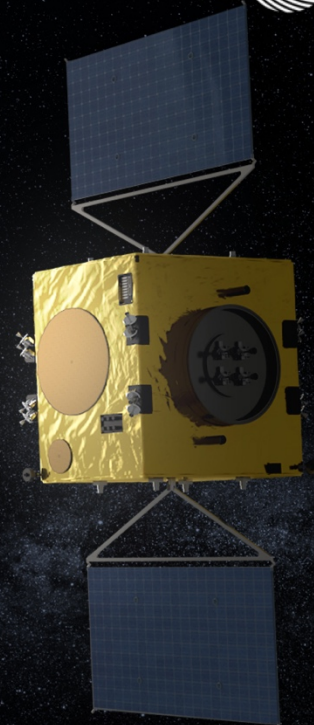
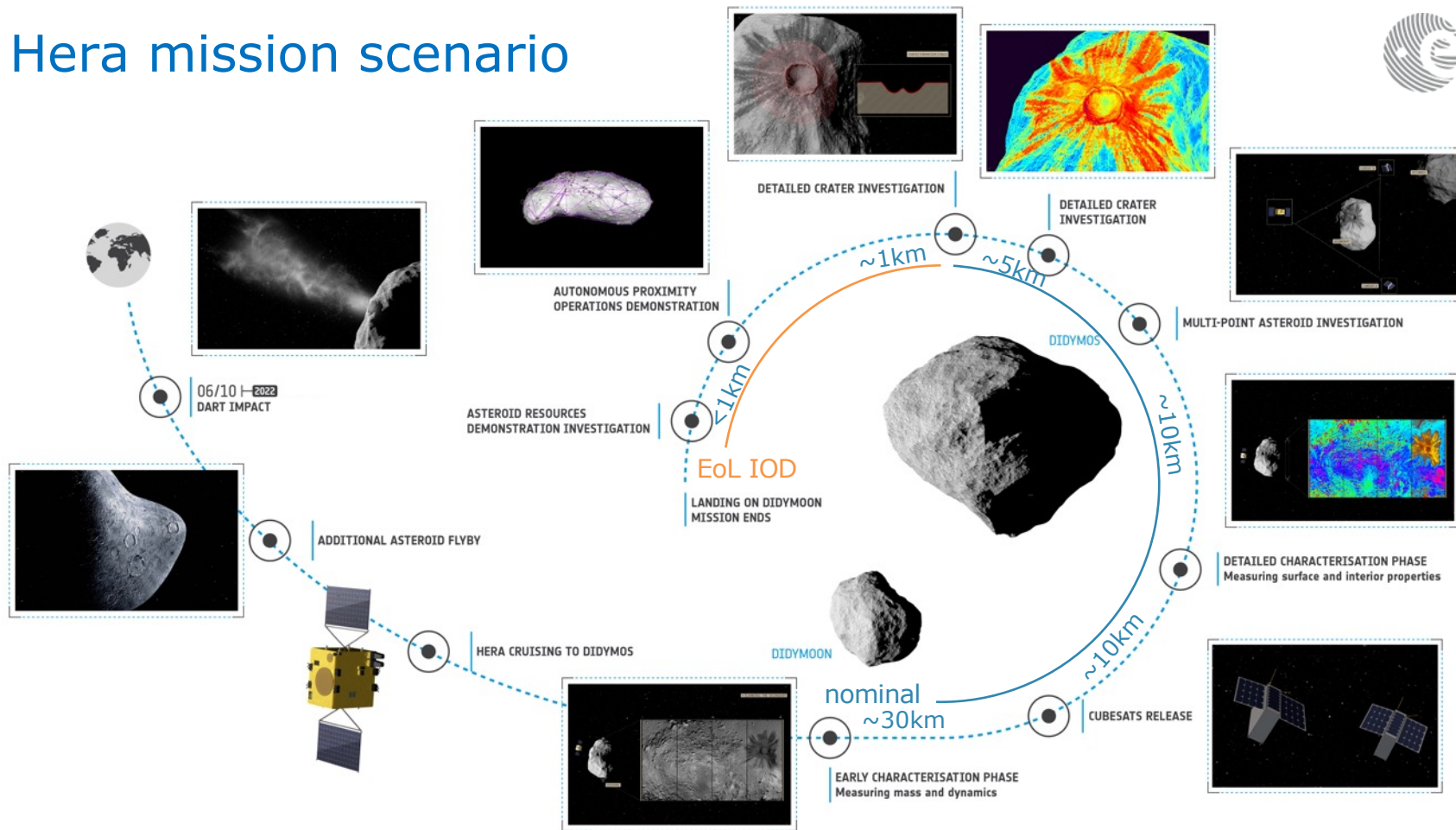




Hera baseline mission scenario and spacecraft design

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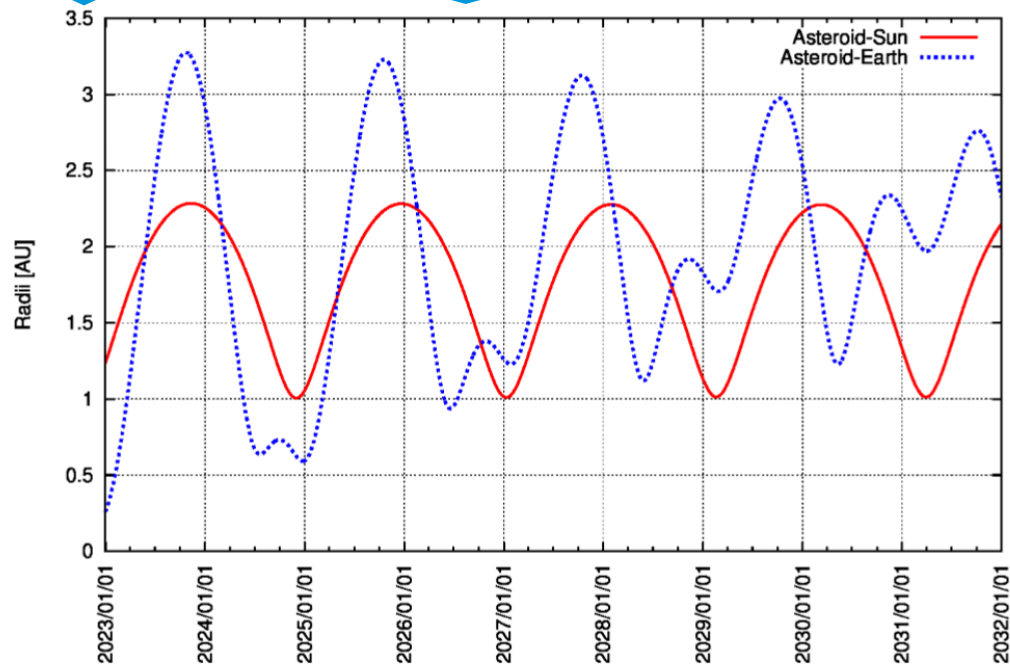
Hera mission scenario



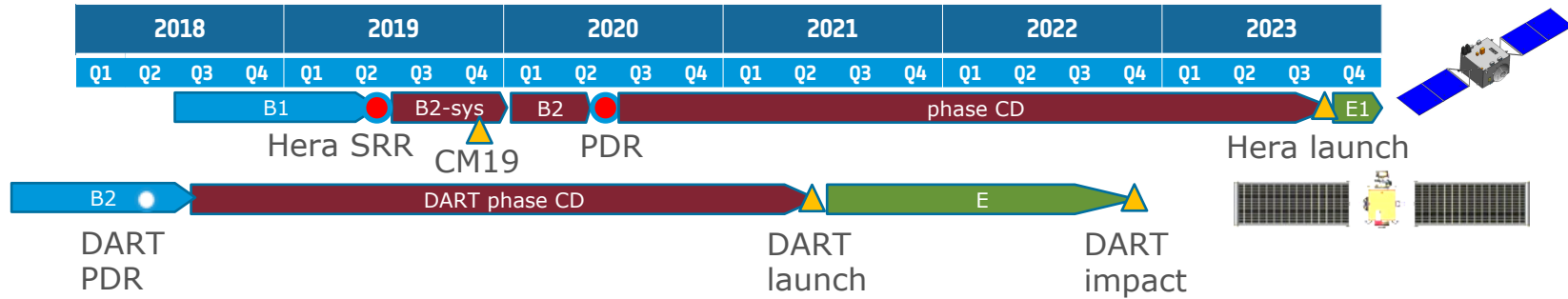
Current Mission Timeline



Mission Phase	Key Events	Date / Duration
Launch and Early Operations	Launch	Oct 23 (BL) / Nov 24 (BU)
	Early Operations / Commissioning	1-2 months (TBC)
Cruise	DSM and Interplanetary transfer	~3 / 2 years
	Arrival at Asteroid System	02/09/2026
Asteroid System Rendezvous	Insertion Manoeuvres	~28 days
	Early Characterisation Phase (ECP)	~6 weeks
Proximity Operations	Detailed Characterisation Phase 1 (DCP1)	~6 weeks
	Payload Deployment Phase (PDP)	~4 weeks
	Detailed Characterisation Phase 2 (DCP2)	~6 weeks
	Detailed Characterisation Phase 3 (DCP3)	~6 weeks
	Disposal Phase	TBD
	End of Life (EoL)	Jun 2027 (TBC)

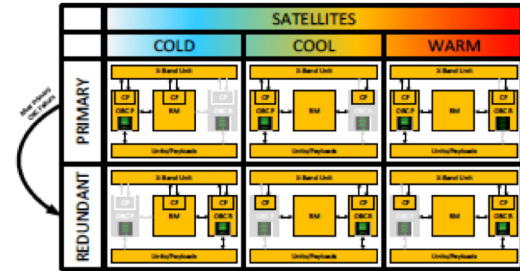


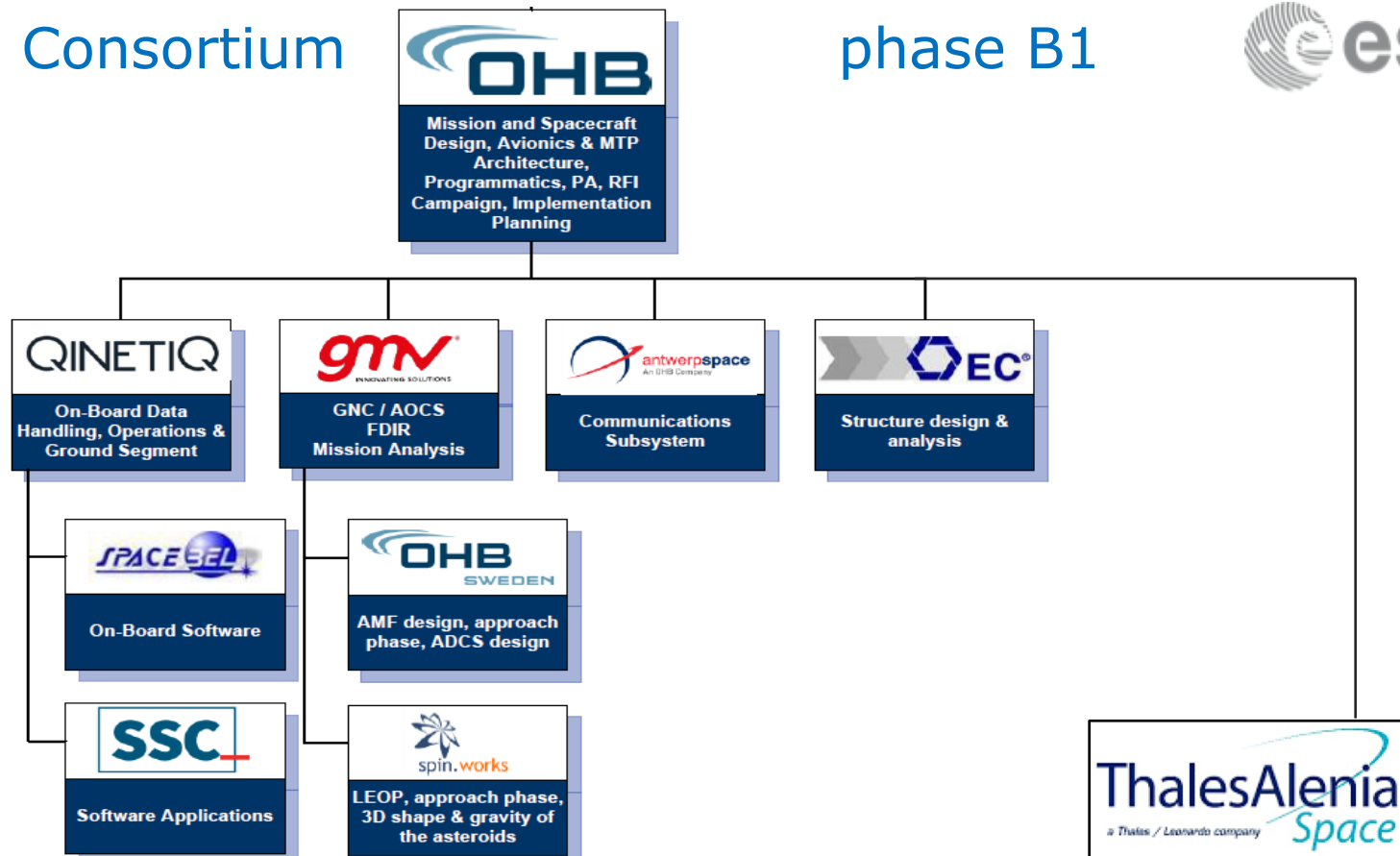
Hera phase B1



- **KO on 25 July** (DE, BE, RO, LU, SE, PT, ES, CZ, AU, FI, PL, CH) including technology development activities:

- Onboard computer (OBC) EM for HW/SW integration
- GNC and FDIR HIL and SIL in robotic lab incl:
 - Prototype a Collision Avoidance Manoeuvre
 - Mission Performance Simulator
 - High fidelity validation of Hyperspectral camera for close proximity operations
 - Enhanced Relative Navigation algorithm
- Onboard Software prototype implementation and validation with OBC EM

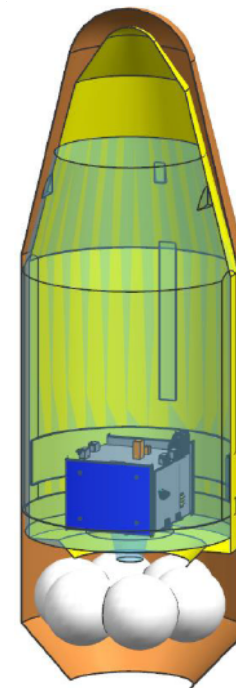
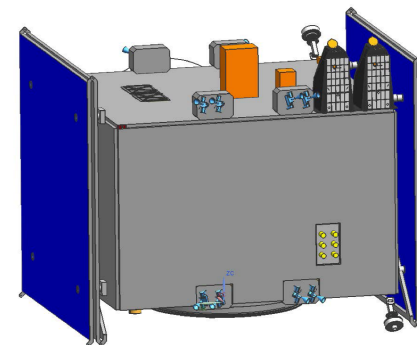
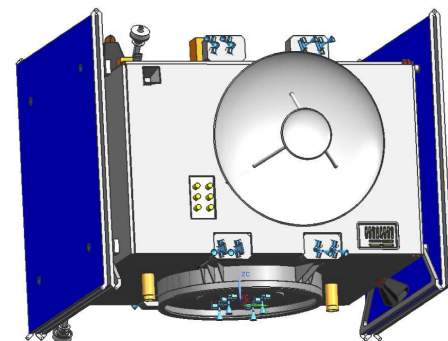




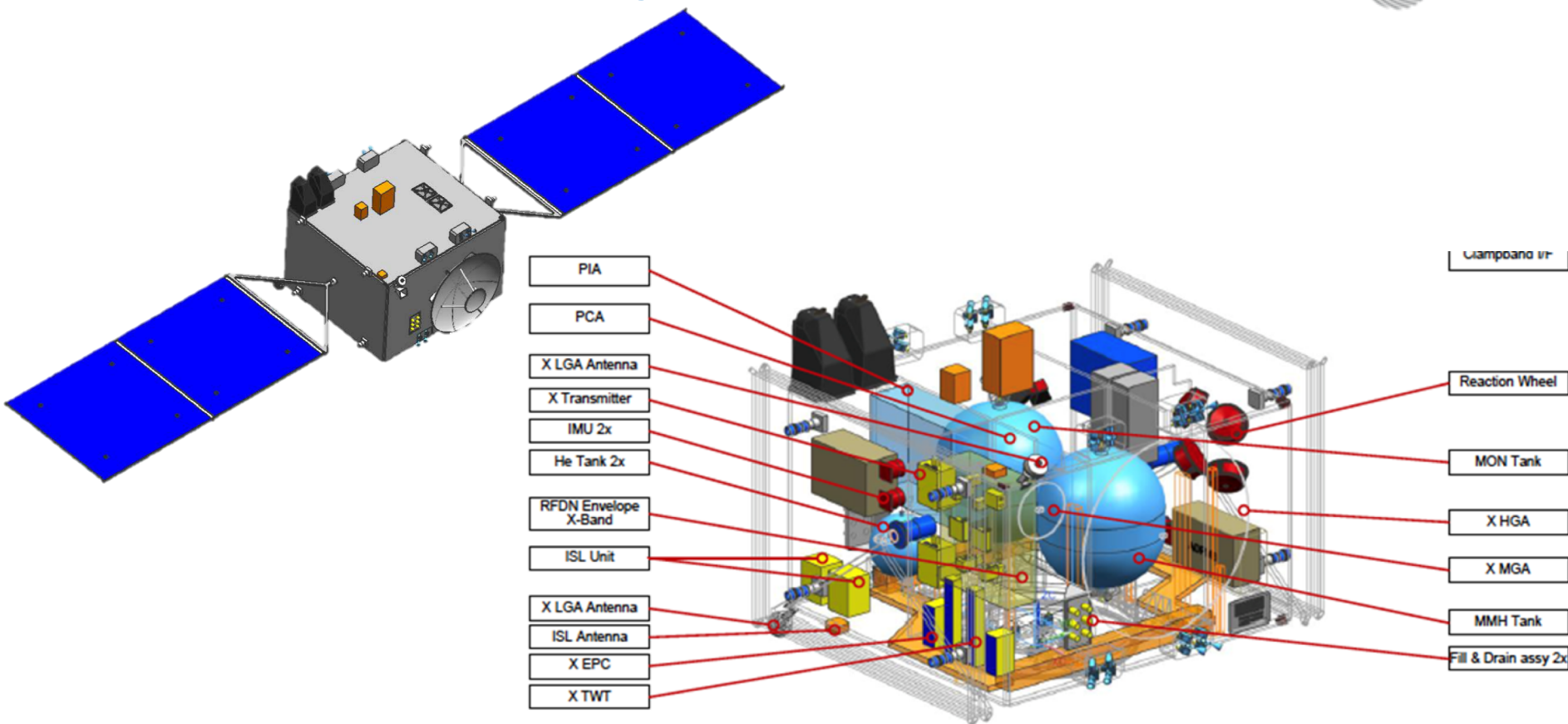
Current Spacecraft design



Dimensions	~1.8 x 1.7 x 2.1/8 (stowed/deployed)
Mass	Dry Mass ~475 kg Wet Mass ~630 kg
Power	~400W @ 2.33 AU, ~500W @ 1.9 AU
Thrusters	16 x 10 N thruster (ACS N+R) 4 x (22 OR 10) N thruster (OCS N+R)
AOCS	Sensors: STR, CSS, IMU Actuators: RW, ACS Thrusters RPE o(0.1) deg
TT&C	1 x X-band HGA 2 x ISL (S-Band), MGA(TBC), 2 x LGA 2 x X-DST (N+R), 35 W TWTAs
OBDH	QinetiQ PROBA-Next Avionics 2 x RTU
Power	2 wings, 2 panels each, 8.7 m ² total 28 V unregulated



Current Spacecraft design



Payload status



Current payload baseline selection resources allocation:

Power: **55 W**

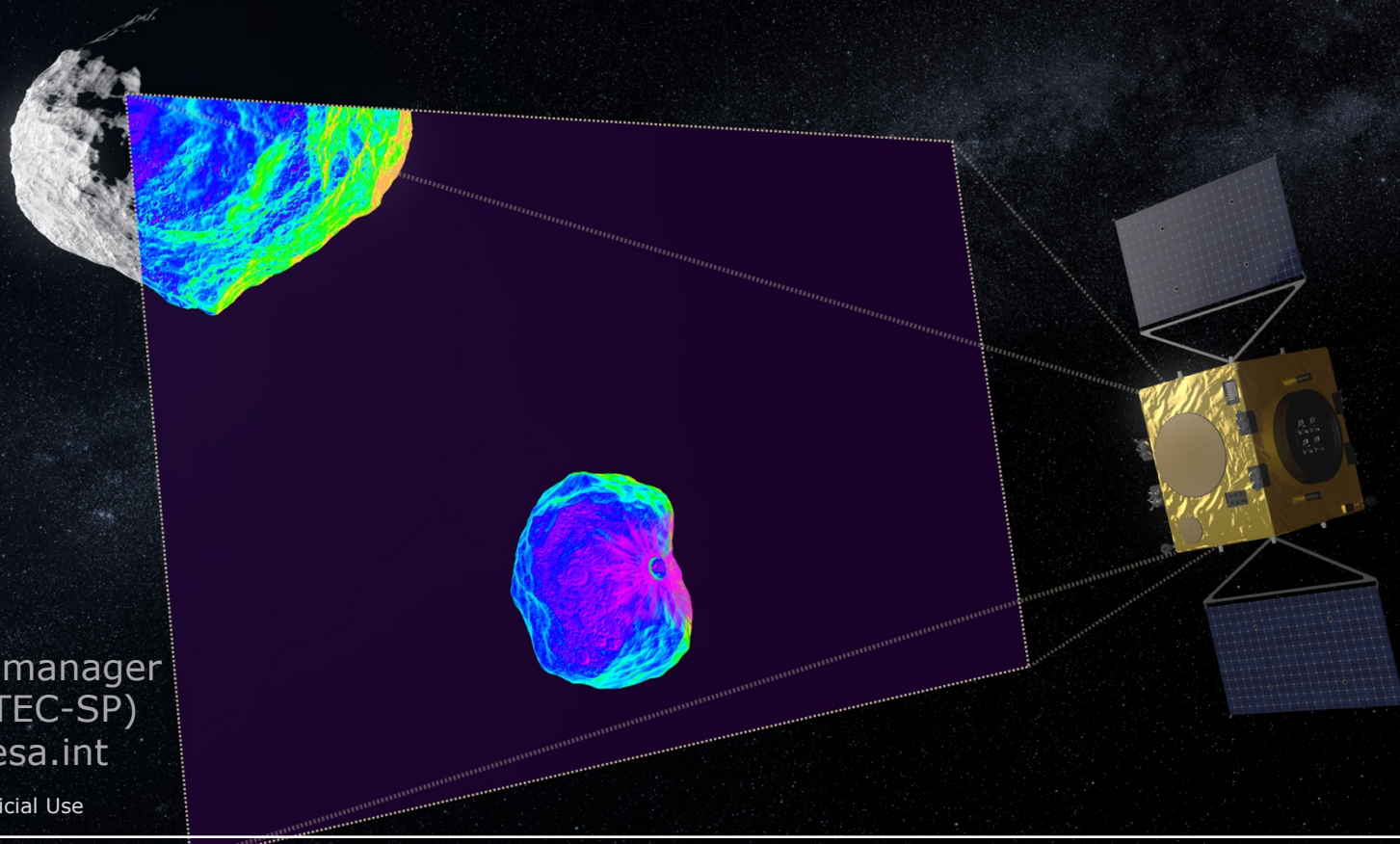
Mass: **57.5 kg**



Extra resources currently available

Power: ~100W @ 1.9 AU (*Sizing case for SA is safe mode during transfer @2.33 AU..*)

Mass: ~10 kg



Paolo Martino
Hera Spacecraft manager
Projects Office (TEC-SP)
Paolo.martino@esa.int

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