

Laboratory Directors Group, July 2023

- ▶ My thanks to the Local Organising Committee
 - ▶ Particularly: Fabio, Alessandra, Doug
 - ▶ Many twists and turns in the organisation of this meeting...
- ▶ Thanks to those who committed to attending from outside Europe
- ▶ Purpose of the Open LDG Meeting
 - ▶ Take a closer look at the work and facilities in Frascati
 - ▶ Bring together informally leadership of labs inside and outside Europe
 - ▶ Expose the work of LDG to a wider audience
 - ▶ Discuss some strategic and timely topics
 - ▶ Note: no LDG 'formal business' or decisions here, not minuted
- ▶ Agenda
 - ▶ Presentations by selected laboratories (more tomorrow)
 - ▶ Sustainability
 - ▶ Strategy processes for HEP
 - ▶ Update on FCC and detector R&D

European Laboratory Directors Group

- ▶ Remit conferred by CERN Council
 - ▶ Facilitate informal dialogue among the Directors of the LNLs and CERN
 - ▶ Provide direct input to the European Strategy for Particle Physics
 - ▶ Liaise with the European Commission and national funding agencies, research institutes and universities, ensuring that LNLs speak with a single voice
 - ▶ Maximise the regional and national benefits of investment in fundamental research and in CERN
 - ▶ Keep abreast of the activities ... being undertaken in laboratories outside CERN's Member States, and of other coordinating groups in particle physics and related fields, and foster dialogue with them
 - ▶ Draw up and maintain a prioritised accelerator R&D roadmap towards future large-scale facilities for particle physics
 - ▶ Coordinate the accelerator R&D activities on the roadmap, with the aim of strengthening cooperation and ensuring effective use of complementary capabilities
- ▶ The next few years will be a challenge and opportunity for LDG
 - ▶ Both in its 'structural' role and as the discussion forum between national labs

Current Membership

▶ Laboratory representatives

- ▶ S. Bentvelsen (NIKHEF)
- ▶ F. Bossi (LNF)
- ▶ J. Clarke (DL)
- ▶ N. Colino (CIEMAT)
- ▶ F. Gianotti (CERN)
- ▶ B. Heinemann (DESY)
- ▶ D. Newbold (RAL)
- ▶ E. Previtali (LNGS)
- ▶ F. Sabatie (IRFU)
- ▶ M. Seidel (PSI)
- ▶ A. Stocchi (IJCLab)

▶ Standing observers

- ▶ K. Jakobs (ECFA Chair)
- ▶ M. Lamont (CERN Directorate)
- ▶ J. Mnich (CERN Directorate)
- ▶ H. Montgomery (SPC Chair)

▶ Secretary

- ▶ E. Tsemelis (CERN)

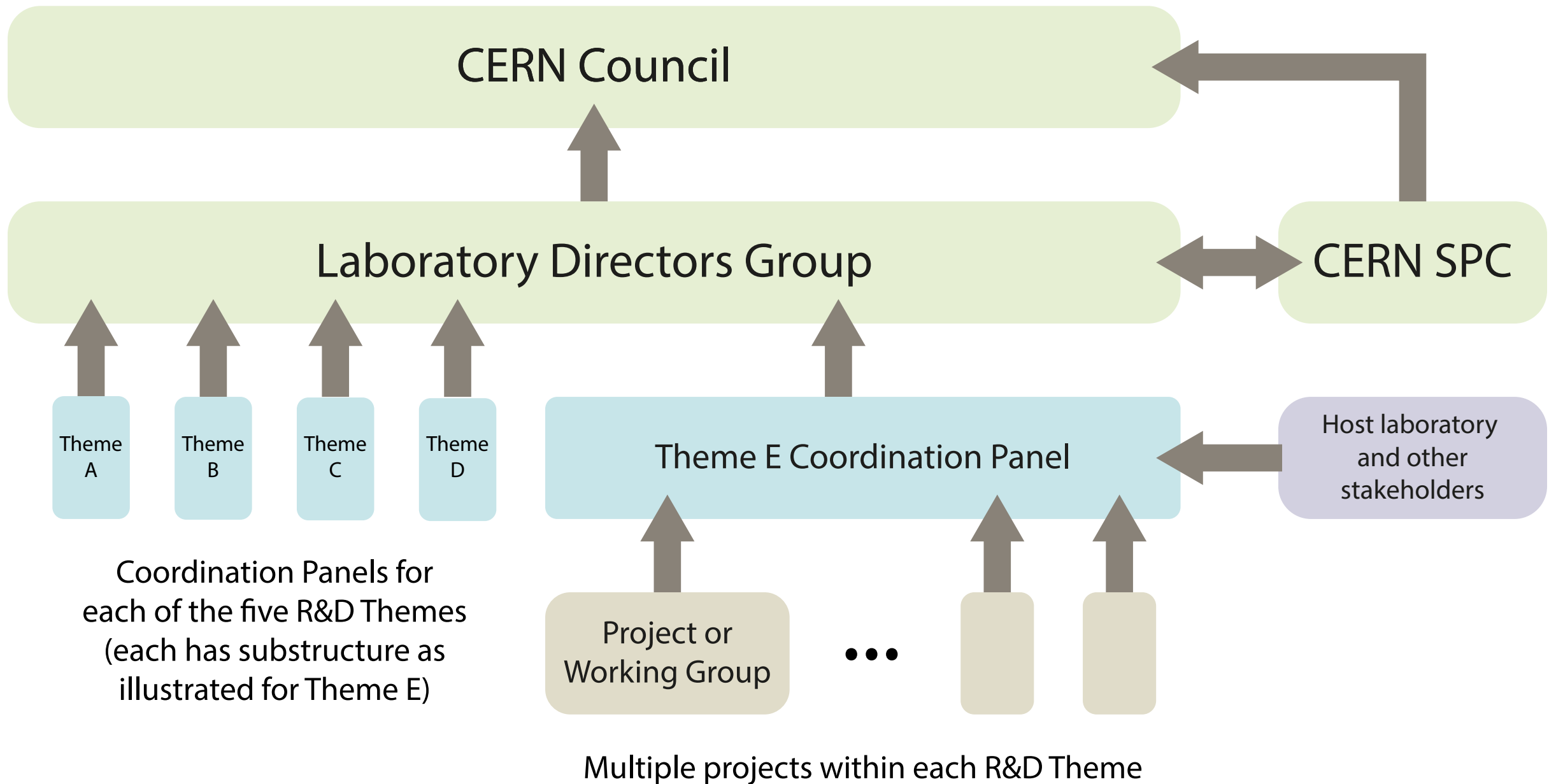
▶ Extended LDG members

- ▶ G. Bisoffi (RF) + P. Macintosh
- ▶ W. Leemans (LPA) + R. Patahill
- ▶ S. Stapnes (Muons) + D. Schulte
- ▶ J. D'Hondt (ERL) + M. Klein
- ▶ P. Vedrine (HFM)

Working Model

- ▶ Monthly hybrid meetings
 - ▶ Alternate between general meeting and focussed discussion of accelerator R&D roadmap ('Extended LDG')
 - ▶ December in-person meeting focussed on annual review of roadmap
 - ▶ One in-person Open Meeting / Forum per year
- ▶ Interactions
 - ▶ LDG reports formally to CERN Council as required, with a regular quarterly update to CERN SPC
 - ▶ Proposed that LDG chair sits ex officio on SPC
 - ▶ LDG chair is ex officio member of RECFA, ECFA chair attends LDG
 - ▶ LDG members attend and present at plenary ECFA meetings
- ▶ Oversight of roadmap
 - ▶ R&D is organised de facto by five coordination panels
 - ▶ LDG provides oversight, review, and the reporting line upwards

R&D Coordination Structure



Global Forum

- ▶ This event originally advertised as two-day Global Forum
- ▶ Motivation
 - ▶ Key decision points and challenges coming up HEP that will affect us all
 - ▶ For the broadest definition of 'HEP', and similarly in other relevant science areas
 - ▶ Strategy processes under way in all parts of the world
 - ▶ New requirements and pressures on labs from funding agencies and external conditions
 - ▶ Scale of funding (and therefore delivery challenge) becoming very large
 - ▶ No formal connection between similarly labs inside and outside Europe
 - ▶ In some cases, even informal connections put under strain by changes during COVID era
- ▶ These are common challenges, motivating a common response
- ▶ What happened?
 - ▶ Difficult to get engagement by labs around the world – starting from zero
 - ▶ No current forum where lab directors meet collectively (seems a significant gap)
 - ▶ Lack of familiarity with the work / role of LDG
 - ▶ Exceptionally busy time of year
 - ▶ Question: should we try again? And if so, where and how?

Common Concerns

- ▶ Addressing environmental sustainability
 - ▶ This has the potential to affect all future investment decisions
 - ▶ In the worst case, an existential consideration for HEP
- ▶ Planning long-term big science vs medium-term applications
 - ▶ Technical developments often produce benefits outside Big Science first
 - ▶ The 'reverse path' into HEP (e.g. from light sources) does not always work
- ▶ Maximising the regional benefits of global investments
 - ▶ How can labs secure (and demonstrate) a role in centralised projects?
 - ▶ How can this be reconciled with expectations of funding agencies?
- ▶ Coordinating response to national / international strategy
 - ▶ How do we find a voice in scientific strategy processes without 'advocacy'?
 - ▶ Do the interests of labs always align with the global scientific interest?
- ▶ Sustaining public interest and support for major laboratories
 - ▶ Showing that our role goes far beyond 'hosting large national infrastructures'

Accelerator R&D Workshop

- ▶ Roadmap is now ‘taking off’
 - ▶ After a difficult definition and setup phase during COVID, the benefits are now being seen
 - ▶ New funding streams becoming available, new coordinated activities set up
- ▶ Purpose
 - ▶ To report to the wider HEP community the progress in R&D to date
 - ▶ To receive feedback and comment, ensuring that the roadmap stays on course for delivery of results before the next European Strategy Update
- ▶ Content
 - ▶ Introductions on strategy and future facilities
 - ▶ Presentations by global science projects current in construction
 - ▶ Reviews of work in each of the five R&D areas
- ▶ Not just a ‘business as usual’ reporting meeting
 - ▶ Significant announcements to make, topics to discuss and decisions to be prepared for