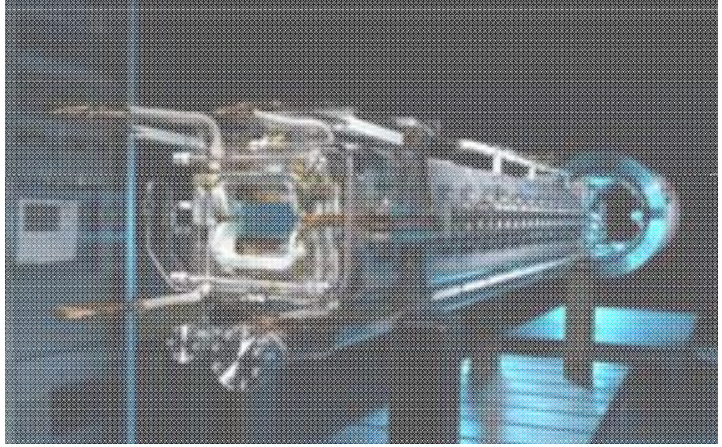


Status of FAIR

Ingo Augustin

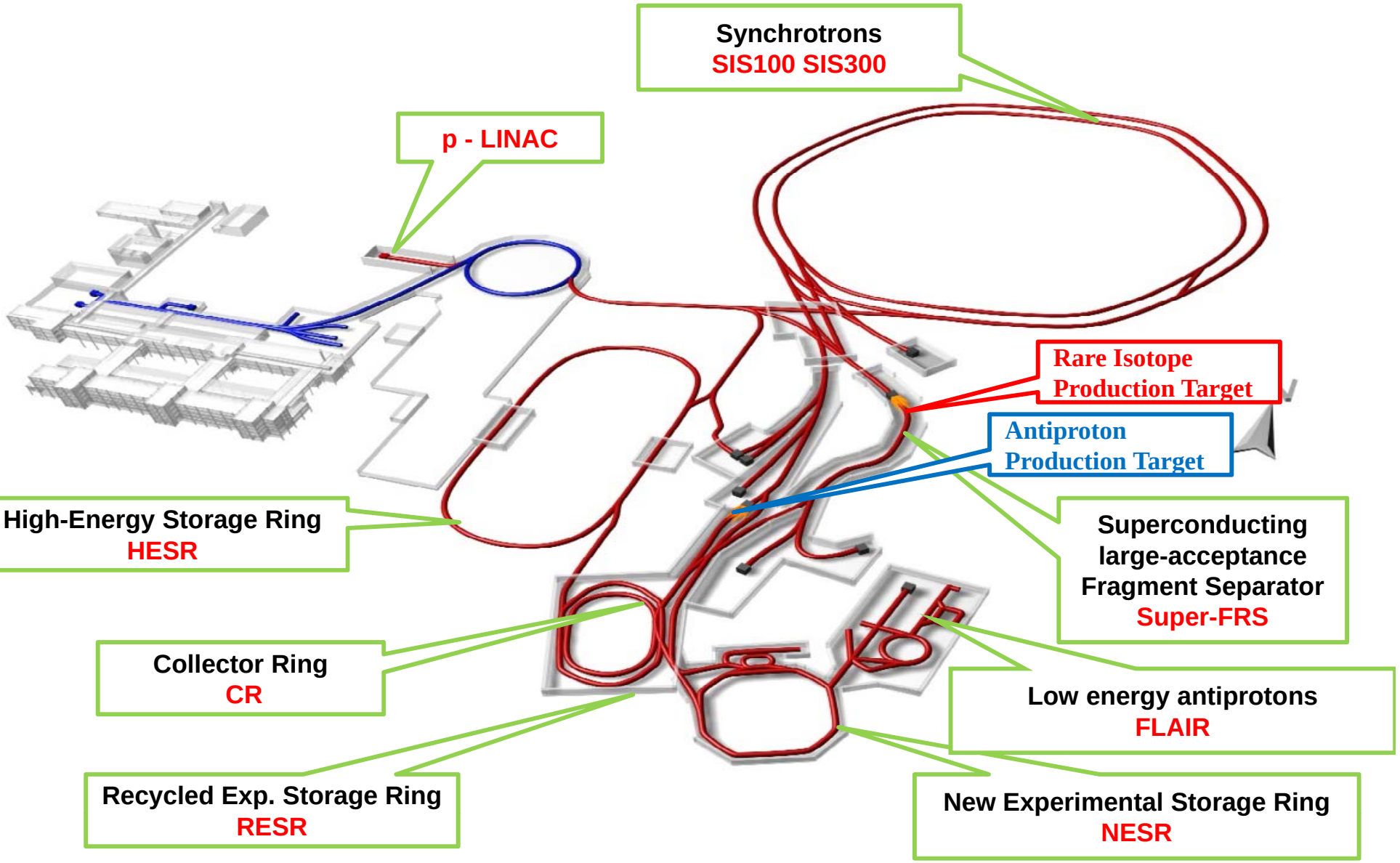
Chief of Staff

FLAIR, Daresbury, 22 February 2011

Signing of the Convention and Founding of GmbH

4 October 2010

New accelerator systems to be constructed



Development of Project Staging

2003	**Recommendation by WissenschaftsRat – FAIR Realisation in three stages**						
2005	**Entire Facility** **Baseline Technical Report**						
2007	**Phase A**						**Phase B** SIS300
2009	**Module 0** SIS100	**Module 1** expt areas CBM/HADES and APPA	**Module 2** Super-FRS fixed target area NuSTAR	**Module 3** pbar facility, incl. CR for PANDA, options for NuSTAR	**Module 4** LEB for NuSTAR, NESR for NuSTAR and APPA, FLAIR for APPA	**Module 5** RESR P+ beam line nominal intensity for PANDA & parallel operation with NuSTAR and APPA	**Module 6** SIS300 BIOMAT Hall HESR cooler EC ring

Modularized Start Version

Firm Commitments for the FAIR Project

Contracting Party	Contribution [M€]
Finland	5.00
French Republic	27.00
Federal Republic of Germany	705.00
Republic of India	36.00
Republic of Poland	23.74
Romania	11.87
Russian Federation	178.05
Republic of Slovenia	12.00
Kingdom of Sweden	10.00
Total	**1.008,66**

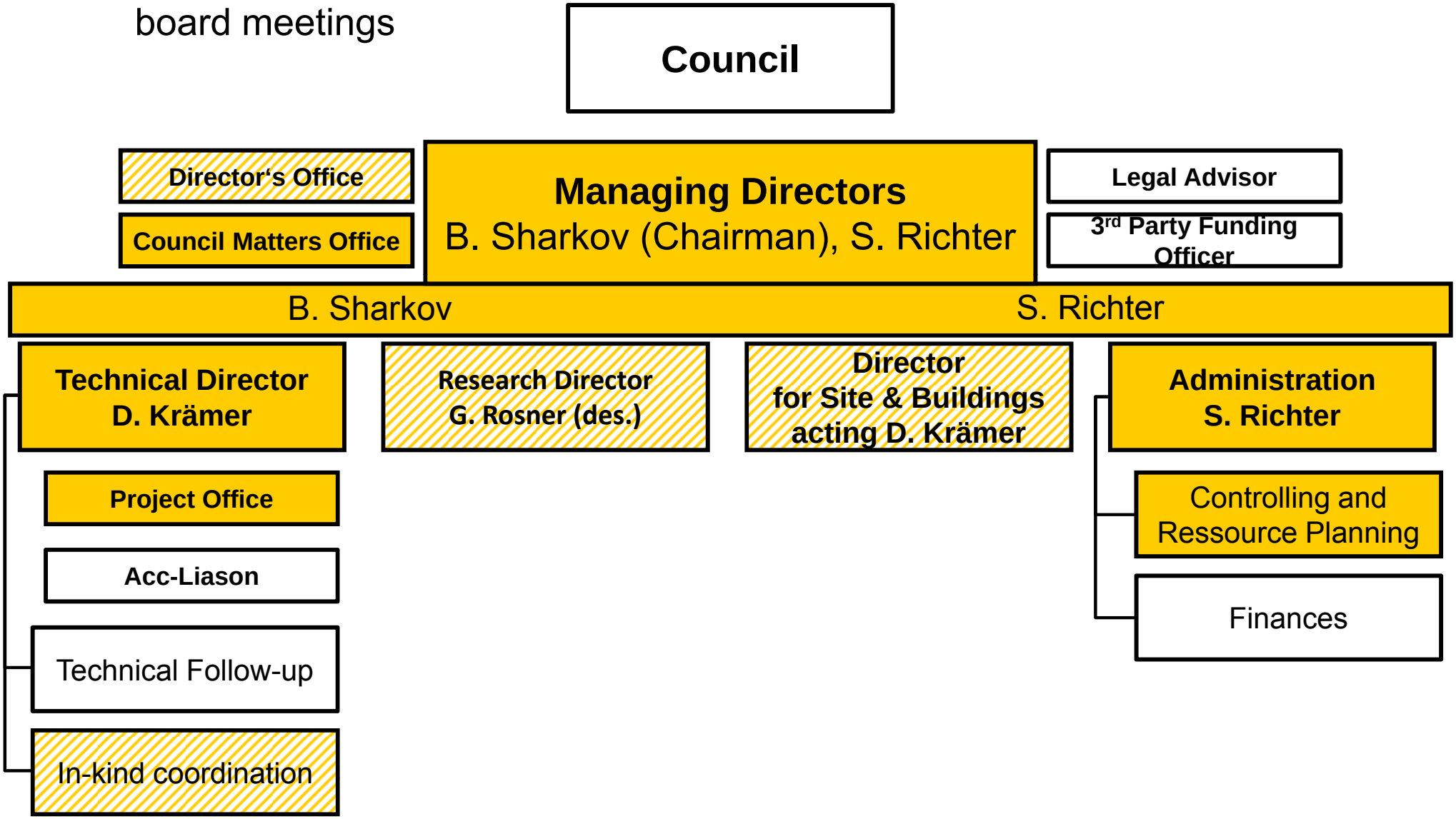
Spain expected to join soon (11.87 M€)

China and UK want to contribute to experiments (6.6 M€)

Project costs (1027 M€)

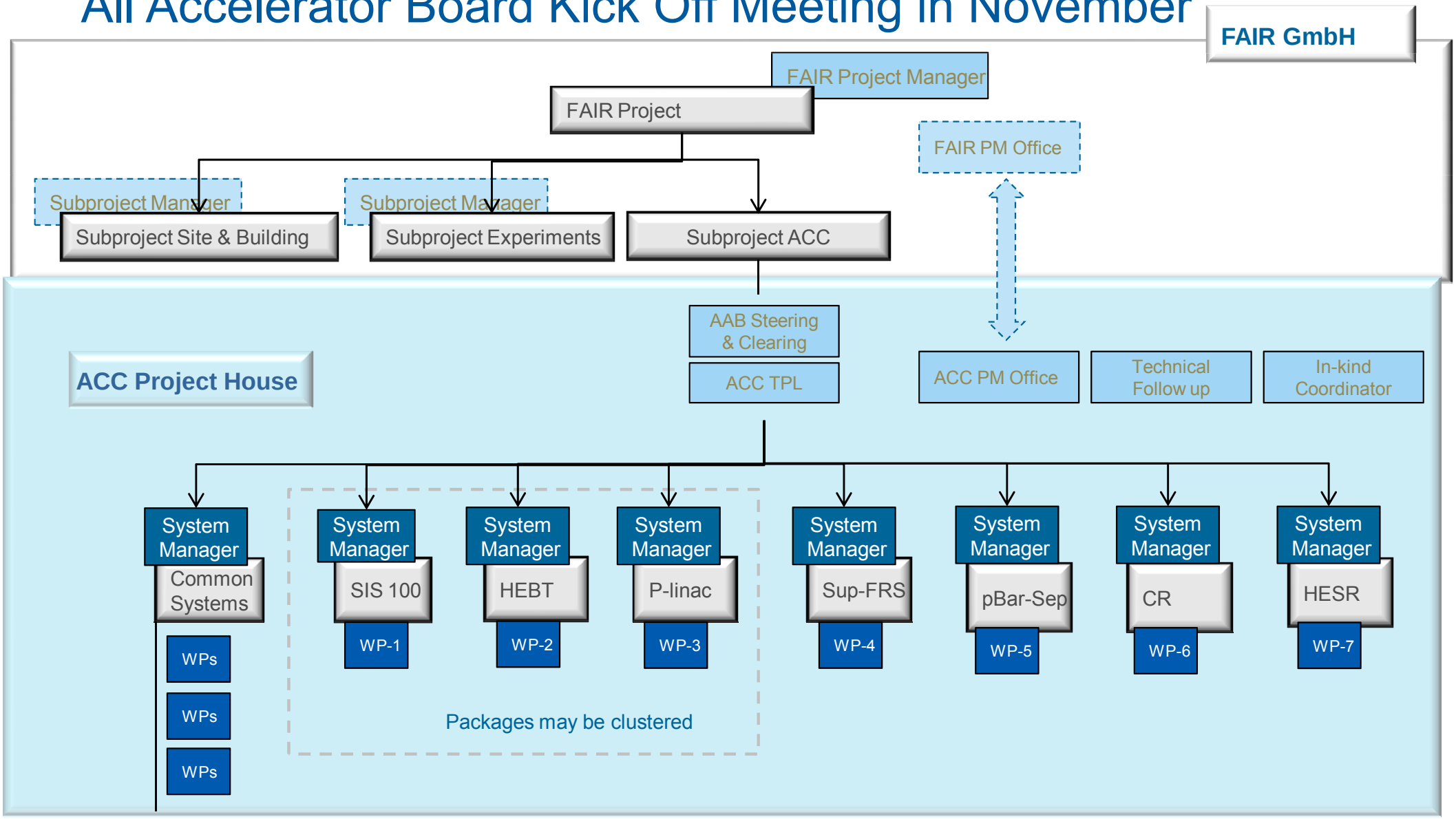
Organisational Chart

- Weekly management board meetings



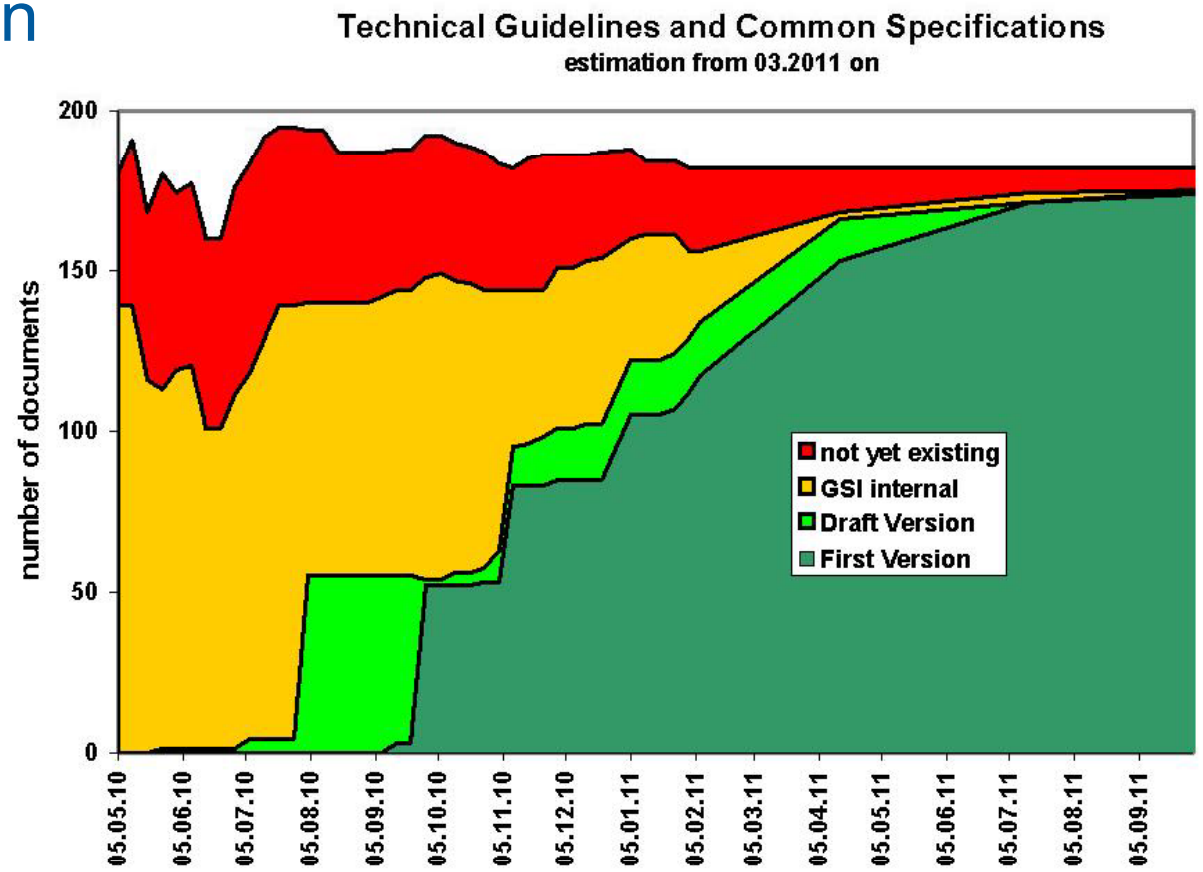
Technical Division

All Accelerator Board Kick Off Meeting in November



Technical Division II

- Technical Specifications to the In Kind Contracts under preparation



- Preparation for procurement of non-in-kind components (S-FRS, SIS100) in 2011

External Relations

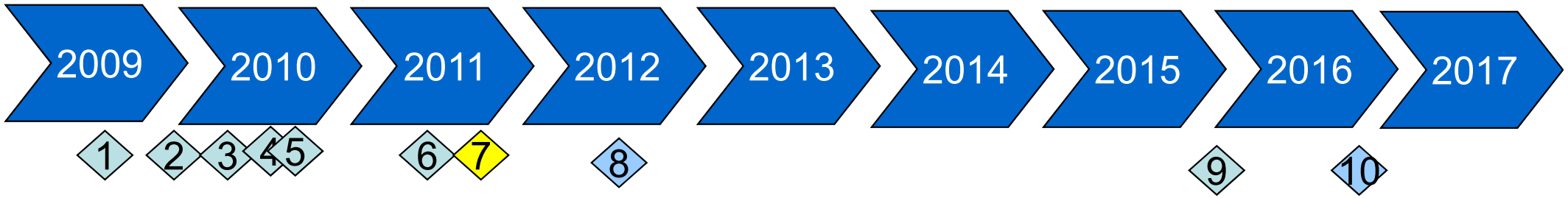
- General MoU with CERN signed
  on 18 November 2010

- MoU GSI, FAIR and Institute for Applied Physics (RAS), Nishnij Novgorod in preparation

- Discussions started with Norway, Brazil, Israel

- Visit to Swedish Research Council

Road Map FAIR Site & Buildings



1. Handing in of preplanning documents to hbm
2. Clarification of user requirements Modularized Start Version (MSV)
3. Start revised preplanning for MSV
4. Approval of revised planning for MSV
5. Preparation of documents for building permit
6. Expected approval for (partial) building permit
7. Start site preparation (clearing trees)
8. Award contracts on civil construction work lot 1 … n
9. Completion of civil construction work lot 1 … n
10. Start installation of accelerators and detectors

MSV and beyond

- FAIR GmbH cannot spend legally money on items outside the MSV
- At this step any addition of the planning would throw back the approval process to:
  - floor program (BMBF)
  - ZBau evaluation (hbm)
  - plus additional planning time and FAIR Council approvals (status as of beginning 2010) → no construction start in winter 2011/12

Extensions of MSV (procedure)

- Money needed for planning, approval process,construction, infrastructure, etc.
  - start with rough estimate for the total cost
- Get approval by FAIR Council
  - will probably require involvement of advisory committees (AFC, SC)
- Planning by architects
- Approval by
  - BMBF (floor space)
  - hbm (ZBau/finances)
  - local authorities (construction)

12 – 15 months

- tender procedure
- construction

Raising New Funds

- New international Partners
  - Saudi Arabia
  - Brasil
  - Turkey
  - Hungary
  - Norway
  - Netherlands
  - Israel
- Increasing contributions to FAIR
  - China
  - Spain
  - India
  - Italy . . .
- EU Programme

- Costs optimisation, raising efficiency
  - Accelerator , CC , Experiments
    → implementation of MAC recommendations already in 2010

SUMMARY

FAIR is gathering MOMENTUM !

- Based on recent cost estimates and firm commitments of FAIR Member States the Modularized Start Version is elaborated
- Modules 0-3 ensure a physics programme that is unique, competitive with great discovery potential
- All FAIR science communities can perform excellent physics from early on
- The facility can be smoothly upgraded towards the full version of FAIR (modules 4,5,6)
- Setup of the international FAIR company proceeds in parallel