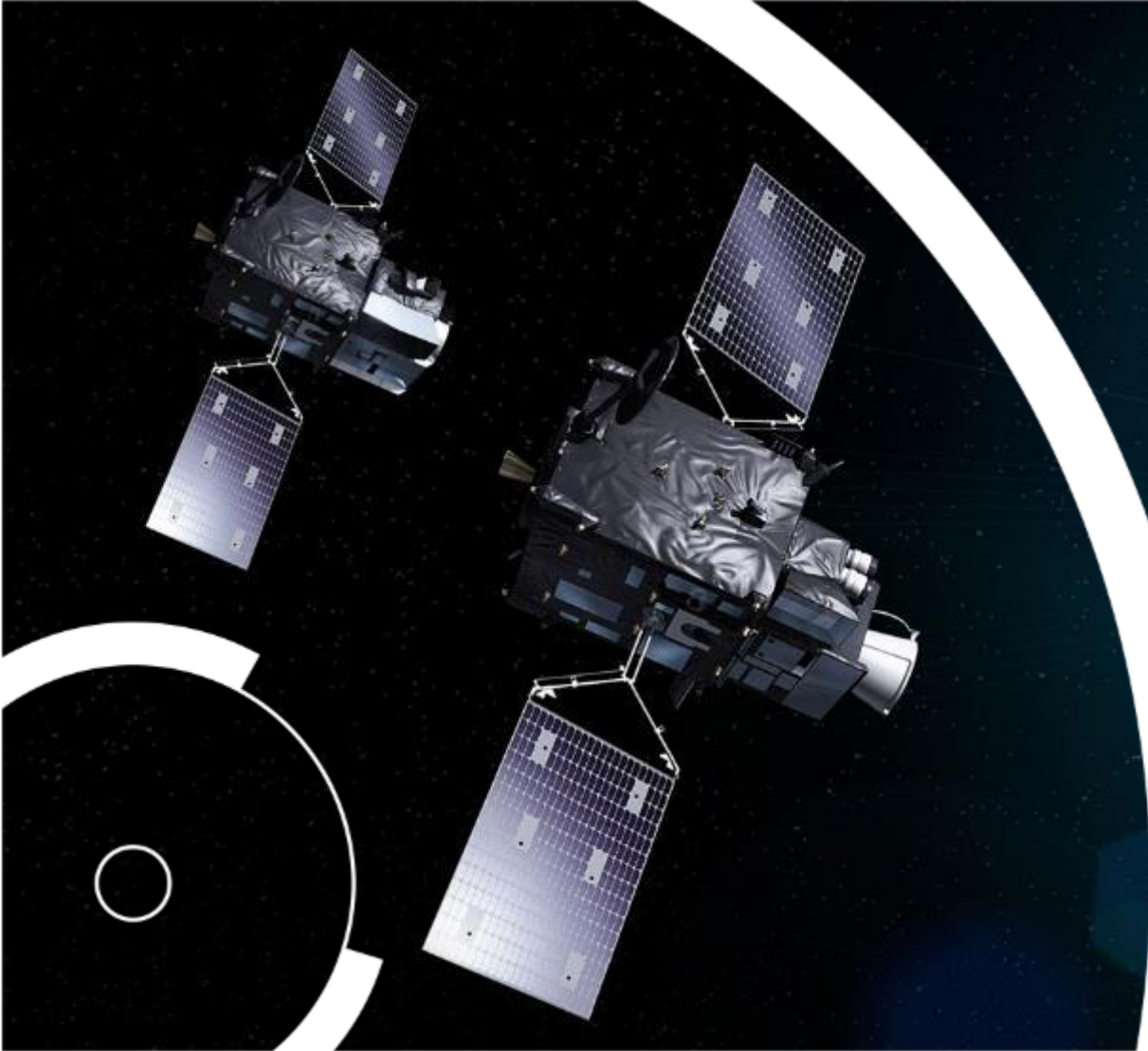




# MTG-S1 Commissioning Status

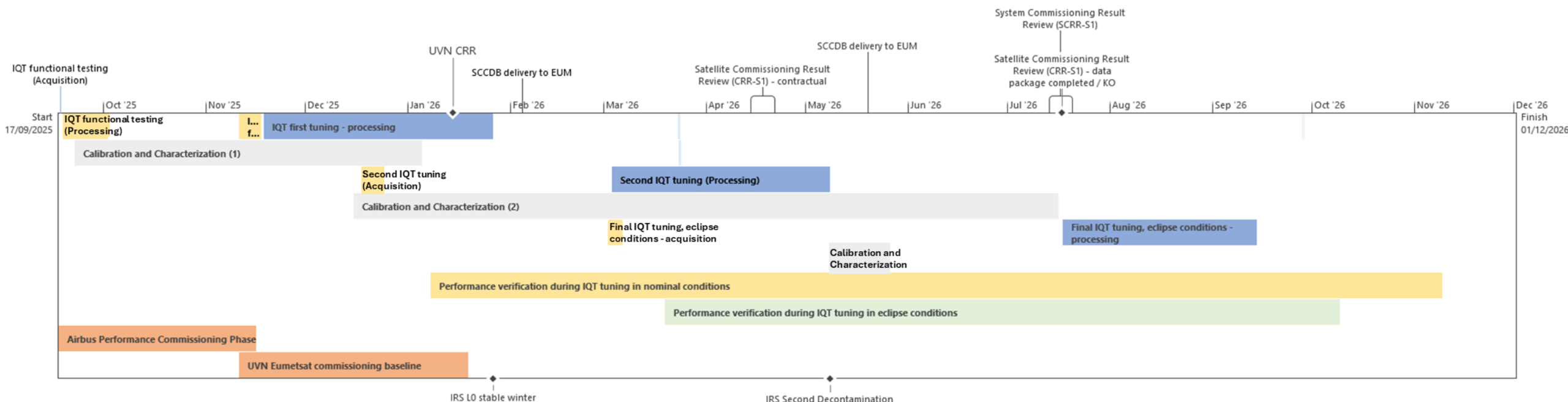
Daniele Innorta

*03 June 2025*



# Satellite Commissioning Timeline High level view

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- First batch of IRS demonstrational L1 dissemination target is around H0 + 9 months (April 26, CRR)
- Near real time / continuous dissemination of pre-operational IRS L1 target is around H0 + 12 months
- Progressive dissemination of IRS L2 is foreseen in Q3 2026 (earliest date)

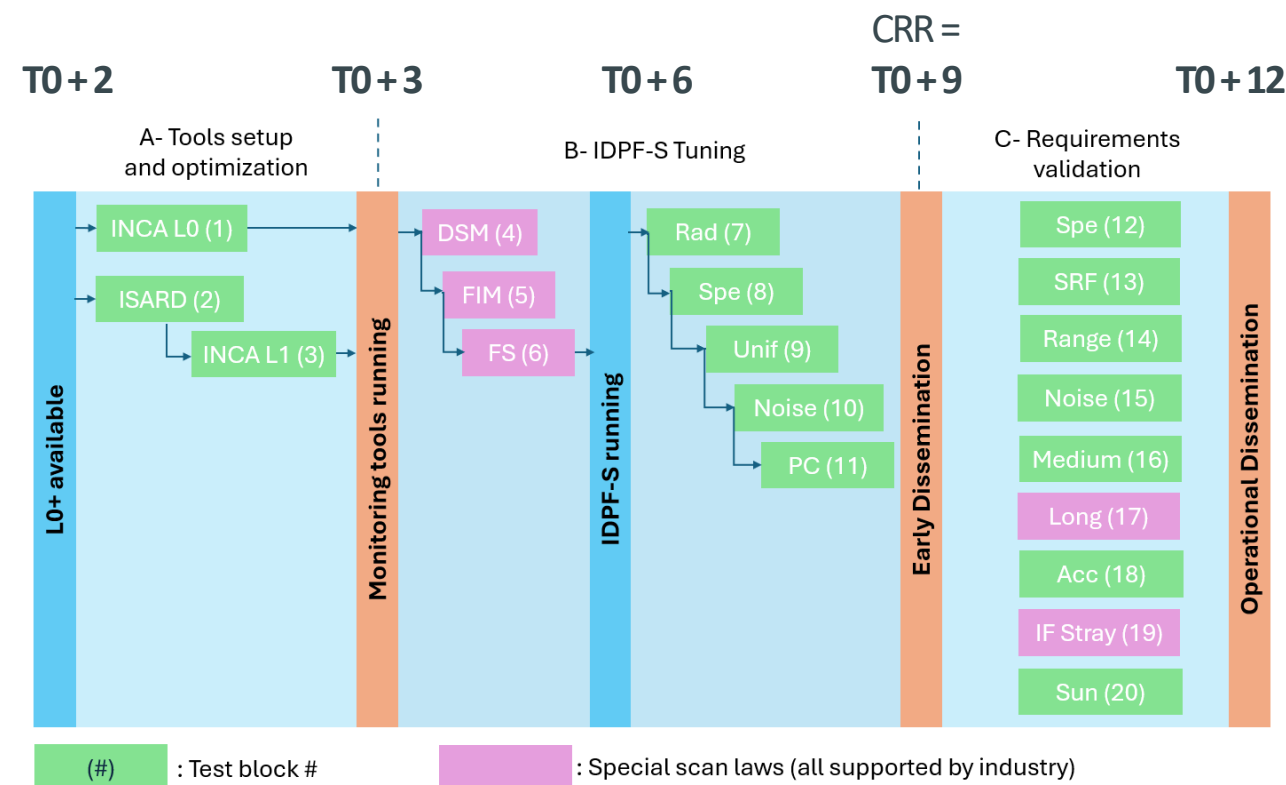
- IRS - L1 Test Spec status = Completed, not signed → [IRS Dataset Test Specification \[IRSLTSPE\] - RSP.docx](#)
  - 20 Test Blocks / 3 Phases = Tools setup and optimization + IDPF-S Tuning + Requirement Validation
    - First two phases will run in parallel of the IOIV – Relying on acquisitions from the IOIV directly
    - Objective to have products with good radiometric and spectral calibration generated by IDPF-S for CRR
    - Third phase will run until July 2026 to verify the requirements and fine-tuned the IDPF-S – mostly relying on long nominal acquisitions

## • Special scan laws:

- DSM, FIM, FS, IF straylight characterization  
→ Derisking = all supported by OHB
- Long-term calibration requires re-running FIM and FS characterization after CRR
- FS and IF straylight scan laws not yet fully agreed (waiting for OHB meeting invitation)

## • Tools:

- IRS-INCA (L0/L1 offline monitoring) and ISARD (reference processor) are ready for commissioning
- Preparation of scripts for first image activity, including L0 and L1 visualization.





## IOIP Group

|                          | #Num<br>TBs | To be rev by OHB | To be Rev by EUM | To be Reb by<br>EUM/TAS/ESA | # Baselined |
|--------------------------|-------------|------------------|------------------|-----------------------------|-------------|
| IRS First Activation     | 11          |                  |                  |                             | 11          |
| Calibration and Tuning   | 21          | 2                | 8                |                             | 11          |
| Good Health Checks       | 12          | 2                | 4                |                             | 6           |
| Performance Verification | 17          |                  | 4                | 3                           | 10          |
| Other Characterizations  | 1           |                  |                  |                             | 1           |
| Nominal Activities       | 3           |                  | 1                | 2                           |             |
| Optional Activities      | 1           |                  |                  | 1                           |             |
|                          | 66          | 4                | 17               | 6                           | 39          |



|     | Formal Test Case Runs                                   | Forecast SCB#97                     | Trend          | Comments                                                                                                                                                        |
|-----|---------------------------------------------------------|-------------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IRS | OSV-TC 26.02 IRS First Activation                       | Phase 3 June CW 23-24               | Stable         | CDC and SPT for Sun Avoidance Ready<br>FOM 15.2 received<br>CDC functionality for Scan Encoder Calibration in development<br>LUT received from Industry         |
|     | Scan encoder calibration (System)                       | Phase 3 June CW 23-24               | Stable         | CDC functionality for Scan Encoder Calibration in development<br>LUT received from Industry<br>SW81 converter expected to be redelivered                        |
|     | TPRO OSV-TC 26.04 IRS gain/offset change                | Phase 4 August CW 35                | Stable         | Will be run without DCSOT, with inputs from Industry<br>CDC functionality in development<br>ONB files received (arrived but some parts need to be confirmed)    |
|     | IRS scan scenario update (SIOV)                         | Phase 3 June CW 23-24               | Stable         | Additional conversion tool under preparation to validate the chain Conv Tool – MSGT-IPSSR –SPT – CDC)<br>Scan laws received , <b>APC Table under discussion</b> |
|     | IRS scan scenario update (System)                       | Phase 4 August CW 35 ( <b>TBC</b> ) | <b>At Risk</b> | <b>Pending SPT functionalities and MSGT</b>                                                                                                                     |
|     | TPR OSV-TC 26.03 IRS IQT functional testing (data flow) | Q4 2024                             | Done           | Test done by IVV with IQT V3                                                                                                                                    |



# Commissioning Rehearsal

| Date     | Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | comment                                                                              | www.eumetsat.int |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------|
| 08/05/25 | TRR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Done                                                                                 |                  |
| 12/05/25 | UVN First Activation <ul style="list-style-type: none"><li>UVN first Activation</li><li>Preparation for Performance Commissioning Phase (Switch ICU to IDLE)</li><li>Execution of an ADS measurement sequence</li></ul>                                                                                                                                                                                                                                                                                                              | Done                                                                                 |                  |
| 13/05/25 | IRS First Activation <ul style="list-style-type: none"><li>Switch-on ICU</li><li>ICU SW good health</li><li>Verification of temperature sensors</li><li>IRS to HTR_WARMUP</li><li>IRS Thermal Control Settings</li><li>CCM, CCU and SCAN M0 Unlock</li><li>IRS First Decontamination (no stabilisation)</li><li>IRS to COOLING</li><li>IRS to CONFIG</li><li>IRS SCAE SW good health/ICE SW good health</li><li>DPU Health checks</li><li>IRS to WAIT</li><li>SCA Encoder Calibration</li><li>Start of Nominal acquisition</li></ul> | Done                                                                                 |                  |
| 14/05/25 | IRS Sun Avoidance Operations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Done except for SPT and CDC                                                          |                  |
| 15/05/25 | Satellite depointing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Done for simplified scenario, real scenario to be refined by OHB due date end of May |                  |
| 16/05/25 | contingency scenario                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Done                                                                                 |                  |
| TBD      | TRB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                      |                  |

TRR readiness checkpoint, aiming to assess procedure readiness:

- IRS activation 22 Apr 2025 (postponed due to FOM15.2) 🔄
- Platform 23 Apr 2025 ✅
- UVN activation 24 Apr 2025 ✅
- Initial Activities and RF 25 Apr 2025 ✅

Following TRR readiness checkpoint will follow chunks of period of activities



**Thank you!**  
Questions are welcome.