TG04 – Cryogenic Vessel & Infrastructure

Schedule & Integration

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TG04 - General

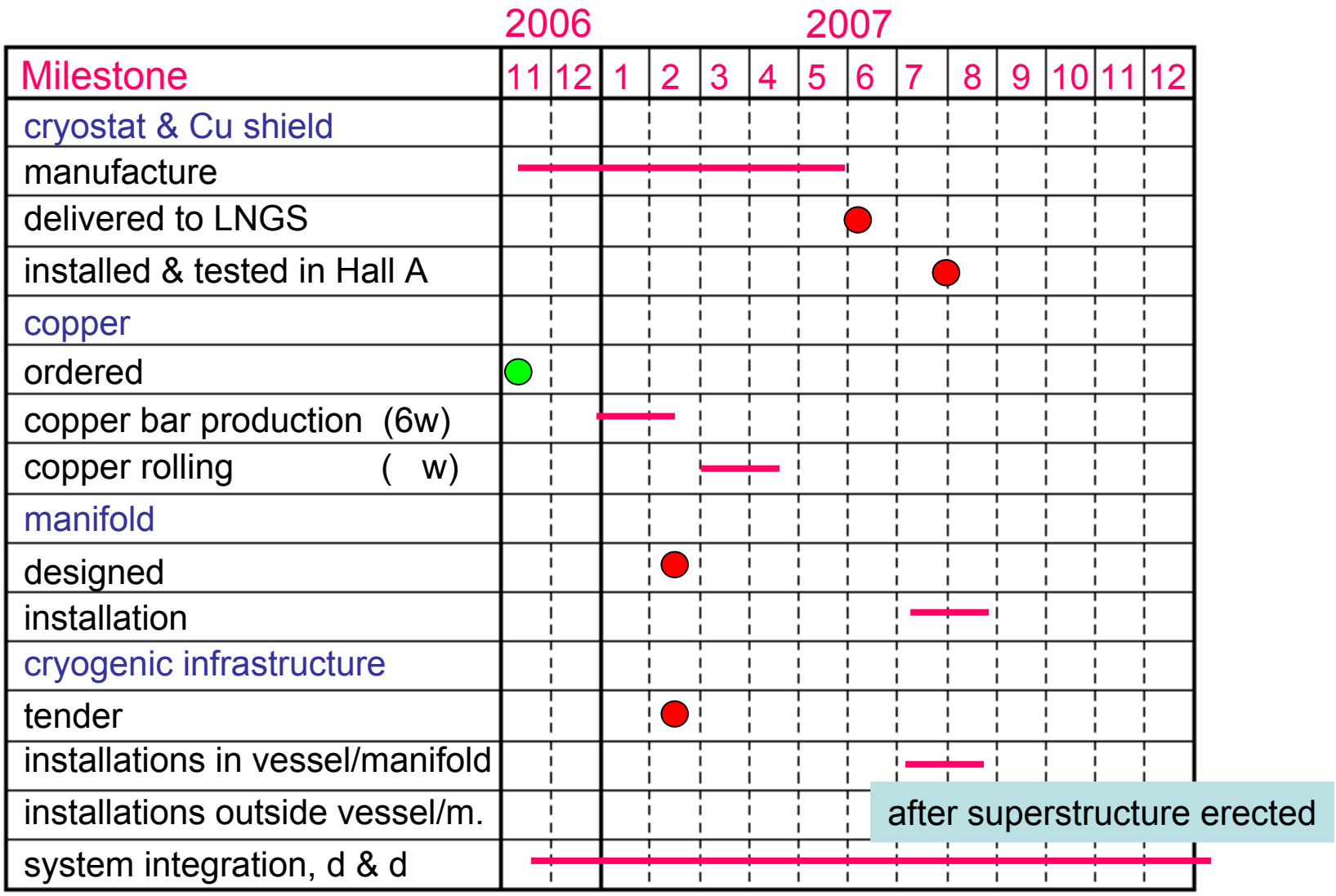
- GOAL: Delivery of GERDA cryostat including cryogenic infrastructure

- ACHIEVED:

2005:
engineering design for copper cryostat, 3rd wall, etc – now obsolete
reviews of cryostat design, generic design for cryogenic infrastructure, PID
HAZOP, FMECA safety reviews for Cu cryostat and cryogenic infrastructure

2006:
Jun : engineering design for stainless steel cryostat, base for tendering
Jun : SIMAP Prior Information Notice 2006/S 106-113359
: first safety review for stainless steel cryostat at LNGS with NIER,GERDA
Aug : tender document for cryostat published
: 2nd safety review for stainless steel cryostat at Bologna, NIER,LNGS,GERDA
: order of ... tons of stainless sheet material for cryostat
Nov : screening of stainless steel sheets for cryostat almost done
Nov : contract for cryostat fabrication & copper shield mounting signed
Nov : copper order (from Feb.) modified from 70 tons to 20 tons

TG04 – Schedule & Milestones



TG04 – Integration: Issues to be Solved

- Cryostat - Platform
  - Fixation of exhaust gas pipes, etc.
- Cryostat – Lock
  - Alignment of bellow (rotatable?) flange and lock flange
  - **Length of bellow** (absolute height of platform)
  - Bypass connection
  - Marriage & interlock of both gas systems / PIDs
- Cryostat – Water Tank
  - Access to manifold, transport tool
  - **Connection to WT roof** – isolated!
  - Isolation from and interface to bottom of WT
  - Holes in WT bottom for cryostat fixation ► template?
  - WT effective bottom thickness ► **final height of cryostat**
  - Exhaust gas heater
- Cryostat – Muon
  - **Location of holes** for PMs **in skirt**
- General
  - **Reference for z-coordinate, same in real world & plans**
  - Location, number of storage tanks