
GRAIN: Project plan

Alessandro Montanari

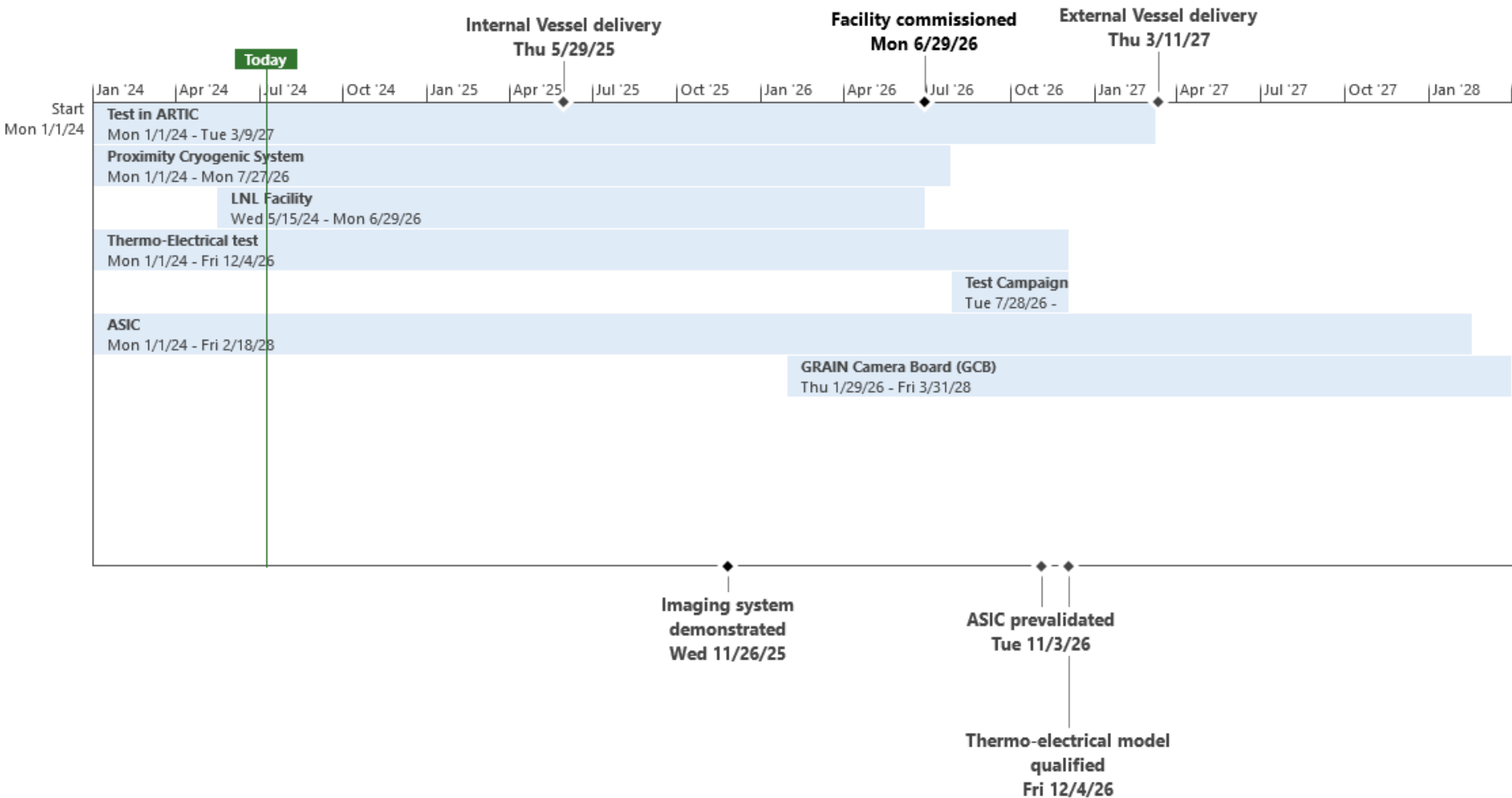


CSN1 review
Frascati, 11 Luglio 2024

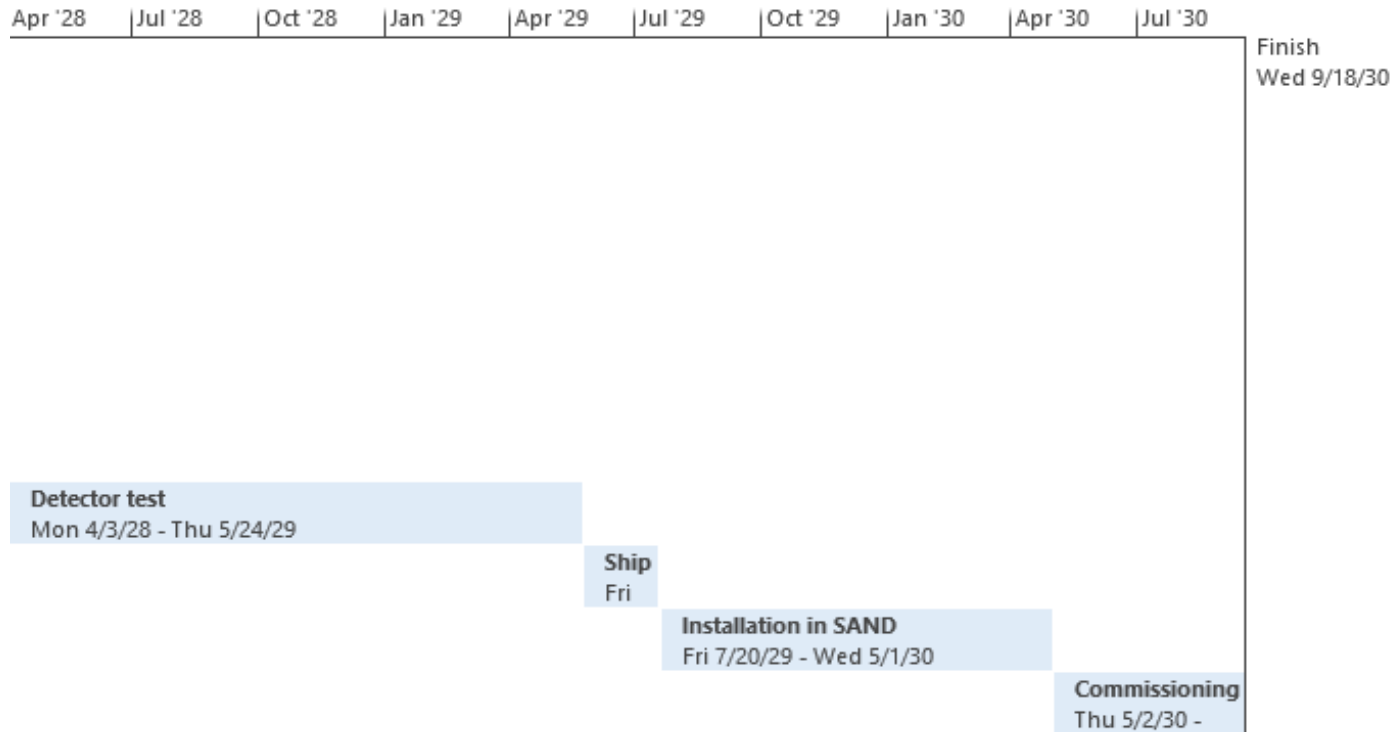
Test roadmap

- Test campaign through all the Project evolution:
 - **Imaging technology:**
 - Cameras with Masks or Lenses in ARTIC (LAr)
 - **Thermo-electrical qualification:**
 - At room temperature in Lab
 - At LAr temperature in LNL (when Internal vessel and cryogeny ready)
 - **Full detector test:**
 - Final configuration of all cameras with Cosmic rays in LNL

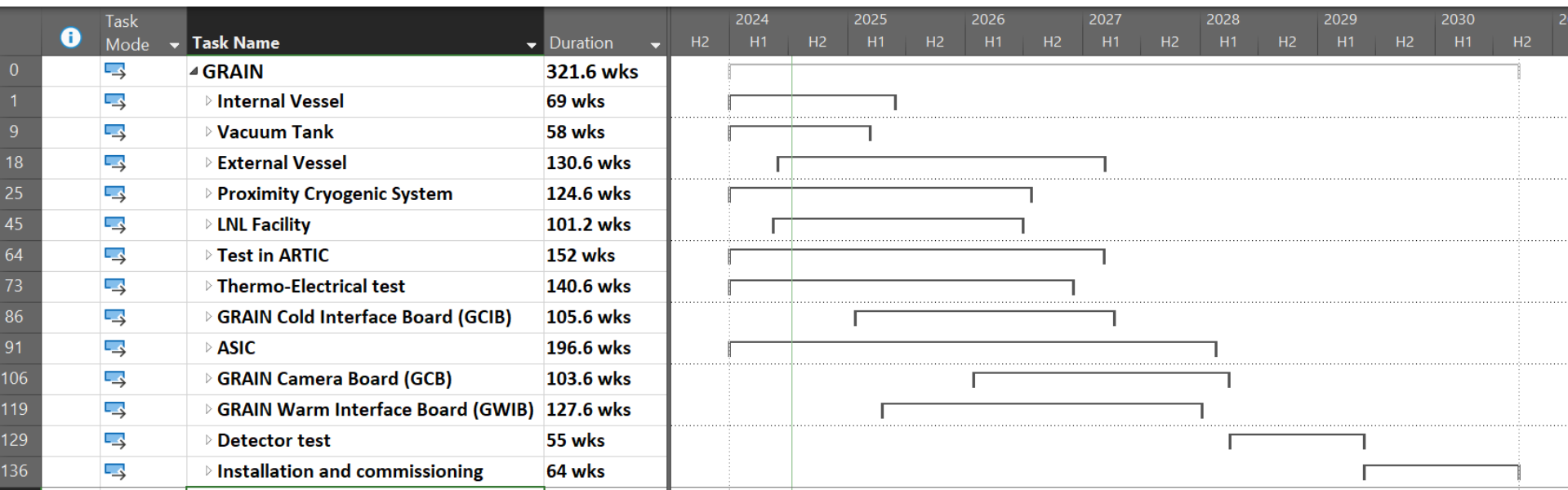
Timeline (2024-2027)



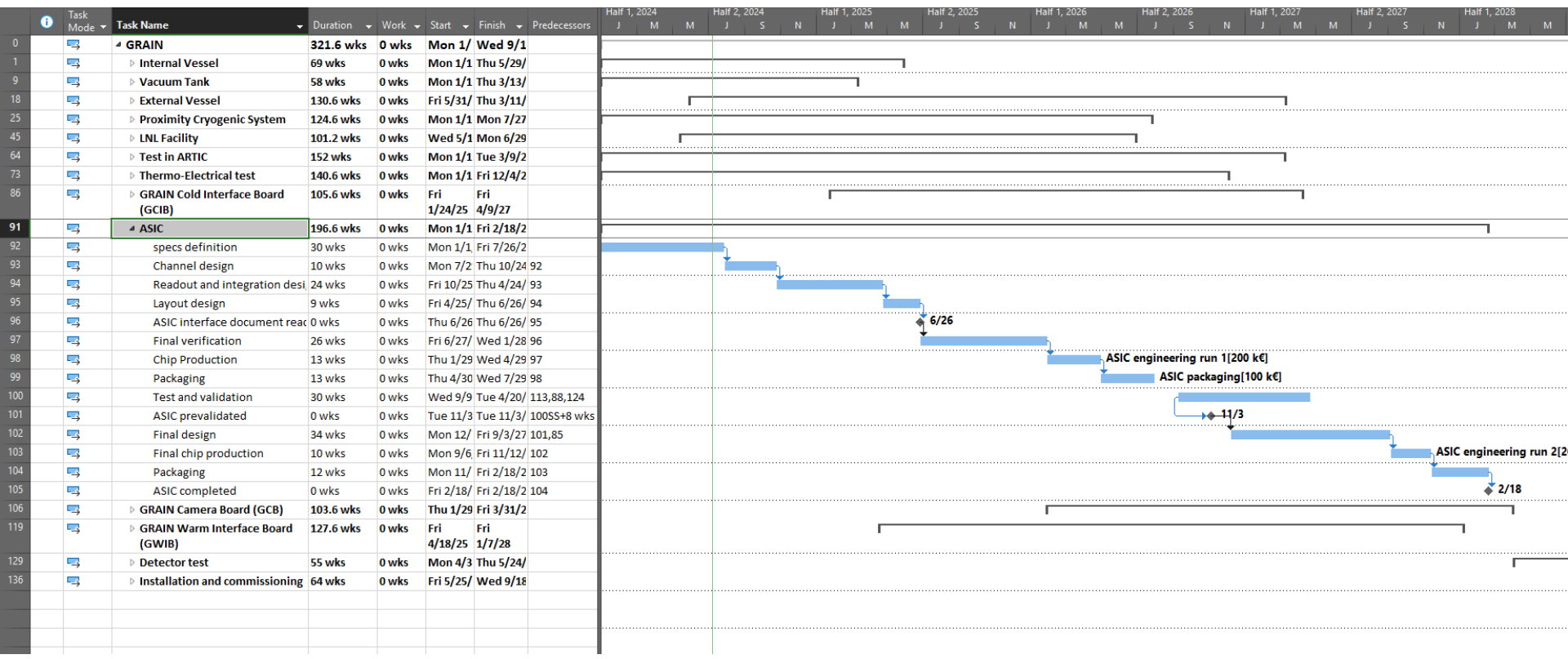
Timeline (2028-2030)



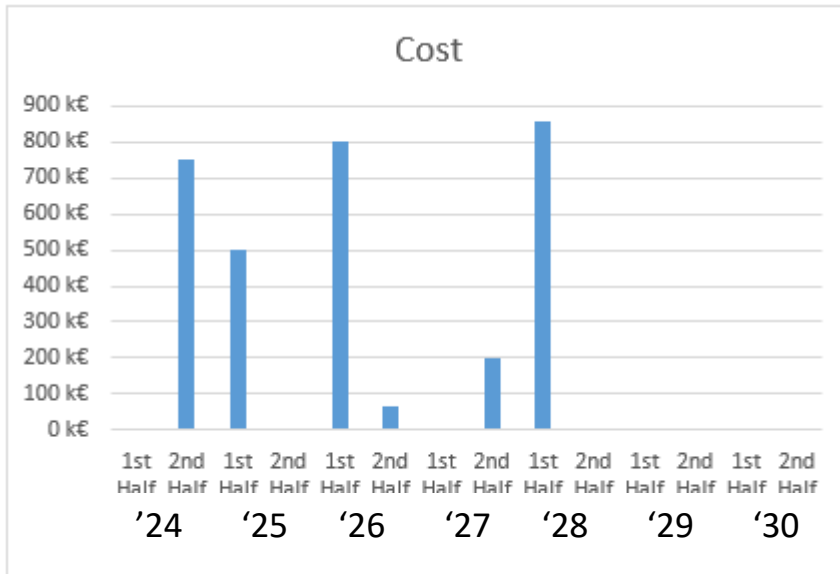
Timeline (overall view)



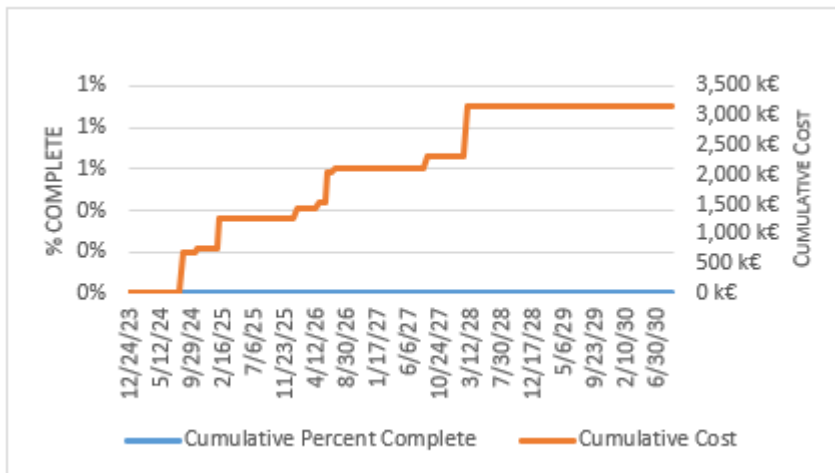
Critical Path



Expenditure profile (preliminary)



Name	Remaining Cost
Internal Vessel	180 k€
Vacuum Tank	70 k€
External Vessel	500 k€
Proximity Cryogenic System	1,000 k€
LNL Facility	
Test in ARTIC	
Thermo-Electrical test	
GRAIN Cold Interface Board (GCIB)	
ASIC	500 k€
GRAIN Camera Board (GCB)	920 k€
GRAIN Warm Interface Board (GWIB)	
Detector test	



MON 1/1/24 - WED 9/18/30

COST
3,170 k€