

BDS and Detector schedules

for discussion at MDI meeting

August 15, 2006

Andrei Seryi with input from
Martin Gastal, Yasuhiro Sugimoto et al.

Purpose of these slides

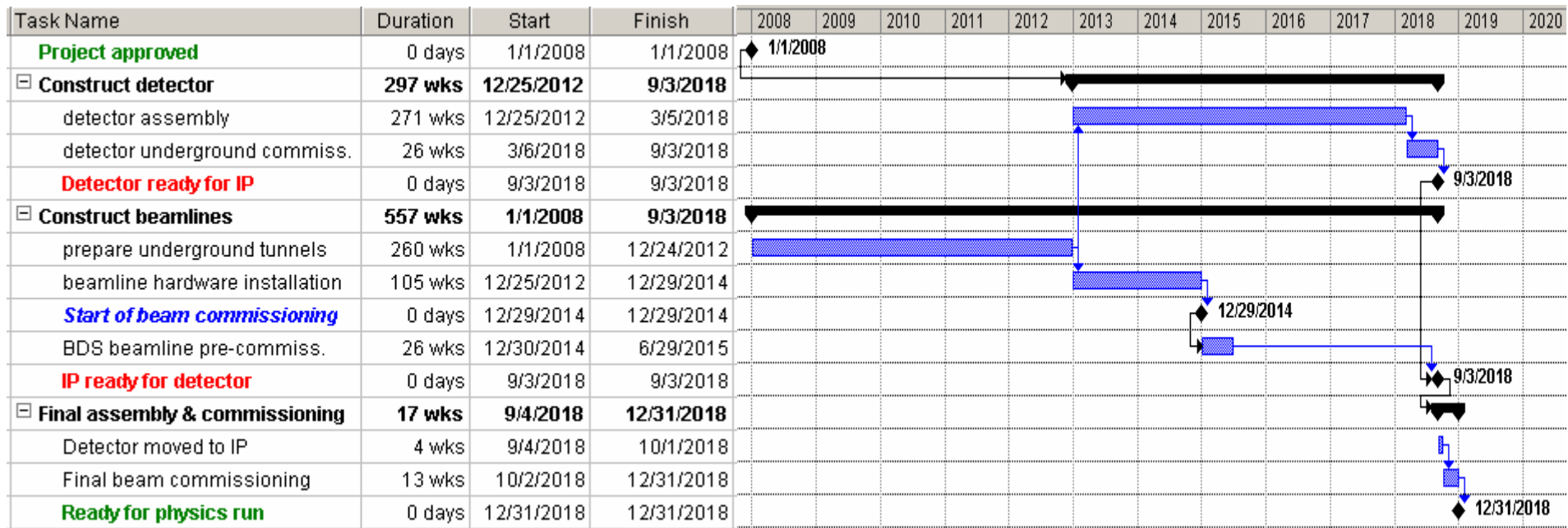
1. To start discussion of schedule of accelerator and detector, including construction and commissioning
 2. To discuss on-surface versus underground detector assembly
- Many of the assumptions shown on these slides are tentative and will be refined

Global schedule assumptions

- Assumed that the goal for start of beam commissioning is 7 years from approval
- Assumed that ILC should be ready for physics run after 1 year from start of the beam commissioning
- Assumed start date 1/1/2008 just as an example
- These assumptions need to be discussed

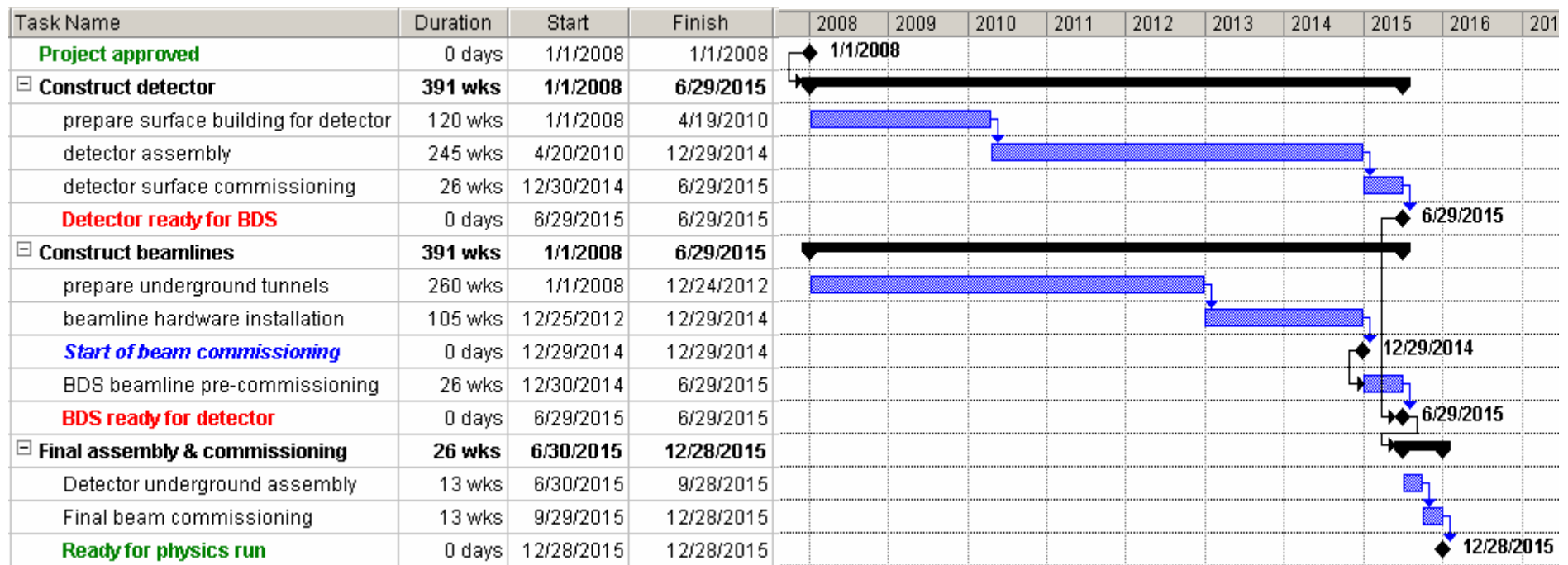
Schedule assumptions

- Assumed that the **collider hall** is ready after **4y11m** (256w) as suggested by CERN colleagues
- Assumed that **surface building** is ready after **2y4m** (120w), which is **shorter** than suggested by CERN colleagues (3y). Is it possible?
- Assumed 245w for on surface detector assembly and 270w for underground.
 - Is this reasonable? Would underground assembly take even longer?
- All these assumptions need to be discussed and verified



Underground detector assembly

- Seems that would miss the “8years to physics” goal by 3years
- Machine will be “waiting for detector”, doing slower installation (?) and longer commissioning

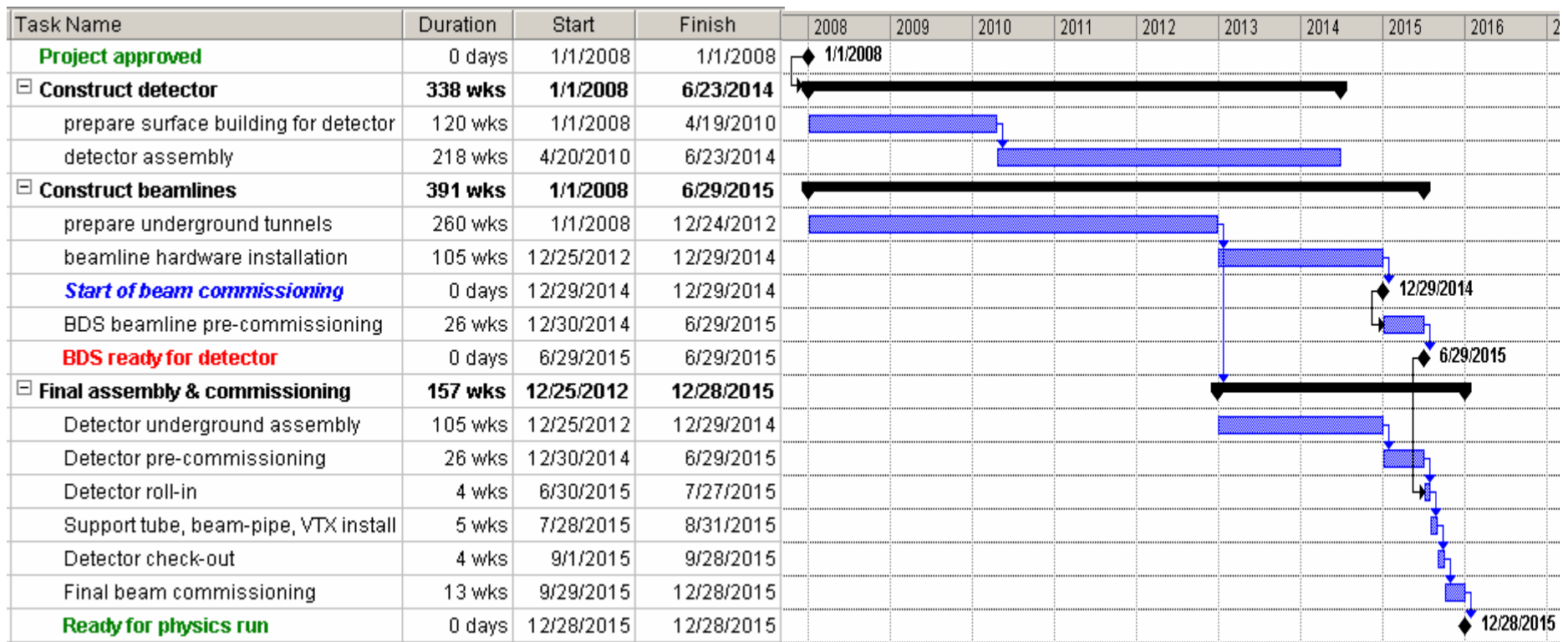


On-surface detector assembly, scenario 1

- Seems that can fit to “8years to physics” goal
- Possible issues:
 - short time for BDS pre-commissioning
 - rather short time for detector underground assembly and final commissioning

GLD version of on-surface...

- Yasuhiro Sugimoto san suggested that for GLD approach (to be presented by Tauchi san) one can use both the surface assembly hall and the underground experimental hall in parallel for more than 1 year
- Need to understand the implications for the size hall and overall optimization
- Also need to understand interference between installation of beamline components and detector



On-surface detector assembly, GLD scenario

- Seems that can fit to “8years to physics” goal
- Possible issues:
 - interference of beamline installation with detector underground assembly =>longer time needed for beamline installations
 - larger underground space needed?

Questions to discuss

- Assumptions for durations of all procedures
- Requirements on hall sizes or surface building sizes
- How two detectors affect the schedule
 - Are the schedules the same or shifted?
- etc.