



Swiss Industry
Liaison Office
for International Research Organisations



UNIVERSITÉ
DE GENÈVE

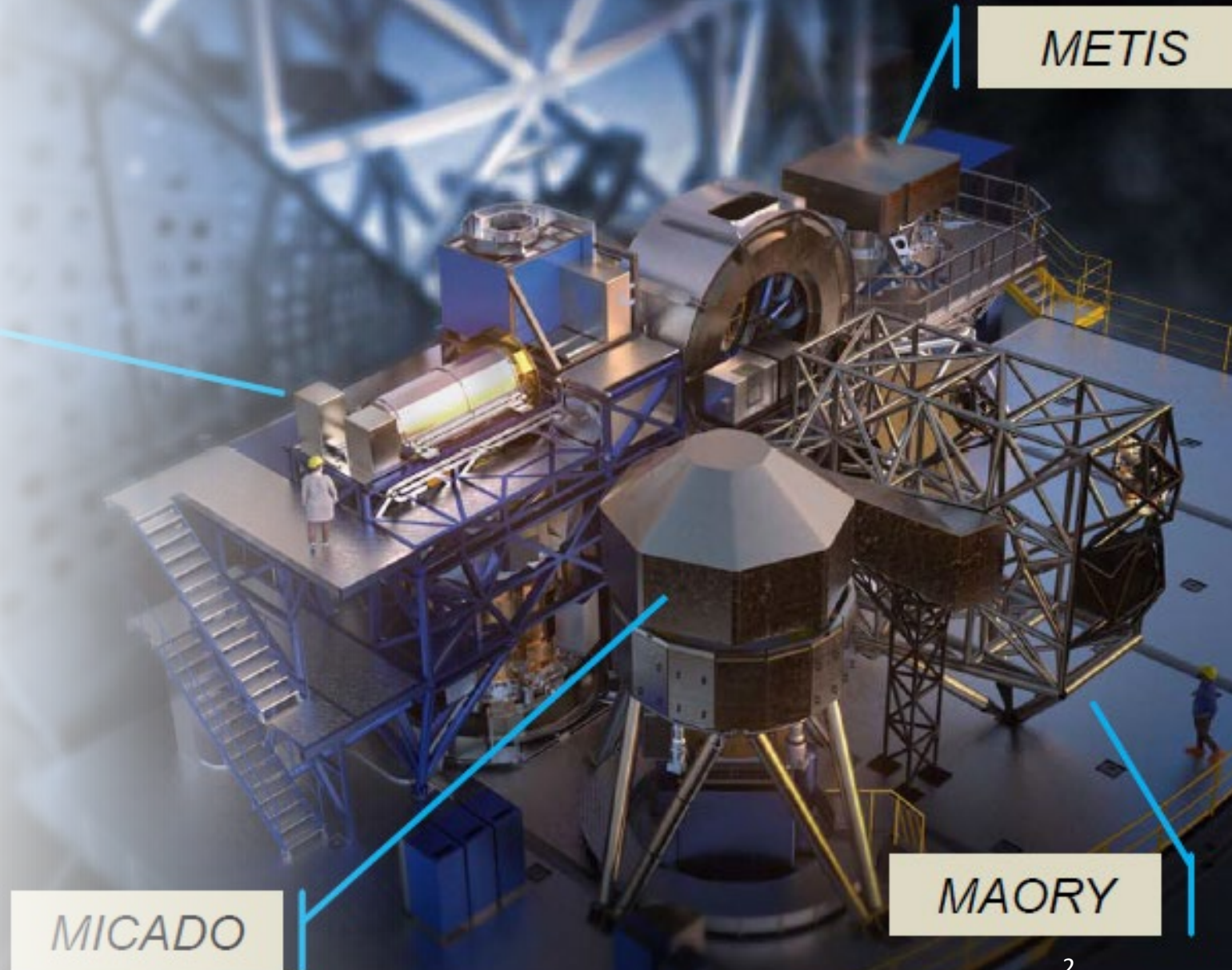
Your Knowledge #8 - Towards a broader and enhanced
ENRIITC ILO & ICO network
12.05.2022

**Feedback on ESO's Extremely Large Telescope (E-ELT)
Information Day for the industry
Geneva – 07 April 2022**

Michel Hübner
Swiss ILO Office
replay for CERN ILO meeting – 21.03.2023

Procurement conference for the first scientific instruments of the world largest optical telescope.

- Providing procurement information to the European supplier industry (15 ESO Member States)
- Procurement range est. 100 MEUR
- Supply needs in Mechanisms, Optics, Cryogenics, Vacuum, Detectors, Control
- First telescope light Sept 2028



Event objectives

- Improve the networking and cooperation between industry and institutes in the field of large scientific space observation instruments
- Connect E-ELT Instruments procurement officers with the European supplier industry (fifteen ESO Member States)
- Presentations of procurements and schedules from all six E-ELT Instrument consortia with a specific focus on procurements:
 - with a high-tech content,
 - where competition is seen as fair among Member States (more than one supplier),
 - with a substantial allocated budget.

Event KPIs

- for industry = the number of new business opportunities/contacts identified by a company
- for labs/IRO = the number of new supplier options for a given procurement
 - Feed-back questionnaire to all industry participants

Event challenges

- Re-start in person a large international event after 2 years of pandemic
- Bridge the gap between ESO (telescope provider), the E-ELT independent instrument consortia (with different procurement jurisdictions) and the industry supplier network.
- Acknowledge the role of each participating entity (ESO /Laboratories /ILOs /Suppliers)
- Fund from mixed sources (international, national, regional / private, institutions, academic)
- Use modern event organisation methods to facilitate qualified & inclusive participation :
 - **Objectives /audience** : event dissemination (who is concerned- why attend) / speaker panel selection
 - **Event roll-out**: on site infrastructure, remote participation, presentation handouts
 - **Information exchange**: event webpage, participation list, conference booklet incl. company profiles
 - **Participative event**: B2B & poster session, company pitches
 - **All-in-one experience**: professional/cultural/recreative/sustainable development compatible

One information point – the event website



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Planet S

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ES+O

ELT Instruments Day 2022

7 avril 2022
Geneva
Fuseau horaire Europe/Zurich

Entrer le texte à rechercher

- Accueil
- Ordre du jour
- Liste des contributions
- Inscription
- Liste des participants
- Enquêtes

Enquête

Company Satisfaction survey / ELT Instruments Day 2022 - Geneva - 07.04.2022

Company profile

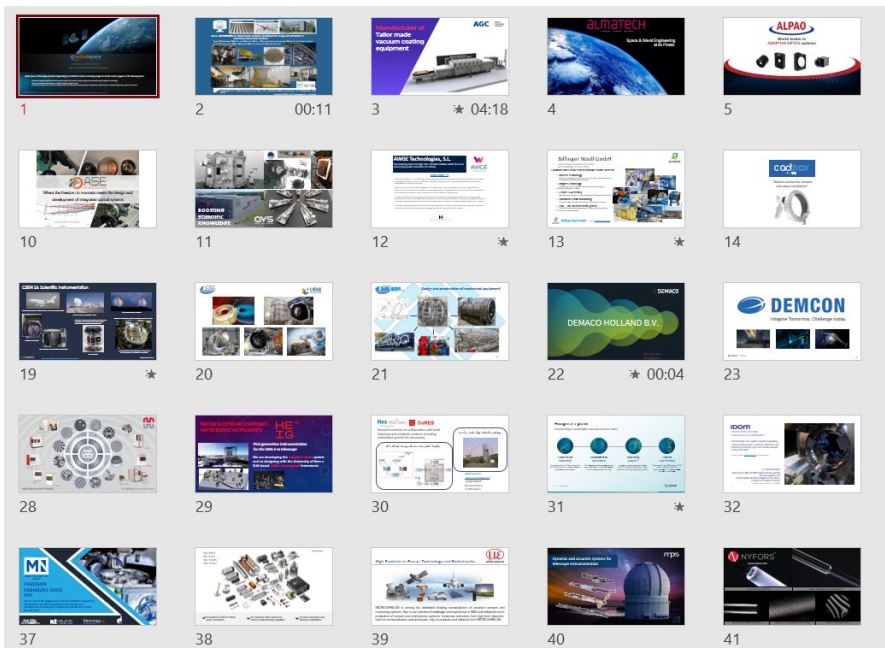
Company domain of activity

- Detectors
- Optical devices
- Mechanical or Opto-mechanical devices

Participative elements



Poster session



Company slideshow

Exhibitors List

A.D.S. International
ACTIVE SPACE TECHNOLOGIES S.A.
AGC Glass Europe SA
ALMATECH SA
ALPAO
ALSTMEX
ALTER TECHNOLOGY
AMOS S.A.
APCO Technologies
ASE Optics Europe
AVS Added Value Solutions
AWGE Technologies, S.L.
Bilfinger Noell GmbH
Cadinox SA
Cambridge Consultants
Centre Spatial de Liège
Creotech Instruments S.A.
Cryoworld BV
Cryo Diffusion
CSEM SA
Dal Ben SpA
DEMACO HOLLAND B.V.
Demcon Advanced Mechatronics
ENSA
First Light Imaging
Heidelberg Instruments Mikrotechnik
HEIG-VD
Heraeus Conamic
Hexagon MI
IDOM
IMEC
IPP CAS

Institute of Scientific Instruments of the Czech Academy of Sciences

Kampf Teles
Manufax Ne
MAXON
Micro-Epsilon
MPS Micro
NYFORS Tek
Observatory
OFFICINA ST
OIP Sensor
Optical Gale
Optocraft G
Physik Instru
RFR Solution
SZInnovatio
SAFRAN REE
SCHOTT AG
SENER Aero
SETIS
SwissOptic
SYDERAL SW
SYMETRIE
TECPA
Teledyne SP
Thales SESO
TNO
TOPTICA Pr
VOL
von Hoerne
Winlight Sys

Foreword

Dear industry representatives,
Dear ELT instrument work package managers & National astronomy institute members

We are writing to you as industry Liaison Officers to the European Organisation for Astronomical Research in the Southern Hemisphere ESO.

There is no doubt that ESO is one of the world's leading research institutions in the field of astronomy. The ESO telescope infrastructures have produced spectacular scientific discoveries for the international astronomy community with major achievements in the exploration of the universe. The construction of the ESO's extremely large optical/infrared telescope ELT with a primary mirror in diameter with a "first light" mission scheduled for 2027. The ESO ELT will be "the biggest eye on the sky" – the largest optical/near-infrared telescope in the world. Once complete ELT will address many of the most pressing unsolved questions in astronomy.

Technology development, including industry partnerships, has been one of ESO's top priorities since its construction. In parallel, the design of four of the first generation ELT instruments to be constructed has started with MAESTRO, MANGRO, MAJESTO and METIS. Two further instrument proposals and MANGRO, have just recently obtained budget approval from the ESO Council. These instruments concentrate a substantial amount of high-tech components in different technological fields, such as mechanisms, vacuum & cryogenics, detectors or control electronics. The delivery of the ELT will represent a substantial amount of high-tech components in different technological fields, such as mechanisms, vacuum & cryogenics, detectors or control electronics. The delivery of the ELT will represent a substantial amount of high-tech components in different technological fields, such as mechanisms, vacuum & cryogenics, detectors or control electronics. The delivery of the ELT will represent a substantial amount of high-tech components in different technological fields, such as mechanisms, vacuum & cryogenics, detectors or control electronics.

Regular exchanges between ESO managers, physicists and engineers from the laboratories in which industrial companies are seen as highly valuable. In order to allow companies to anticipate challenges ahead of time, and for laboratories to assess expertise and capabilities of the industrial supplier options, it is our pleasure to welcome you to the "ELT instruments information day". No Geneva International Congress Center on the 7th April. Besides ESO keynote speeches, we have a participation of the ESO's ELT instrument project team leaders who will provide a full overview of instrument activity, including technical status updates and procurement opportunities.

We are delighted that more than 40 companies from different ESO member states are showcasing innovative products and services. Participating companies will be invited at small poster booths of a scientific conference to present their technology offer and show their previous or ongoing research facilities. This poster session will foster exchanges and serve as a basis for "business to session". A hybrid conference format will be set up for companies and institutes prevented from travelling.

We warmly invite you to attend the 2022 ELT instruments information day and look forward to your General!

On behalf of the ESO Industry Liaison Group

Michel Hübner
 Swiss ESO ILO

Sophie Pireaux
 Belgian ESO ILO

Ramon Navarro
 Dutch ESO ILO

Program

10:00	Registration/ Welcome coffee	
10:55	Welcome address Michel Hübner, ESO ILO Switzerland	
ESO Presentations chair Sophie Pireaux, ESO ILO Belgium 11:00 – 12:15		
11:00	ELT Telescope Progress Roberto Tamai, ESO, Head of ELT Program	
11:20	ELT Instruments – General Overview Suzanne Ramsay, ESO, ELT Instruments Project Manager	
11:40	ESO Technology Roadmap Norbert Hubin, ESO	
12:00	Q&A presentations	
12:15	Lunch	
ELT Instruments Presentations chair Ramon Navarro, ESO ILO The Netherlands 13:15 – 16:05		
13:15	HARMONI David Le Mignant, IAM Marseille	
13:45	MICADO Sebastian Rabien, Max Planck Inst. Garching	
14:15	MAORY Paolo Ciliegi, INAF Bologna Ugo Di Giannatempo, INAF Bologna	
14:45	Coffee break	

A.D.S. International

A.D.S. International is an Italian private company operating in the design and production of Astronomy and Defense Systems.

<https://www.ads-int.com/>

ACTIVITY KEYWORDS

Large Deformable Mirrors for Adaptive Optics - High-precision high-payload Hexapod positioner systems - Land Satcom on the Move, Airborne DataLink terminals, Ground Stations

WHO WE ARE

Founded 25 years ago, ADS has been constantly growing and developing highly specialized skills and know-how. A lean, flexible organization and a competent, experienced workforce allow ADS to design, develop and deliver cutting edge products and customised solutions to its international customer base. A.D.S. International has been certified to ISO 9001:2015.

Our premises feature an assembly hall 11 m tall, a mechanical workshop, an electronics lab, two clean rooms and a chemical laboratory. We develop, integrate, calibrate and test all our products in-house, to assure direct control of our processes.

PRODUCTS / TECHNOLOGY DETAILS

CATEGORY	DESCRIPTION	BRAND
Deformable Mirrors	Our Large Deformable Mirrors for Adaptive Optics (AO) operation on the telescope optical path have been selected by most of the present and planned extremely large telescopes.	USTL2B-ELT-M4 GDF-ADM-LSR-M4 ADM
Hexapod	High accuracy hexapod and linear actuators feature payloads from 500kg to 3000 kg with submicron displacement accuracy and resolution. Accuracy in the across range.	DELTA-DES LIFT-MS-ELT-M4 M4-S
Antenna Systems	We developed a new suite of high-end antenna systems for first responders and defense markets.	Paraflex GDM-4.5 & Cyber-Dragon

KEY FIGURES

Turnover: 4 MEUR
Employees: 22

SOME REFERENCES

- European Southern Observatory
- Giant Magellan Telescope
- Large Spoolable Telescope
- NAOJ
- INAF
- INAF

From Concept to Object

Conference digital booklet

Event results

- Participation in person: 141p (+45p remote)
- Representation
 - Suppliers: 60 companies / 12 countries
 - Suppliers with poster exhibition: 35 companies
 - Scientists: 38 p from 12 astronomy laboratories
 - ESO Organisation: 5 upper level managers
 - ESO ILOs : 11 delegates
- Dinner event on the «Italie», Belle Epoque lake Geneva fleet (91p)
- Event website: presentations & photos: <https://indi.to/ELTInstruments2022>



Thank you !

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www.swissilo.ch