

Restructuring of detector groups

Why and why now ?

- 2008/09 = transition from the construction and installation phase to operation and maintenance of the LHC experiments
 - first development activities related to the LHC luminosity upgrade are taking shape
 - Start of R&D work packages
 - a few possible non-LHC experiments appear at the horizon.
 - But: the overall staff numbers in the DT1 and DT2 groups have significantly dropped and continue to do so in the coming years. We became very weak in certain sections and certain professional categories.
 - Competencies and experience of DT1 and DT2 overlap
 - The two groups collaborate already on several projects
- **Fusion** of DT1 and DT2 to a single Detector Technology group **seems best option.**

How to structure the group ?

'Autonomous' sections for each activity ?



Many sections with little interaction.
Easy to manage, but inflexible.

'Administrative' sections according to professional categories + horizontal project structure?



Few sections with much interaction.
Challenging to manage, but very flexible.

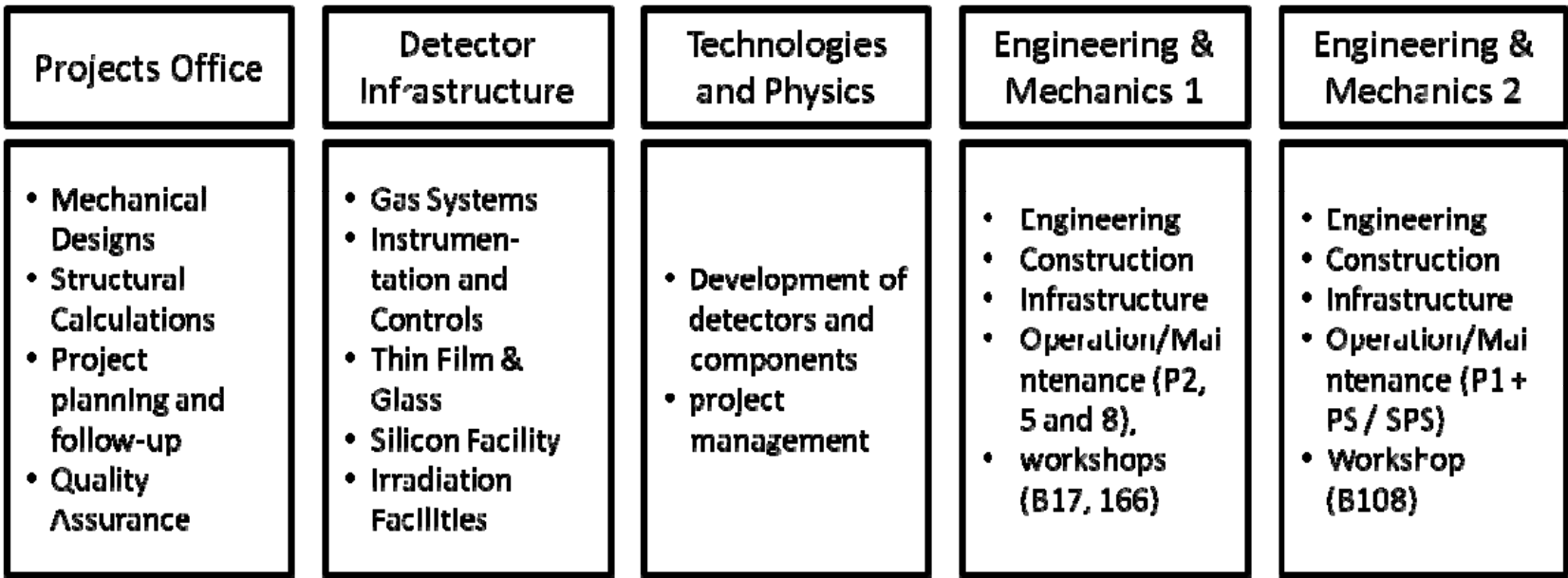
DT Model:

All services and infrastructure activities in one section (mix of phys/eng/tech)

All experiment related activities are distributed over 4 sections, arranged according to professional Categories.

Proposed Group Structure

Group Leader + 2 deputies
Safety Coordinator



Engineers
Designers
~ 10

Physicists
Engineers
Technicians
~ 27

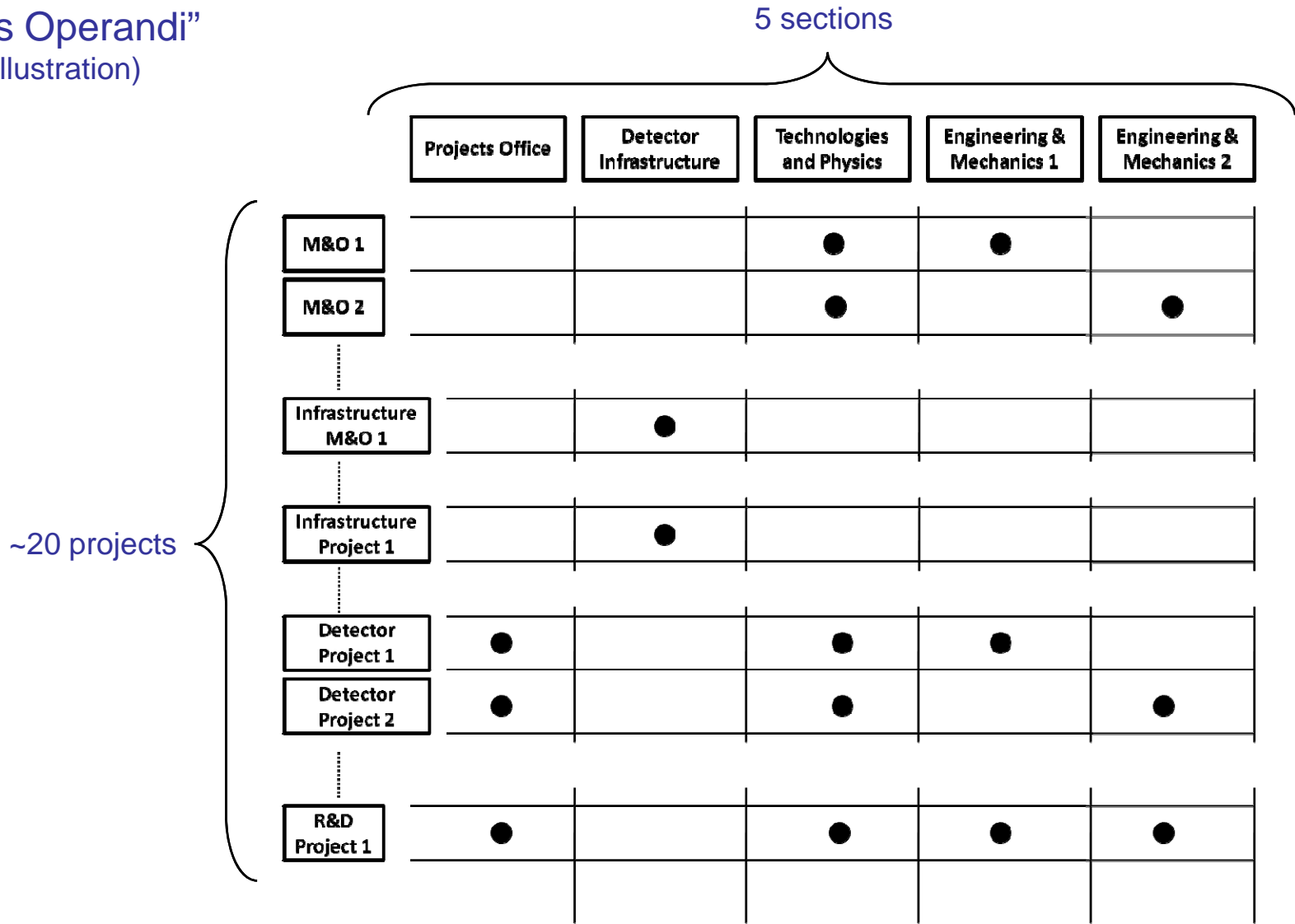
Physicists
~ 13

1-2 Eng/Phys
Technicians
~ 18

1-2 Eng/Phys
Technicians
~ 13

~ 80 people (incl. some transferred from experiments)

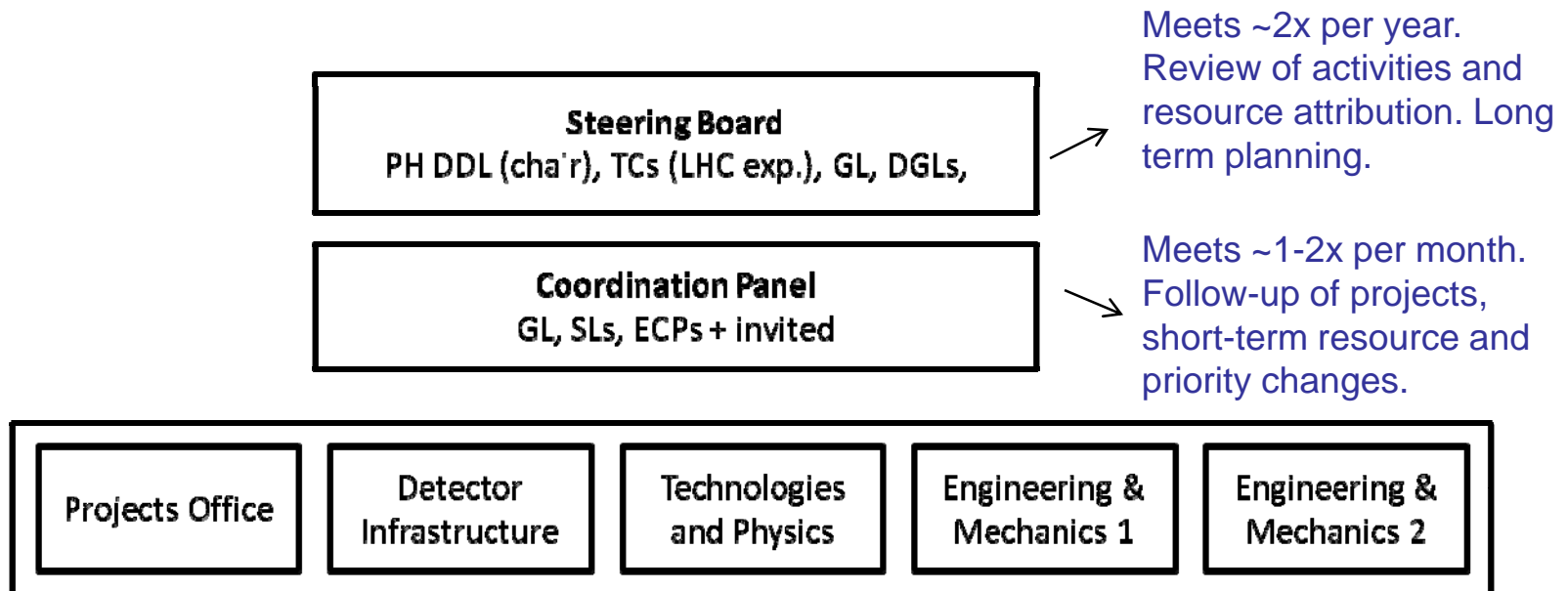
“Modus Operandi”
(just for illustration)



- Every project is performed by a ‘well defined’ team of people.
- Every project is led by an internal project leader.
- For every experiment we have an ‘Experiment Contact Person’.

DT group will represent ~20% of PH total staff.
It will be the main resource in PH for detectors and their infrastructure.

→ We need to involve Department and LHC experiments in its management.



Projects in 2008 and beyond

- **1st priority:** complete/commission/consolidate LHC detectors

Several detectors / components will only be installed during 2008 / 2009

- CMS ECAL end-cap,
 - CMS Pre-shower,
 - TOTEM T2,
 - TOTEM RP,
 - ATLAS ALFA
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- Participate in operation / performance optimization of detectors, Piquet services (gas, magnet controls)
 - Prepare and implement shutdown activities
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- **2nd priority:** Detector upgrade activities
 - LHCb VELO replacement
 - CMS TRK
 - ATLAS TRK
 - ALICE HMPID
 - TOTEM T1
 - PH R&D Work packages (WP4,5,6,7)
 - Engineering R&D (cooling technologies, composite materials ?)
 - Non-core activities (X-HPD, PET)



Cr!



