEC is replaced by the following:

Publication:

The parties to the Agreement are encouraged to make publicly available the results of their research. Before either party submits a paper or abstract for publication or otherwise intends to publicly disclose information about confidential or proprietary/patentable matter, the other party shall be provided 30 days to review the proposed publication or disclosure to assure that proprietary/confidential information is protected.

The publication or other disclosure shall be delayed for up to 90 additional days upon written request by any party as necessary to preserve patent or other intellectual property right. If any objection with regard to the value of confidentiality or other commercial interests is raised by any party against a project-related publication, the parties will make all efforts to find a mutually acceptable solution within three months after the objection was raised, by making appropriate text modifications in the document.

- 11.4. Paragraph 23.2 of the GCEC is replaced by the following:

Protected intellectual property:

The rights and obligations as described in Article 11.1 shall be applicable to any intellectual property title that a Consortium Member decides to take out regarding the newly developed data, information and knowledge owned by it.

- 11.5. Paragraph 23.5 of the GCEC is replaced by the following:

Publication:

The parties to the Agreement are encouraged to make publicly available the results of their research. Before either party submits a paper or abstract for publication or otherwise intends to publicly disclose information about confidential or proprietary/patentable matter, the other party shall be provided 30 days to review the proposed publication or disclosure to assure that proprietary/confidential information is protected.

The publication or other disclosure shall be delayed for up to 90 additional days upon written request by any party as necessary to preserve patent or other intellectual property right. If any objection with regard to the value of



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confidentiality or other commercial interests is raised by any party against a project-related publication, the parties will make all efforts to find a mutually acceptable solution within three months after the objection was raised, by making appropriate text modifications in the document.

## **Article 12. CONFIDENTIALITY**

Paragraph 11.2 of the GCEC is replaced by the following:

The confidentiality obligations laid down in Paragraph 11.1 of the GCEC shall apply from the date of signature of the present Agreement and shall remain in full force and effect after termination or cancellation of the Contract, unless otherwise notified in writing by the disclosing party.

## **Article 13. LIABILITY – INSURANCE**

13.1. Paragraph 28 of the GCEC is replaced by the following:

- 13.1.1. It is agreed that the Consortium will either be self-insured and therefore no external insurance evidence will be requested, or will take out cover for the relevant risk with appropriate insurance policies.
- 13.1.2. Between the moment of delivery of ANDES to ESO in Armazones (Chile) and the date of Provisional Acceptance, the Instrument will be covered by the applicable ESO All-Risk Insurance, at ESO's cost.
- 13.1.3. The declared value of the Instrument will be agreed upon between ESO and the Institute Principal Investigator before any transport and shipment of the instrument is initiated.

Should such agreement not be reached, the declared value of the Instrument shall be defined by ESO on the basis of an appropriate value as estimated by ESO after consultation with the Consortium.

- 13.2. Each party shall hold the other party harmless from, and indemnify it for loss and damage, including, but not limited to, personal injury and death and related legal costs, resulting from acts or omission of the party, its employees, agents and/or Sub-contractors.

Except in cases of gross negligence or willful misconduct, a party shall not be liable to the other for loss of contract, loss of income or profit or any other consequential or indirect loss or damage.

- 13.3. The Consortium's aggregate liability collectively shall be limited to the total cost of the Instrument.



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#### **Article 14. TERMINATION FOR CONVENIENCE**

Paragraph 12.2 of the GCEC is replaced by the following:

- 14.1. Both, ESO (following a relevant Council decision) and the Consortium may at any time, by registered letter, terminate the Agreement in whole or in part for important and justified reasons.
- 14.2. In the event that ESO enforces this provision, the parties will agree in good faith on a reasonable amount of GTO to be granted by ESO as compensation to the Consortium's FTEs and incurred costs, expenditures and liabilities incurred by it in the performance of its obligations under the Agreement up to the moment of termination.  
  
This GTO will be granted according to the Policy for guaranteed time of observations. It is clear and understood that in such case the parties will agree on which other ESO instruments the GTO will be granted.
- 14.3. In the event that the Institute enforces this provision, the parties will agree in good faith on a reasonable compensation, in cash, hardware, FTEs and/or any other instrument GTO reduction as compensation to the ESO's hardware costs (see SOW sections 3.6 and 3.7) and liabilities incurred by it and not covered by the Consortium under the Agreement up to the moment of termination.

#### **Article 15. TECHNICAL MODIFICATIONS**

For the application of the Paragraph 12.1 of the GCEC, any technical modification of the Instrument' specifications requested by any of the parties shall follow a formal change request process before any potential implementation.

#### **Article 16. DISPUTES – STATUS – APPLICABLE LAW**

- 16.1. In case of dispute arising from the Agreement, the parties agree and engage to enter into negotiations with the aim to reach an amicable settlement. Failing such an amicable settlement, the parties shall resort to arbitration under the conditions described in Paragraph 29 of the GCEC.
- 16.2. The status of ESO and the law applicable to this Agreement are described in Paragraphs 30 and 31 of the GCEC.

#### **Article 17. GENERAL CONDITIONS OF ESO CONTRACTS (GCEC)**

- 17.1. Except if and in so far as they have been modified under the above Articles, the GCEC shall apply to this Agreement.
- 17.2. Wherever in the GCEC the terms "Contract" and "Contractor" are used to cover the relation between the parties, those shall be understood respectively as "Agreement" and "Institute/Consortium" under the present Agreement.



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## **Article 18. LANGUAGE**

Any communication and correspondence between ESO and the Consortium shall be in the English language.

## **Article 19. PARTIES' REPRESENTATIVES**

19.1. The ESO representatives in charge of the follow-up of the Agreement are:

19.1.1. For technical and managerial matters:

ESO

Karl-Schwarzschild-Strasse 2, D-85748 Garching bei München, Germany

Project Manager: Frederic Derie

– Tel: + 49 89 3200 6550 - E-mail: [fderie@eso.org](mailto:fderie@eso.org)

19.1.2. For contractual matters:

ESO (address as above)

Contracts and Procurement – Alain Delorme

Tel: + 49 89 3200 6147

E-mail: [adelorme@eso.org](mailto:adelorme@eso.org)

19.2. The Institute's representatives in charge of the follow-up of the performance of the Agreement and contact for all communication and correspondence are:

19.2.1. For technical and managerial matters:

INAF (Lead Technical Institute)

Alessandro Marconi (Principal Investigator, "PI")

Dipartimento di Fisica e Astronomia, Università di Firenze,

via G. Sansone 1, Sesto Fiorentino (Firenze), Italy

Associated to INAF - Osservatorio Astrofisico di Arcetri,

Largo E. Fermi 5, 50125 Firenze, Italy

Email: [alessandro.marconi@inaf.it](mailto:alessandro.marconi@inaf.it), [alessandro.marconi@unifi.it](mailto:alessandro.marconi@unifi.it)

Tel. +39 055 275 2239, Telefax: +39 055 220 039

19.2.2. For contractual matters:

**Raffaella Riondino**

INAF – Headquarters

Viale del Parco Mellini 84



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00136 Rome, Italy

Phone: +39 063 5533 3237

E-mail: [raffaella.riondino@inaf.it](mailto:raffaella.riondino@inaf.it)

- 19.3. The Principal Investigator on the instructions of the Institute shall act in the name and on behalf of the Institute and of all the Consortium Members, and any document sent and/or signed by him under the Agreement shall bind the Institute on behalf of the Consortium.
- 19.4. The above-mentioned parties' representatives may be replaced after a prior written notification sent to the other party. No formal amendment to the Agreement will be required.

### **LIST OF ATTACHMENTS**

- Annex 1: Statement of Work (SOW), doc. ref. ESO-325159
- Annex 2: Technical Requirements Specification (TS), doc. No. ESO-391757
- Annex 3: Routing and Packing

Forms:

- Form 1: Request for Provisional Acceptance
- Form 2: Provisional Acceptance Certificate
- Form 3: Request for Final Acceptance
- Form 4: Final Acceptance Certificate
- Form 5: Goods transfer and acceptance Form



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Done at Garching by Munich, on 5 June 2024  
for **the INSTITUTE, INAF**

.....  
Prof. Roberto Ragazzoni  
President of INAF

Done at Garching by Munich, on 5 June 2024  
for **ESO, the European Organisation for Astronomical Research in the Southern Hemisphere**

.....  
Xavier Barcons  
Director General