

# Genesis Science Workshop

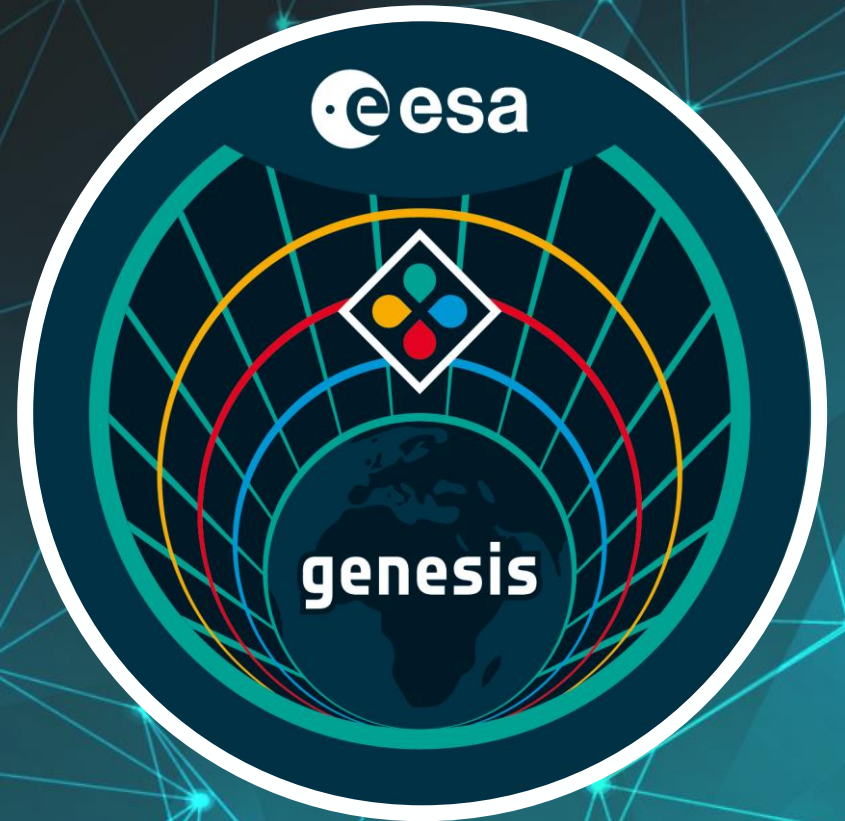
3<sup>rd</sup> -4<sup>th</sup> April 2025

Matera, Italy



## Introduction to Genesis Science Workshop

S. Gidlund,  
E. Sakalauskaite



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# Welcome to Genesis Science Workshop 2025!



Welcome!

- Welcome to the 2<sup>nd</sup> edition of a two-day **Genesis Science Workshop 2025** organised by ESA in collaboration with ASI
- Matera - home to **ASI Space Geodesy Centre**,
- Aims to bring together **Genesis scientific community** together with ESA Project Team and industrial consortium



Agenzia  
Spaziale  
Italiana



Genesis Science Workshop  
2024 at ESOC, Darmstadt

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# Agenda – Day 1



## 3 April, Thursday

|               |                     |               |   |
|---------------|---------------------|---------------|---|
| 8:00 - 9:00   | Registration        |               |   |
| 09:00 - 11:00 | Morning Session 1   | 09:00 - 09:30 | Welcome Speech and Introduction                             |
|               |                     | 09:30 - 09:45 | Keynote speech  |
|               |                     | 09:45 - 10:30 | Genesis Mission Status & Key Topics                         |
|               |                     | 10:30 - 11:00 | Genesis Industrial Update                                   |
| 11:00 - 11:30 | Coffee Break        |               |   |
| 11:30 - 13:00 | Morning Session 2   | 11:30 - 12:00 | Genesis Science Exploitation Objectives for 2025 and Beyond |
|               |                     | 12:00 - 12:50 | Genesis Science Management Board Presentation               |
| 13:00 - 14:00 | Lunch Break         |               |   |
| 14:00 - 15:00 | Afternoon Session 1 | 14:00 - 15:00 | Working Group 1 (ITRF and Combination Techniques) Session   |
| 15:00 - 15:30 | Coffee Break        |               |   |
| 15:30 - 17:00 | Afternoon Session 2 | 15:30 - 16:30 | Working Group 2 (GNSS) Session                              |
|               |                     | 16:30 - 17:00 | Wrap Up of Day 1  |
| 19:00         | Networking Dinner   |               |   |



For those attending the dinner, a shuttle bus is available:

- Pick up from: Ugo La Malfa street (intersection of corner Ugo La Malfa street and A. Moro street)
- Two pick up times:
  - 18:30
  - 18:45

Return to central Matera from the dinner is available at 21:45 and 22:00

# Agenda – Day 2



## 4 April, Friday

|               |                                  |               |                                 |
|---------------|----------------------------------|---------------|---------------------------------|
| 09:00 - 11:00 | Morning Session 1                | 09:00 – 10:00 | Working Group 4 (DORIS) Session |
|               |                                  | 10:00 – 11:00 | Working Group 3 (VLBI) Session  |
| 11:00 - 11:30 | Coffee break                     |               |                                 |
| 11:30 – 13:00 | Morning Session 2                | 11:30 – 12:30 | Working Group 5 (SLR) Session   |
|               |                                  | 12:30 – 13:00 | Conclusions and Closing Remarks |
| 13:00 – 14:00 | Lunch                            |               |                                 |
| 14:00 – 17:00 | Matera Geodesy Space Centre Tour |               |                                 |



- For those attending the tour, a shuttle bus is available:
  - Pick up from: Ugo La Malfa street (intersection of corner Ugo La Malfa street and A. Moro street) at **14:15**
- The bus returning to central Matera from the tour will be available at 17:00



## In person:

- Information desk in the foyer will be open for any questions and assistance if needed
- All sessions will take place in the main conference room
- Refreshments during coffee breaks and lunch will be served in a room to the left of the reception, outside the main conference room
- Information on how to access Wifi is available at the reception
- Detailed programme and other event information can be accessed by scanning the QR code on your badge

## Online participants:

- Same Webex link will be used throughout the event
- You can post your questions in the chat

**Should you have any questions or require assistance, please contact:**

### **Event logistics**

Doreen Hagemeister  
Evelina Sakalauskaite

### **Webex Support**

Camilla Smith  
Leeanne Fletcher





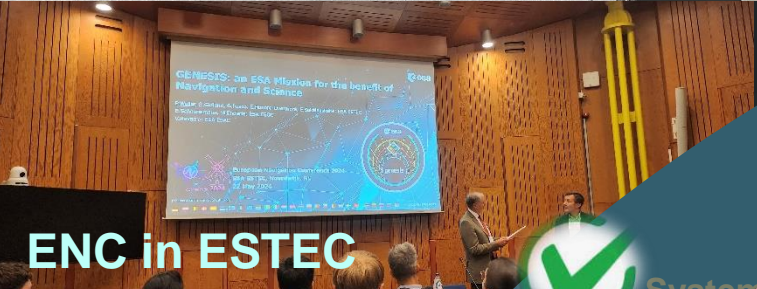
Science Workshop in ESOC



Contract Signature in Paris



KO in Milan



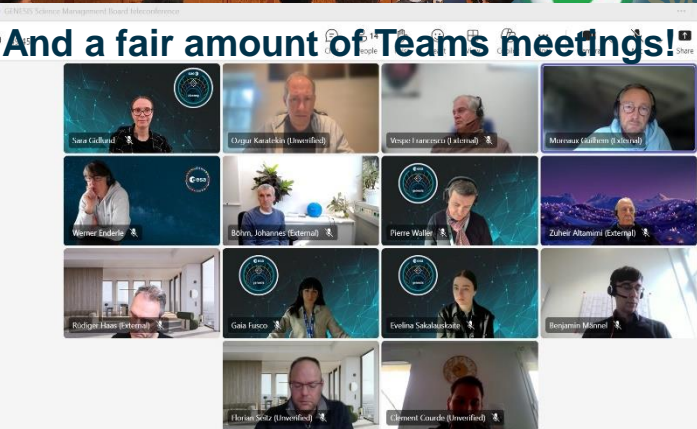
ENC in ESTEC



GNSS Science Symposium in Wroclaw



NASA Goddard Visit



And a fair amount of Teams meetings!



SRR Collocation in Milan




Progress Meeting in ESTEC



# DORIS – Implementation Plan



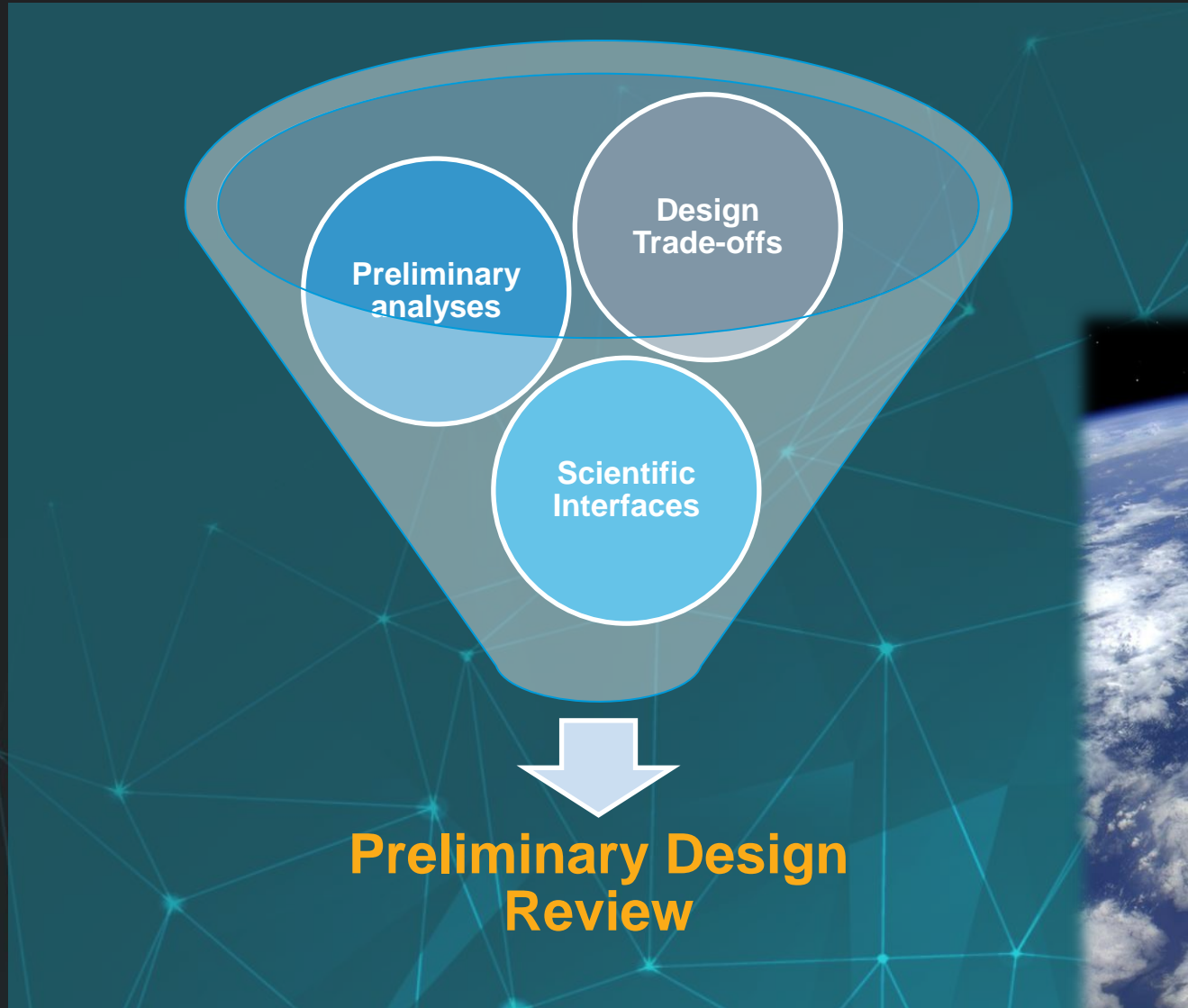
- 
- Way forward agreed in ESA Boards  
**Sep 2024**

- 
- Negotiation of co-funded contract with CNES  
**February – March 2025**

- 
- Signature of the Contract  
**Imminent**



# So, What's on Stock for 2025 and Beyond?



SRR Design Reveal,  
stay tuned for PDR...



# Genesis Deployment & Exploitation – Phasing



**CM25**

## Exploitation

- Extension of operations from 2 to 5 years
- Support to Exploitation Preparation of Scientific Segment

## Phase 2

- Launch 2028
- 2 years of operations

**Subscribed in CM22**

**Germany joined Genesis**

## Phase 1

- Development
- Qualification
- Calibration





## Content CM25

**Genesis**  
“A mission for  
the world”

ESA at the core of  
improving the  
International Terrestrial  
Reference Frame (ITRF)

A UNIQUE mission  
recognised by all the  
International Geodetic  
Services and the  
Scientific Community



**Industrial Phase 2 – Launch and Operations (including preparations)**



**Scientific Preparatory Activities**

→ Ground infrastructure and processing tools need to be strengthened to ensure the **most extensive data exploitation** possible



**Extension of Operations from 2 to 5 years**

→ Extension of operations beyond the baseline 2 years is **key to ITRF accuracy objective**

**New activities highly recommended by International Scientific Community**



# Overview of the ESA Project Team



GENESIS  
ESA Project Team

Sara Gidlund – Head of the Genesis Project

Gaia Fusco – System and Operations Manager

Evelyn Honoré-Livermore – Platform Principal Engineer

Pierre Waller – Payload Principal Engineer

Evelina Sakalauskaite – System Engineering Support

Erik Schoenemann – Head of Navigation Support Office

Jean-Christophe Berton – Navigation Engineer (GSSC)

Werner Enderle – ESA Scientific Representative

In addition: PA&S, Contracts Officer, Project Controller

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