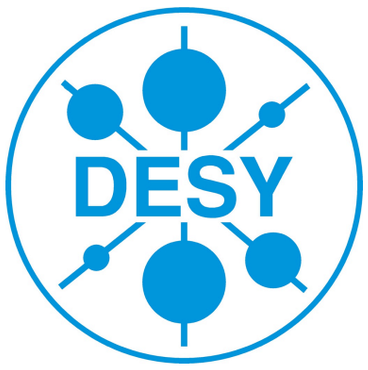
Status of EUROTeV

E.Elsen



4th Annual Meeting, Uppsala, Aug 26-28, 2008

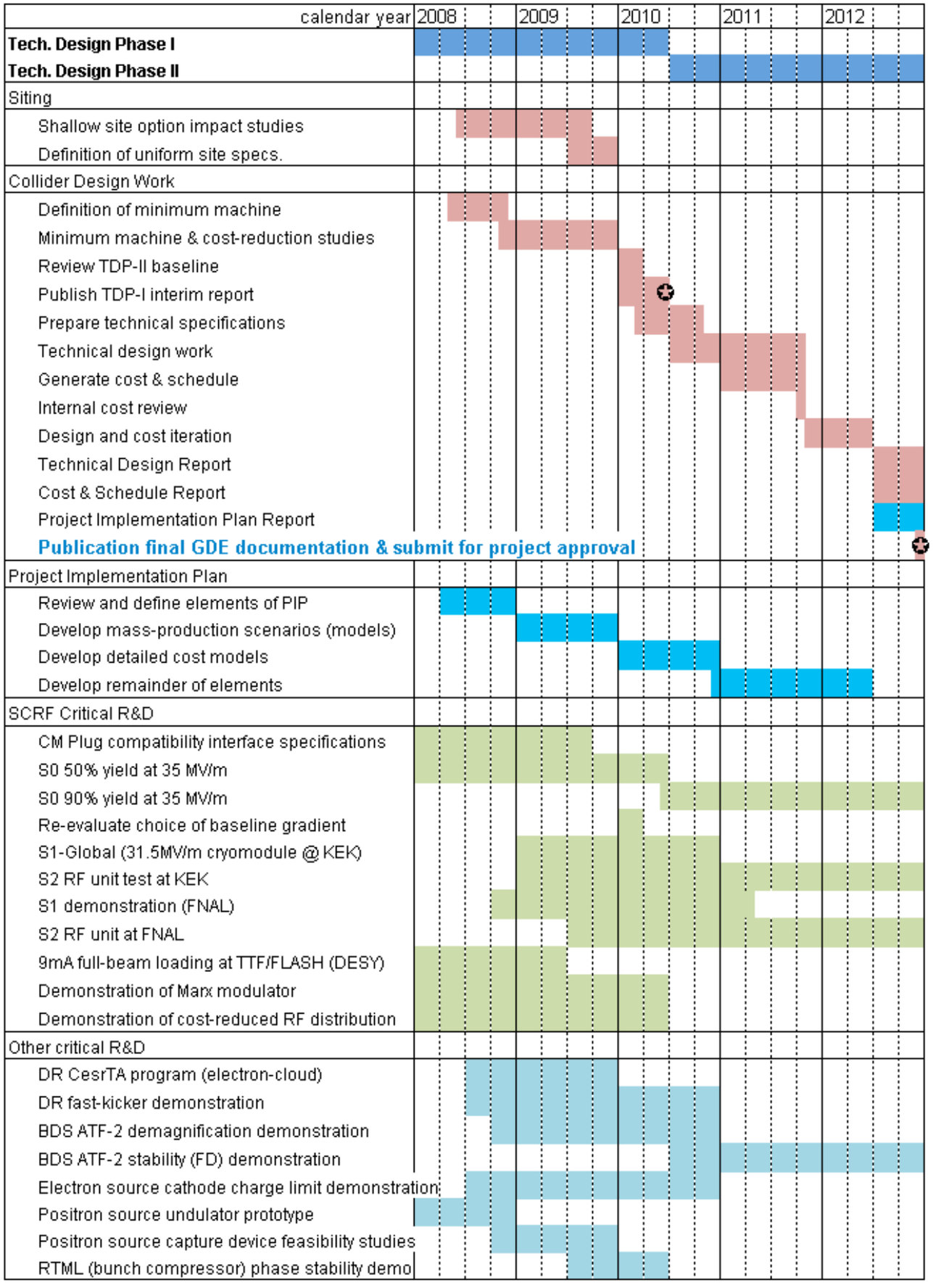
EUROTeV in hindsight

- Success as a research "institution"
  - EUROTeV has provided a wealth of reports on accelerator issues
    - Beam dynamics, instrumentation and optics, vibrations & stabilisation
    - Positron source
    - Damping rings
    - Global collaboration tools
      - Finding widespread applications in remote control rooms
- Many contributions to
  - Conferences: PAC, EPAC etc.
  - Publications readily accessible via SPIRES, ILCDocs

EUROTeV – an Accelerator voice in Europe

- The European contributions to the RDR are predominantly based on **TESLA** or **EUROTeV** work and the respective references.
- Many of the CLIC reports are EUROTeV reports
- Other regions, Asia and America, recognize EUROTeV as a Research Institution
- However, already in the previous meeting at Daresbury we recognized that a Design Study is not well adapted to the Engineering Phase for the ILC that then was about to start.
  - SCRF required serious attention in Europe → FP7 PP ILC-HiGrade, starting 2008
  - Use of infrastructures for engineering exercises → FP7 IA EuCARD, starting 2009
- The ILC has now launched the Technical Design Phases I and II

TD Phase Schedule



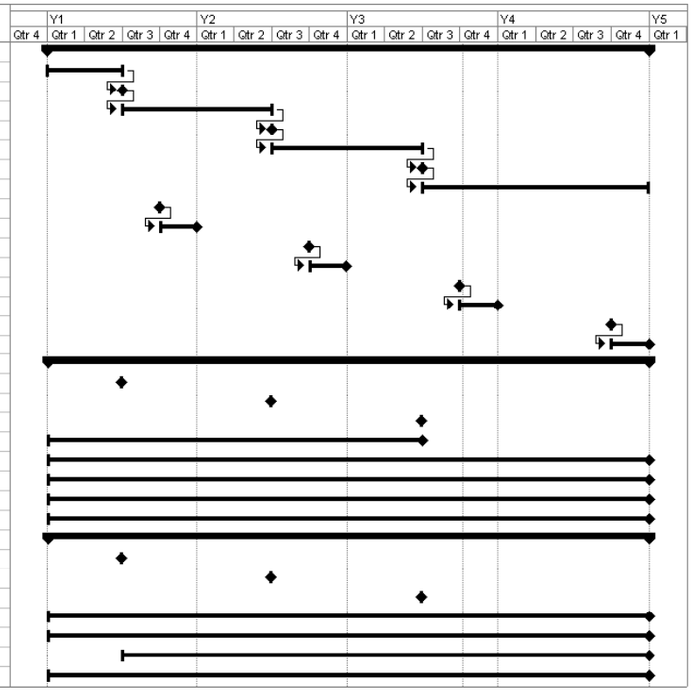
- Emphasis on two critical aspects
  - SCRF
  - Damping rings

EUROTeV in Technical Design Phase of ILC

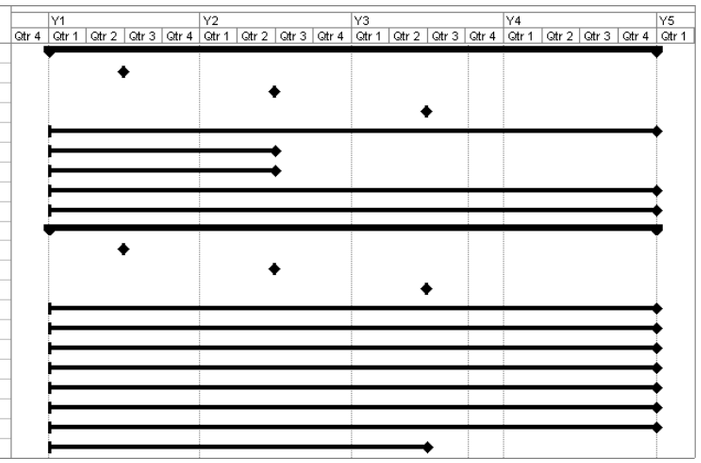
- EUROTeV extended by one year
  - Prolongation has been granted
    - EUROTeV continues till 31.12.2008
    - Most end-of-project deliverables have been deferred to end of 2008
      - Will take stock of the status during this meeting
- Prolongation helps to overcome resource shortages due to the end 2007 developments in the UK
- We should make sure that we maintain the strong European role in the ILC and more generally Linear Colliders that we have had in the past.

EUROTeV 2005 – 2008 Schedule

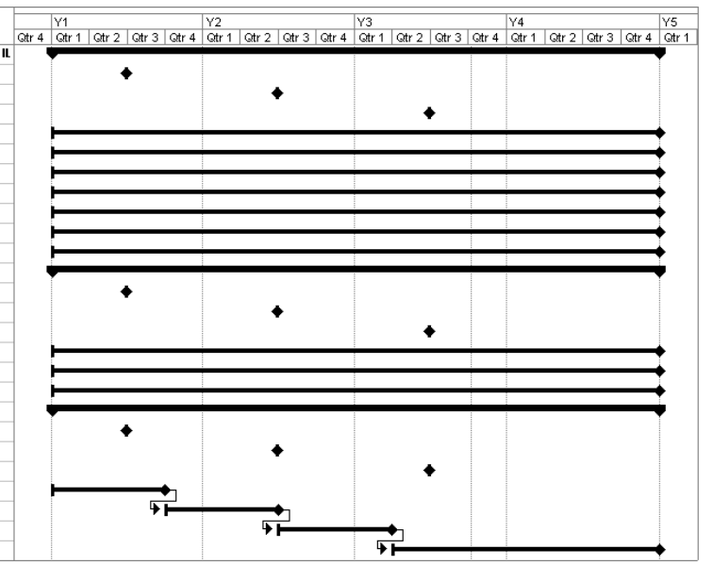
ID	Task Name
1	**WP1: Management MNGMNT**
2	Phase 1: scoping and alignment with GDE
3	1st workshop
4	Phase 2
5	2nd workshop
6	Phase 3
7	3rd workshop
8	Preparation final report and input to TDR
9	Annual meeting
10	preparation of annual report
11	Annual meeting
12	preparation of annual report
13	Annual meeting
14	preparation of annual report
15	Annual meeting
16	preparation of annual report
17	**WP2: Beam Delivery System BDS**
18	1st workshop
19	2nd workshop
20	3rd workshop
21	**BDS Lattice Design BDSLD**
22	**CRAB RF Development CRABRF**
23	**Spoiler wakefield mechanical design SWMD**
24	**Fast intra-train feedback FFBK**
25	**Superconducting final doublet R&D SCFD**
26	**WP3: Damping Rings DR**
27	1st workshop
28	2nd workshop
29	3rd workshop
30	Electron cloud & other instabilities ECLOUD
31	Evaluation RF separator technology RFSEP
32	Low Emittance Tuning studies LETS
33	Wiggler modelling and beam dynamics WGLRDYN



ID	Task Name
34	**WP4: Polarised Positron Source PPS**
35	1st workshop
36	2nd workshop
37	3rd workshop
38	Helical undulator R&D HURD
39	Source performance modelling PPMODL
40	SpinFlip system lattice design SPINF
41	Mech. Design of photon target and collimator PTCD
42	Low energy polarimeter LEPOL
43	**WP5: Diagnostics DIAG**
44	1st workshop
45	2nd workshop
46	3rd workshop
47	Laser based beam profile monitor LBPM
48	Confocal resonator CFBPM
49	Precision transformer PTBPM
50	Wide-band currenct monitor WBCM
51	Timing and phase monitor TPMON
52	Precision energy spectrometer ESPEC
53	High-energy polarimeter HEPOL
54	Fast luminosity monitor FLUM



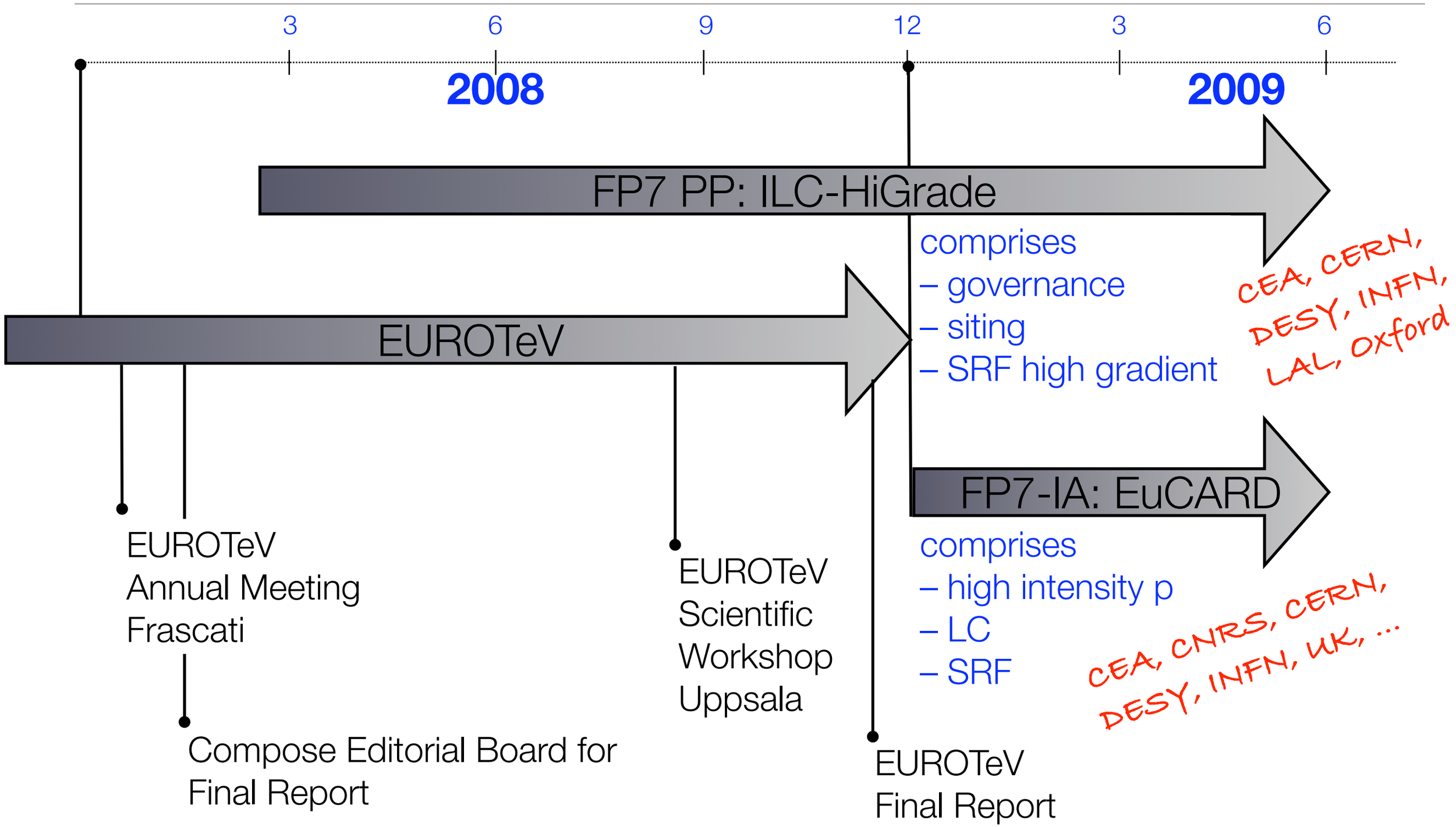
ID	Task Name
55	**WP6: Integrated Luminosity Performance Studies IL**
56	1st workshop
57	2nd workshop
58	3rd workshop
59	Failure modes & effects simulations FMSIM
60	Halo and tail generation HTGEN
61	Simulation of halo collimation COLSIM
62	Bunch compression system design BCDES
63	Post collision diag. lattice studies PCDL
64	Beam-beam simulations BBSIM
65	Luminosity and alignment studies LAST
66	**WP7: Metrology and Stabilisation METSTB**
67	1st workshop
68	2nd workshop
69	3rd workshop
70	Mechanical stabilisation technology MSTBT
71	Precision ground motion spectra PGMS
72	Rapid tunnel reference surveyor RTRS
73	**WP8 GAN mobile virtual lab. GANMVL**
74	1st workshop
75	2nd workshop
76	3rd workshop
77	Evaluation & design of MVL ODI
78	1st prototype construction & evaluation SC+ME
79	2nd prototype construction & evaluation SC+ME
80	MVL field trials & evaluation DGF



Most dates of deliverables have been moved to end 2008

from amended contract

EUROTeV in 2008 and beyond



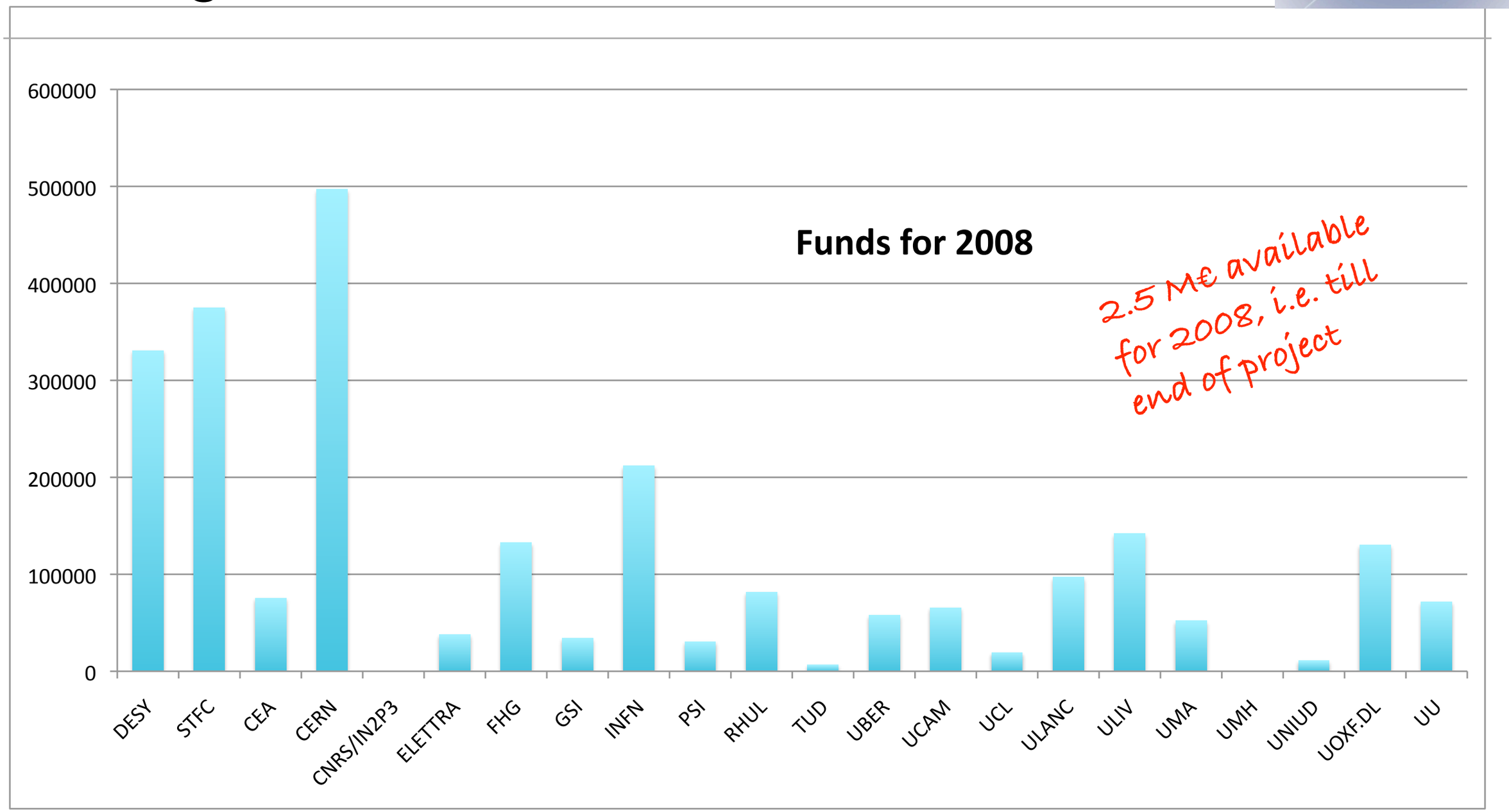
EUROTeV Annual Report 2007

- The scientific part has been accepted
  - In approaching the final report we had already used a somewhat more formal approaches in composing the text
    - structure, layout and format
- The financial part has been accepted eventually
  - Experienced very detailed comments with many minor actions to be taken
    - The transition CCLRC – STFC in the year necessitated two independent financial reports

Finances 2008

- Distrubution of funds amongst institutes
  - CNRS and Mannheim have exhausted their foreseen budget
  - for some institutes the 2007 accepted claims to the EC exceeded the foreseen amounts allocated in the initial distribution of funds between institutes
  - those institutes have received no further funding – but are evidently required to send their deliverables
- Payments made in 2008
  - compensate for 2007 expenditure
  - amount to 80% of the remaining amount for the project and institutes
    - rest to be balanced with the 4th Annual Report
      - reports due mid February

Funding Overview



Note that only 80% have been distributed as pre-payment

European Court of Auditors

- The European Court of Auditors visited DESY to look at EUROTeV
  - in December 2007
    - to asses whether to carry out a performance audit of the **European Commission**
- They decided to do so and
  - came to DESY in July 2008
    - to carry out the performance audit
- We received the draft of the assessment
  - made strong reference to the role of EUROTeV in the global context
    - based on original recommendations of the referees (acceleration technology independance, difficulty of hiring skilled postdocs quickly, etc.)
  - report gave evidence of good and adequate support from Brussels

Conclusion

- EUROTeV continues to hold a strong position in accelerator development in Europe in 2008
  - Have to conclude properly
    - Scientific report end of the year
    - Make good use of the financial resources
- Future projects are in place
  - to support ILC in TDP I
  - to carry accelerator research forward