



WP2: Coordination with the GDE

Nick Walker (for Brian Foster)

6.03.09

LAL

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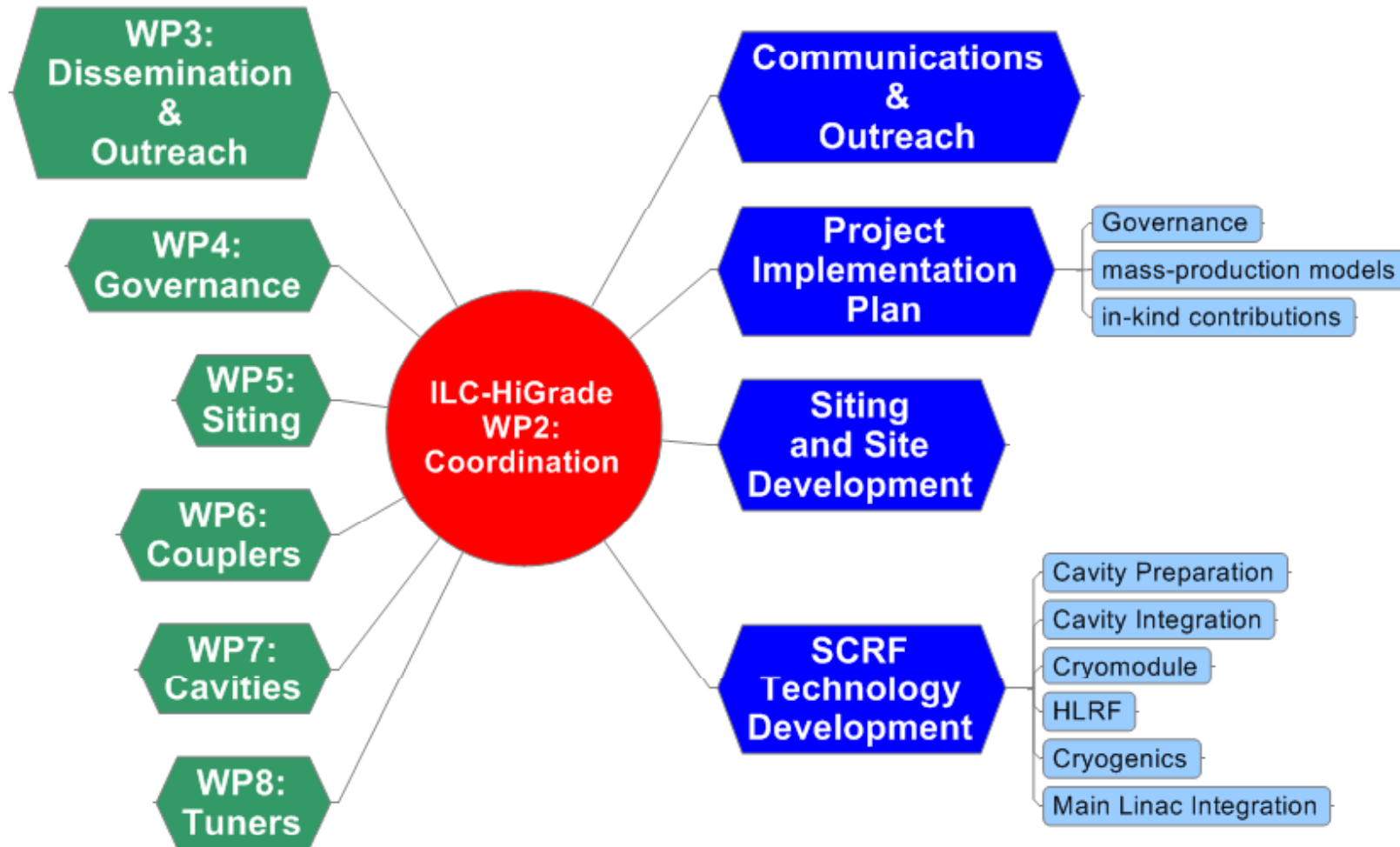


Global Effort

- The Global Design Effort is responsible for coordinating the world-wide ILC R&D effort
 - **Towards publication of the Technical Design Report in 2012**
 - **Preparation for “Submission for Project Approval”**
- Primary GDE deliverables:
 - **A Technical description of the proposed ILC in enough detail to support the cost estimate**
 - **An updated cost estimate, including a construction schedule**
 - **A project Implementation Plan**
- ILC-HiGrade integrates naturally into many aspects of the above Global activities

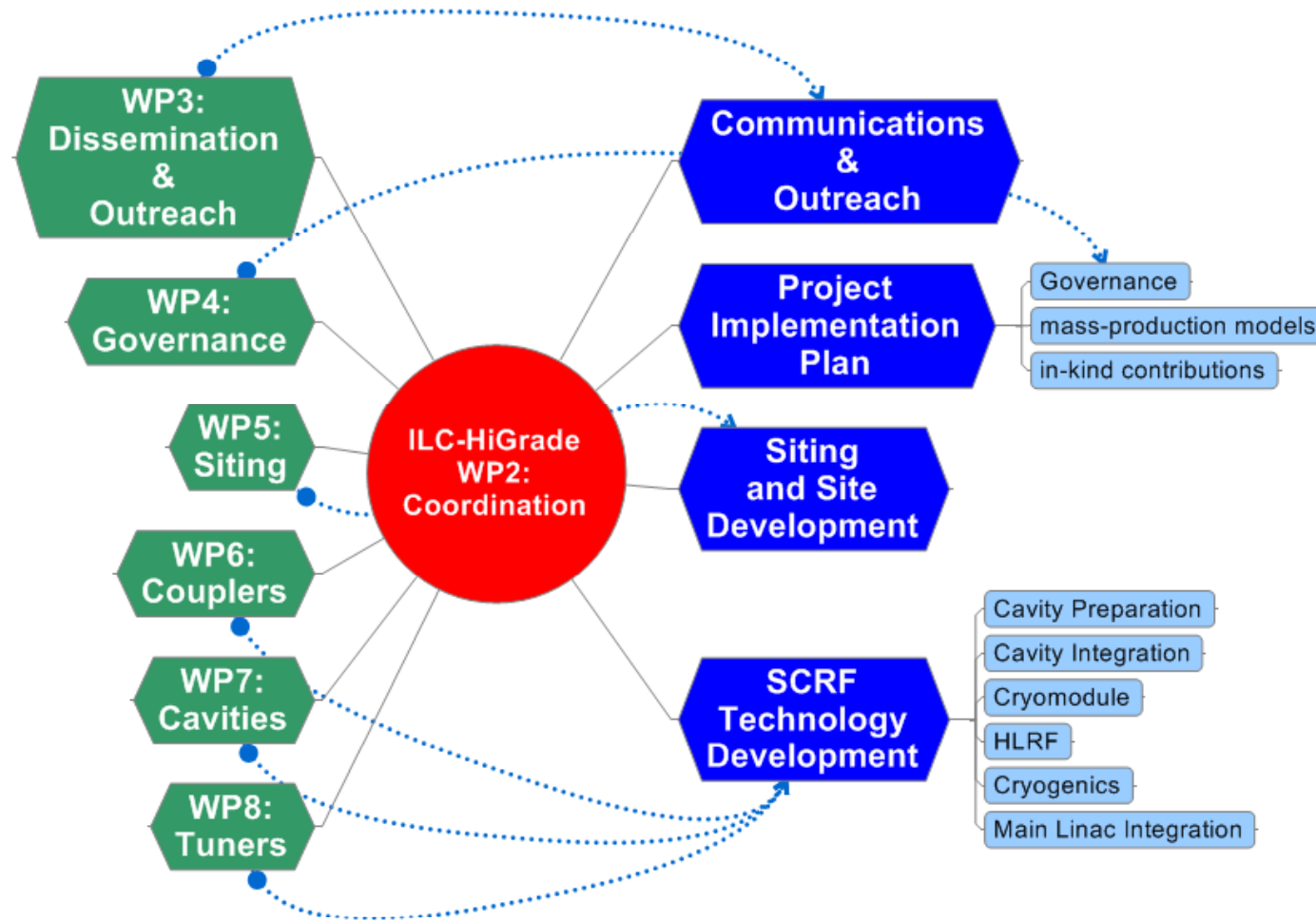


Coordinating with the GDE



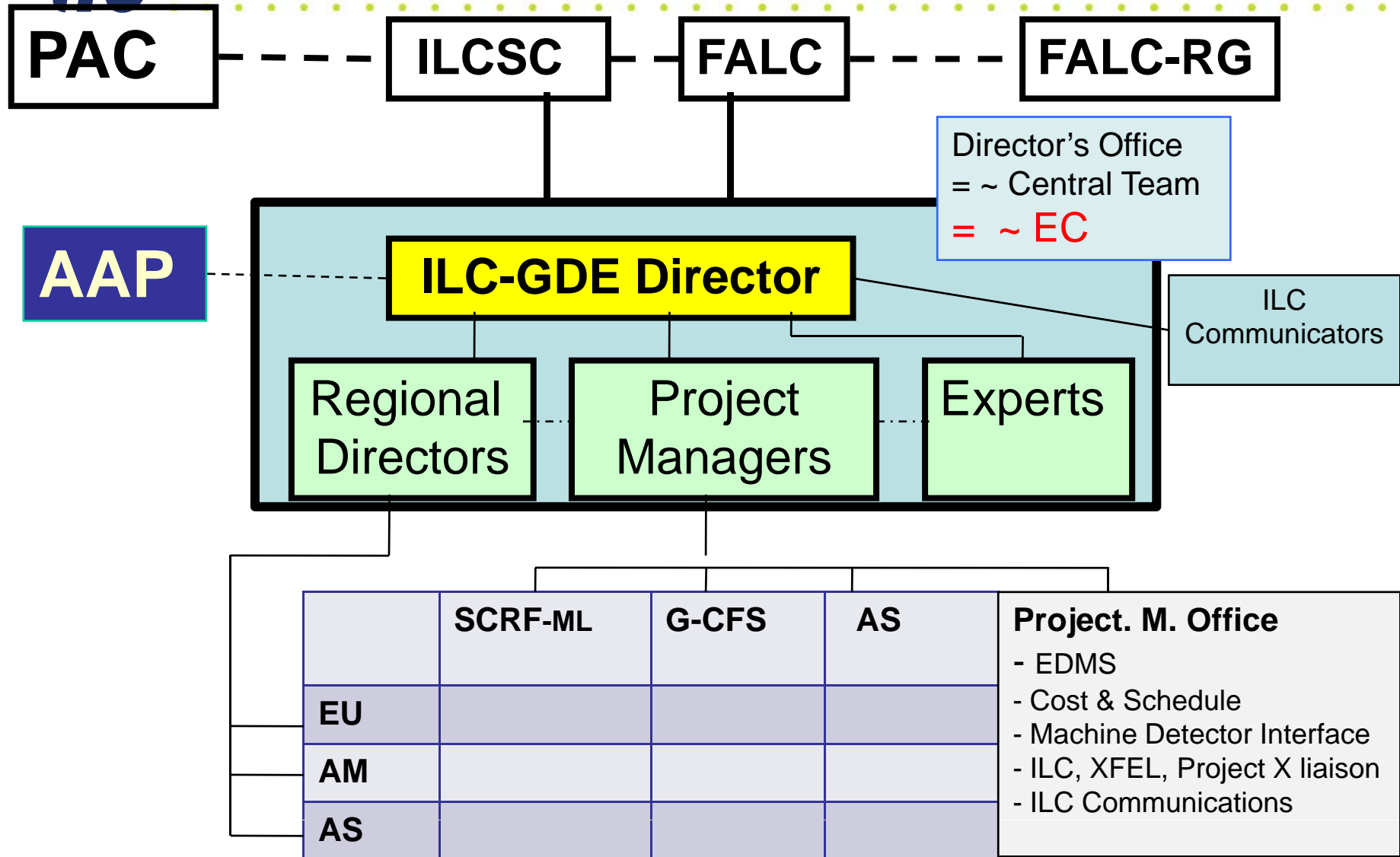


Coordinating with the GDE



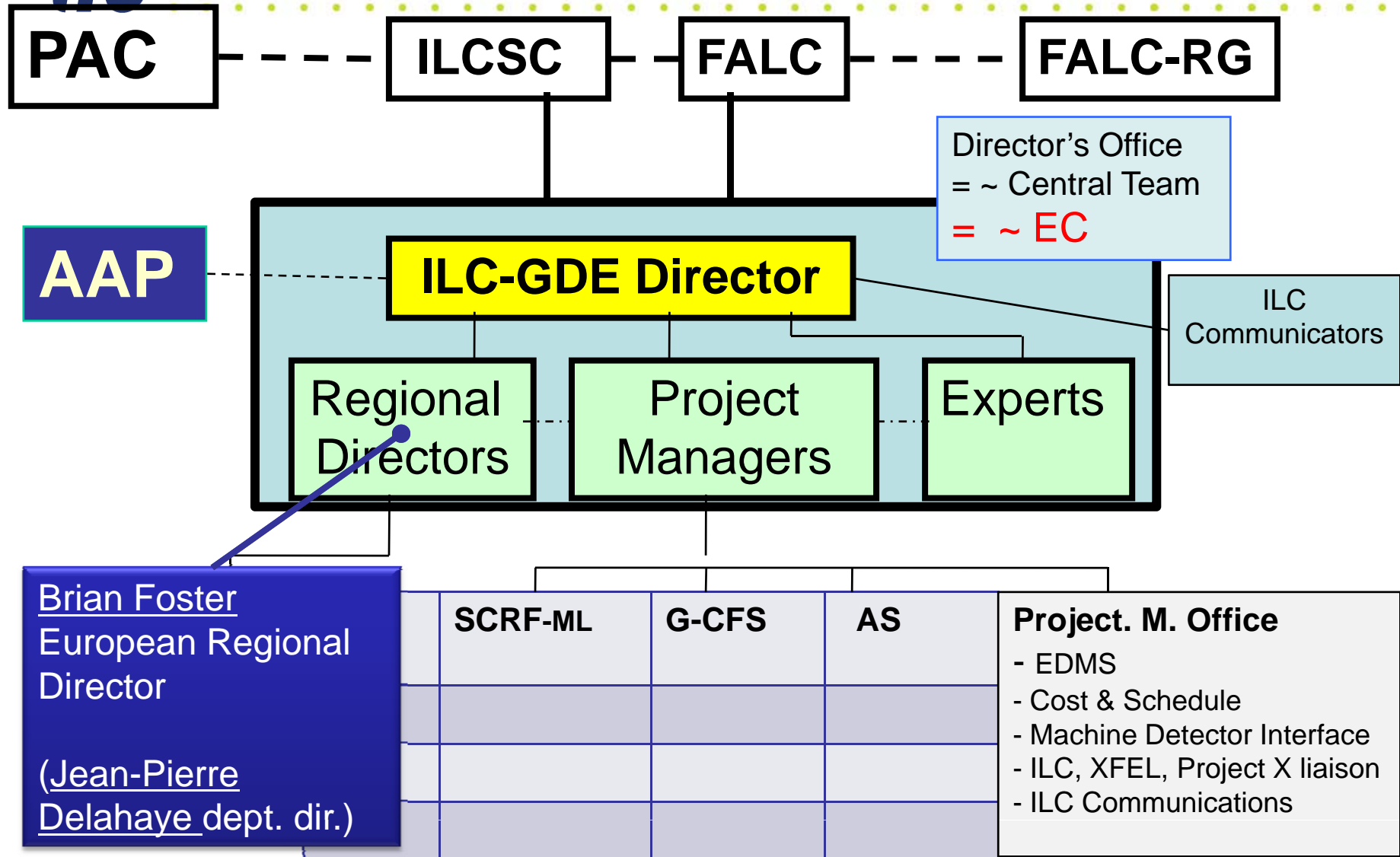


ILC-GDE Organization in TDP



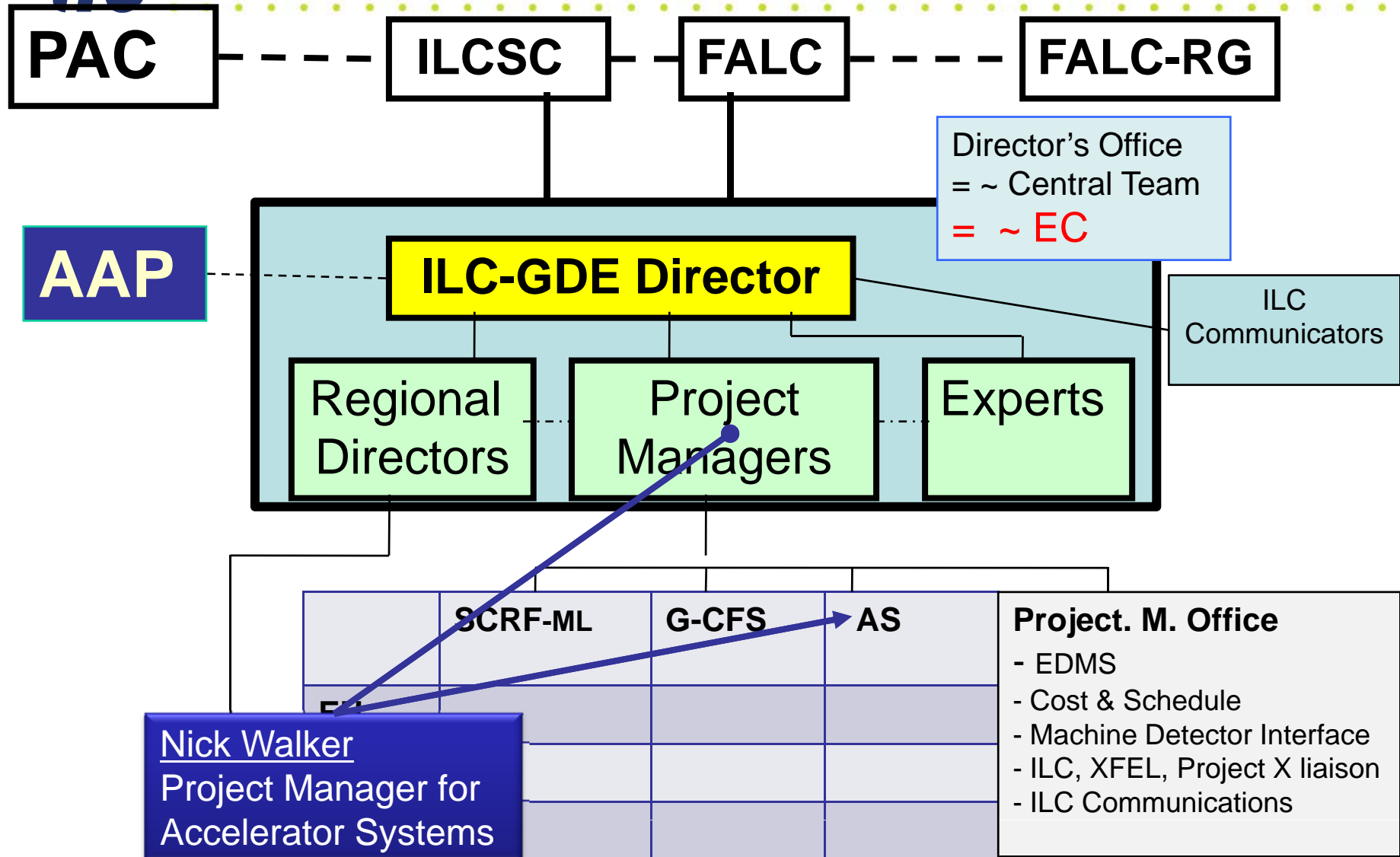


ILC-GDE Organization in TDP



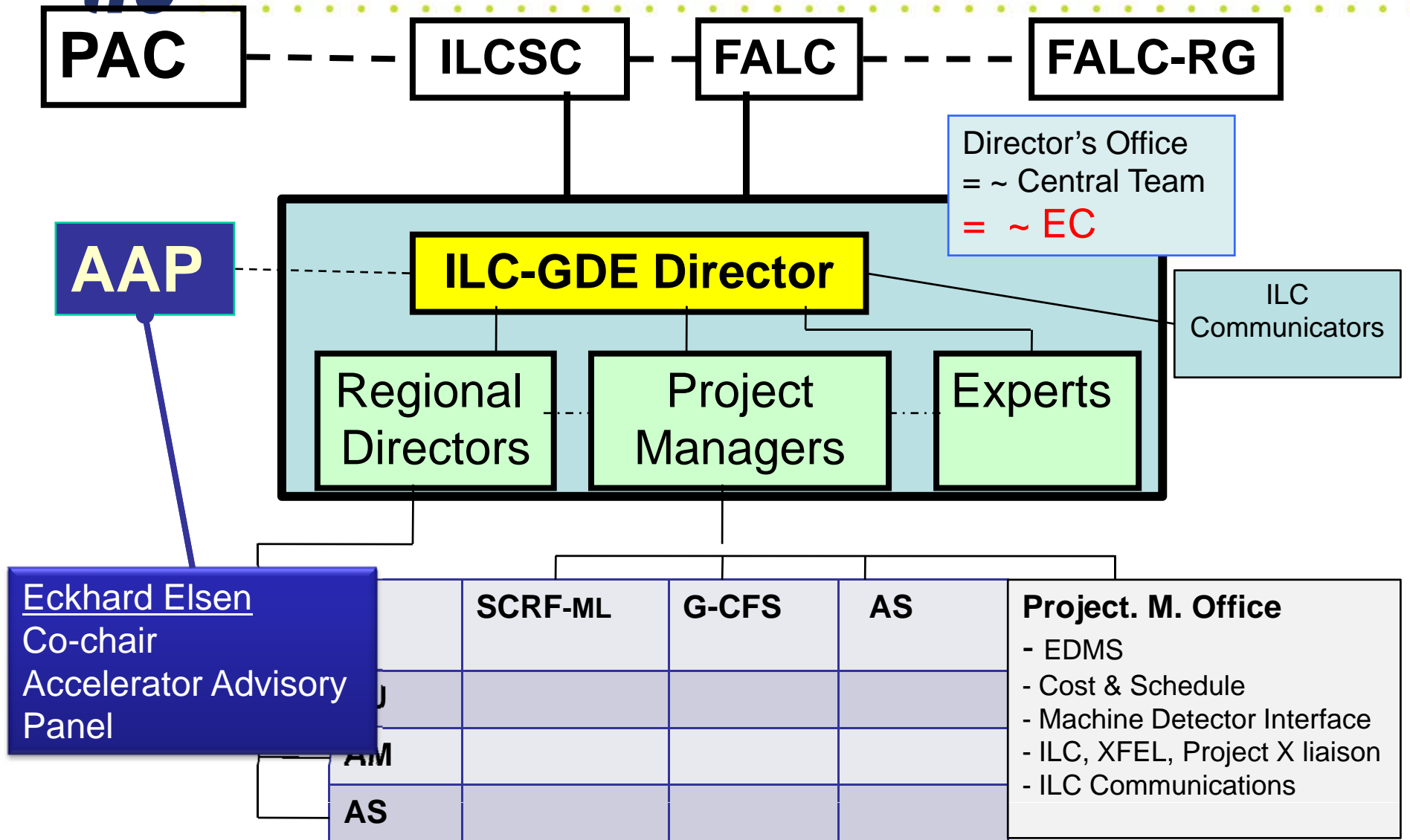


ILC-GDE Organization in TDP



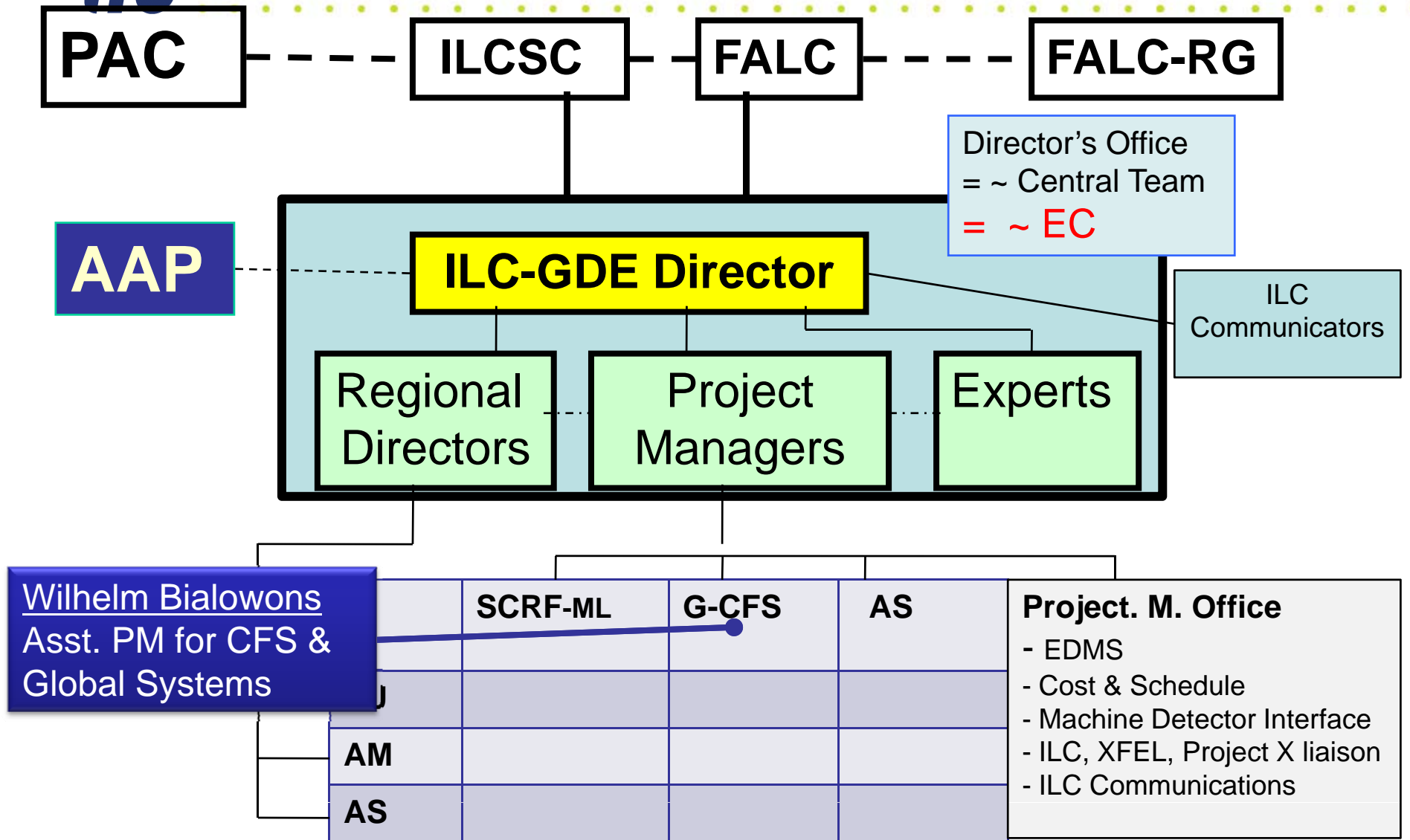


ILC-GDE Organization in TDP



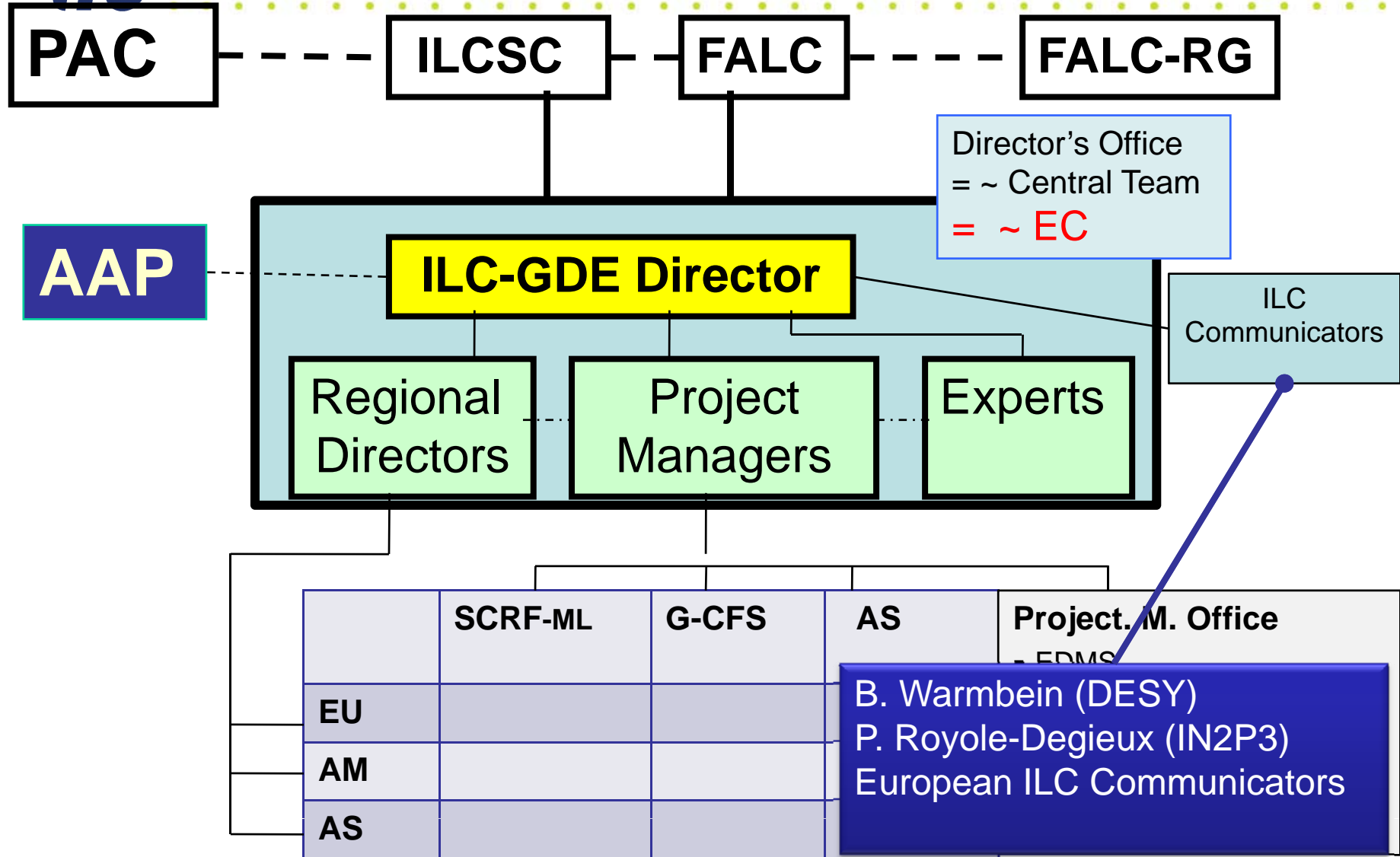


ILC-GDE Organization in TDP





ILC-GDE Organization in TDP



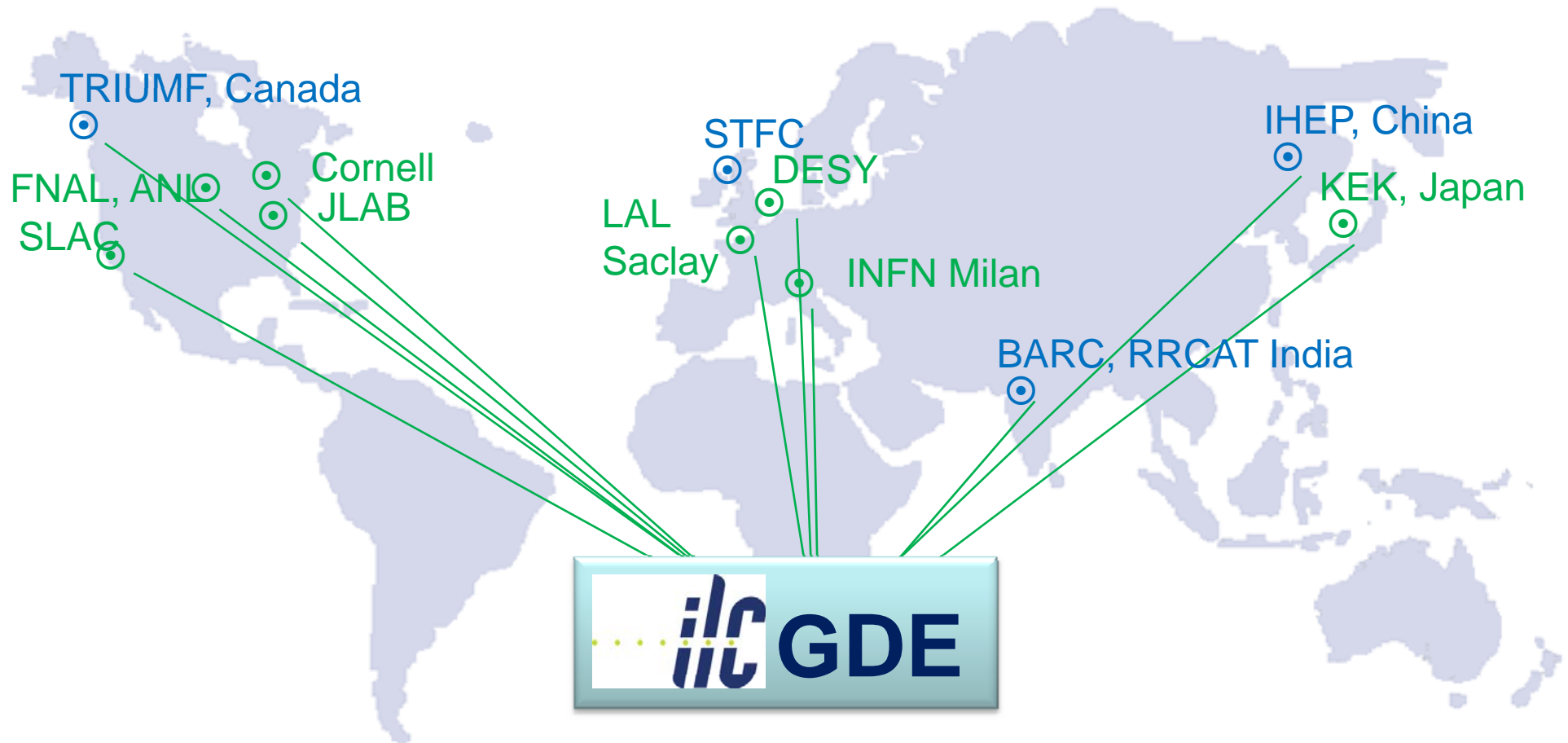


Global SCRF Technology



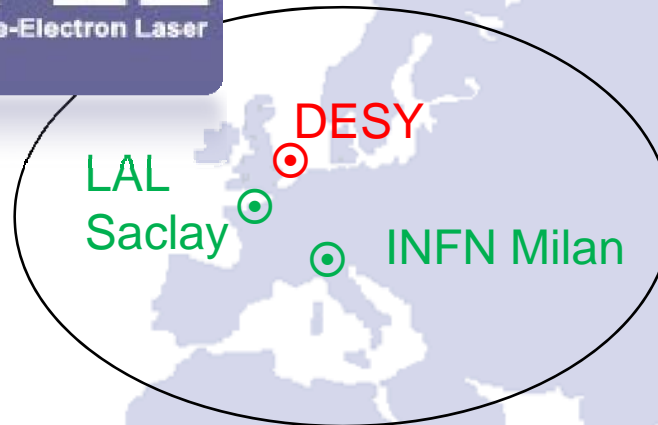


Global SCRF Technology

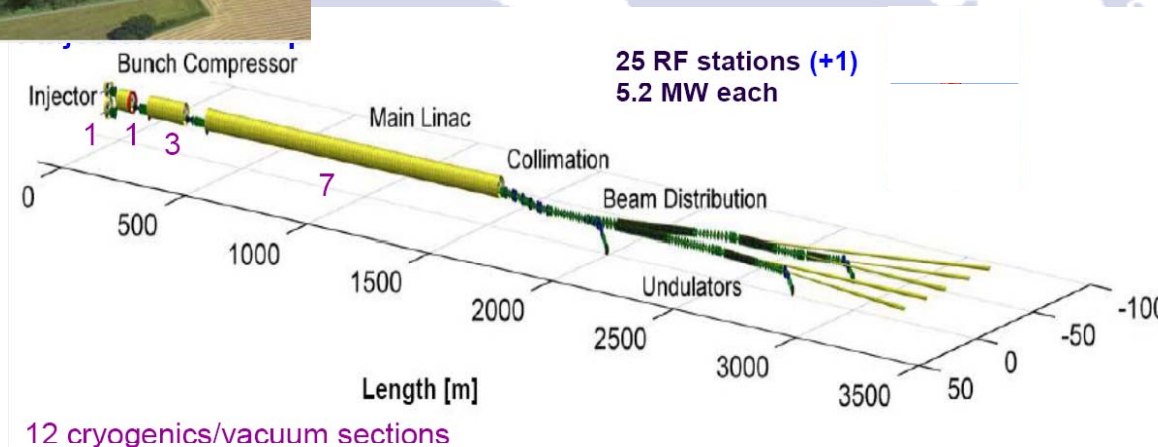




European XFEL

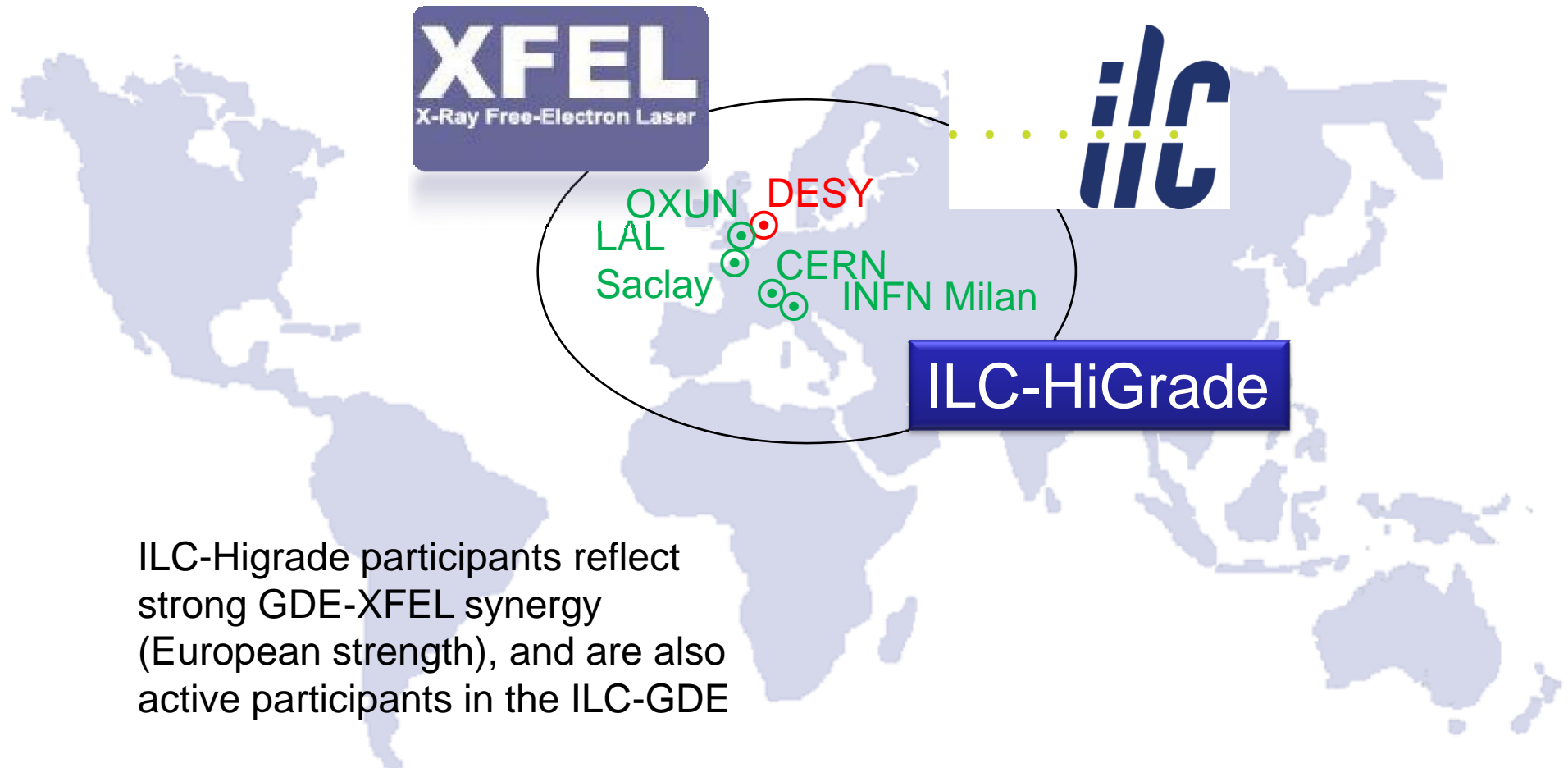


- 101 Cryomodules
- 808 cavities
 - plus auxiliaries
- Gradient:
 - 23.5 MV/m
 - (28 MV/m)
- Industrialisation & mass production
 - 1 CM / week
- “In-kind” international model





XFEL, ILC-HiGrade & GDE

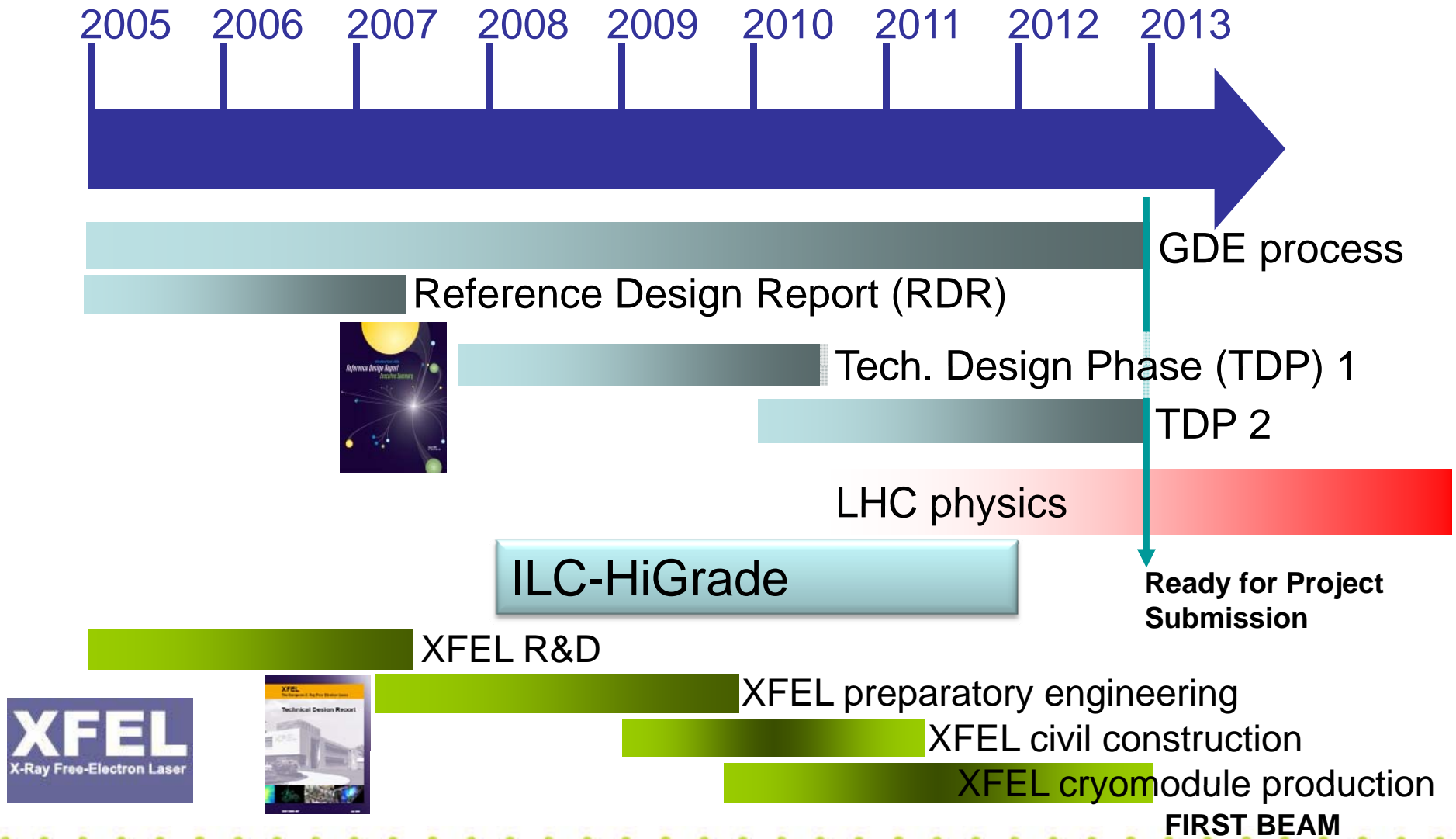


ILC-Higrade participants reflect strong GDE-XFEL synergy (European strength), and are also active participants in the ILC-GDE

-> Collaboration Guaranteed!



GDE, ILC-HG and XFEL Timelines





GDE TD Phase Priorities

A Summary

SCRF gradient R&D
Reduction of underground volume
Better systems integration
Reduced overhead / conservatism
...

Cost / Performance / Design

Project Implementation Plan

International governance
Funding
Siting
Mass production models

R&D for Technical Risk Mitigation

Global Mass Production Models and Industrialisation

ILC International Project Proposal (2012)

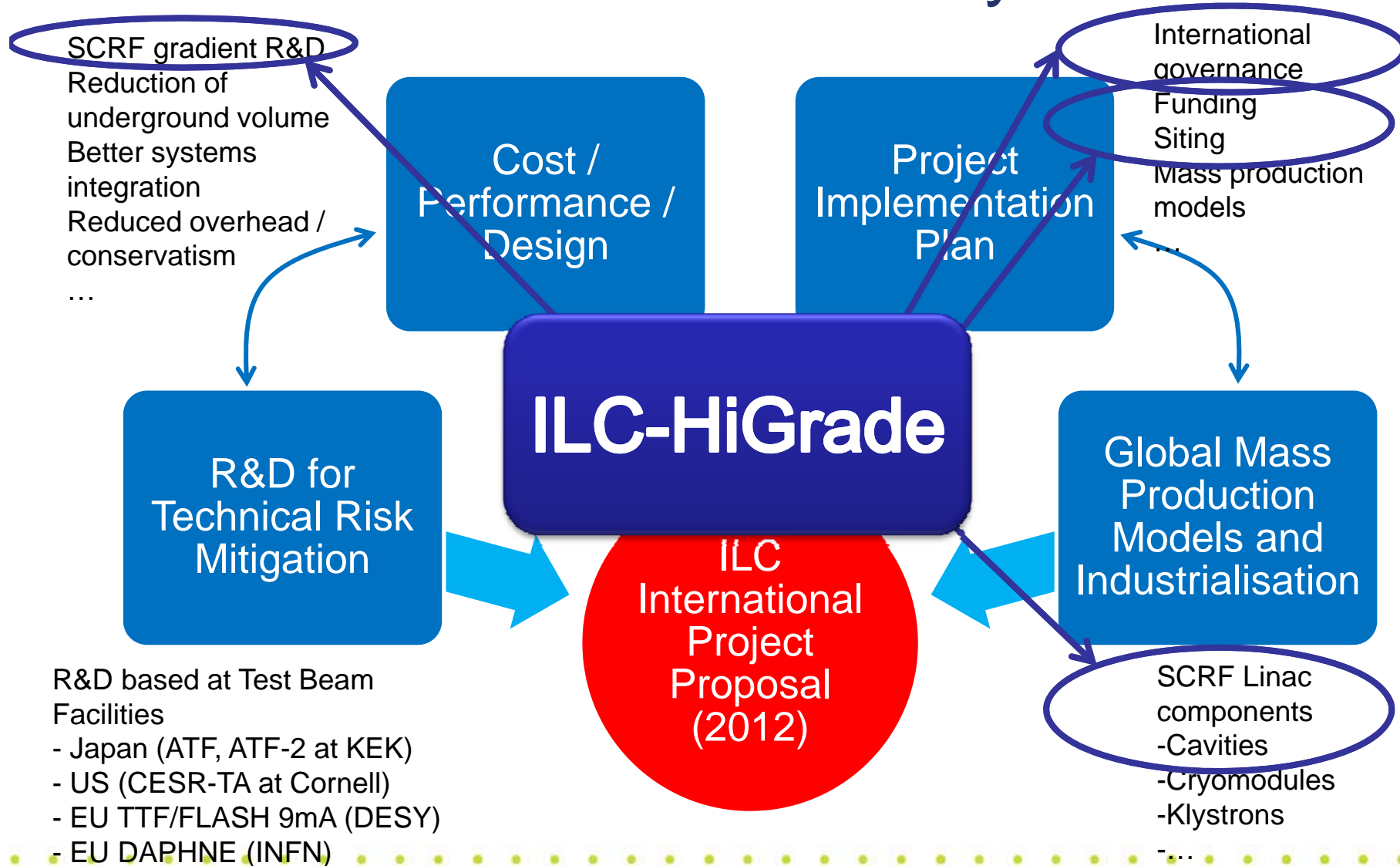
R&D based at Test Beam Facilities
- Japan (ATF, ATF-2 at KEK)
- US (CESR-TA at Cornell)
- EU TTF/FLASH 9mA (DESY)
- EU DAPHNE (INFN)

SCRF Linac components
- Cavities
- Cryomodules
- Klystrons
...



GDE TD Phase Priorities

A Summary





Summary

- ILC-HiGrade is well integrated into the Global Design Effort
 - **Significant overlap of senior people**
 - **ILC-HG WP structure complements GDE activities and goals**
- Preparation activities for SCRF orchestrated via European XFEL synergy
 - **Again significant overlap of senior people**
- Collaboration guaranteed