



CLIC Collaboration working meeting addressing the 2012-16 workpackages

3-4 November 2011 *CERN*
Europe/Zurich timezone

Timetable

Registration

↳ Registration Form

List of registrants

Portable Computers
registration

CERN regular shuttle
timetable

Dates: from 03 November 2011 09:00 to 04 November 2011 18:00

Timezone: Europe/Zurich

Location: *CERN*
Room: Multiple rooms

- Thanks to all
- Brief summary
- Next steps



Work-packages and responsibilities

	Old Name	New Name	Name	WP Holder	Note
General	CLIC-001		CLIC General	S. Stapnes	
Parameters and design Daniel Schulte	BPH-BASE BPH-SIM BPH-FEED BPH-MP BPH-BCKG BPH-POL BPH-SRC E BPH-SRC P BPH-DR BPH-RTML BPH-ML BPH-BDS BPH-MDI BPH-DRV	CD-BASE CD-SIM CD-LUMI CD-OP CD-BCKG CD-POL CD-ESRC CD-PSRC CD-DR CD-RTML CD-ML CD-BDS CD-MDI CD-DRV	Integrated Baseline Design and Parameters Integrated Modelling and Performance Studies Feedback Design Machine Protection & Operational Scenarios Background Polarization Main beam electron source Main beam positron source Damping Rings Ring-To-Main-Linac Main Linac - Two-Beam Acceleration Beam Delivery System Machine-Detector Interface (MDI) activities Drive Beam Complex	D. Schulte A. Latina D. Schulte (interim) M. Jonker D. Schulte (interim) - S. Doebert Y. Papaphilippou A. Latina D. Schulte (placeholder) R. Tomas L.Gatignon B. Jeanneret	Searching (S.Doebert interim contact point) ABP request 2013 (also linked to CTF3 activities) ABP request 2014 - (also linked to CTF3 activities)
Experimental verification Roberto Corsini	CTF3-001 CTF3-002 CTF3-003 CTF3-004 CLIC0-001 CLIC0-002 BTS-001 BTS-002		CTF3 Consolidation & Upgrades Drive Beam phase feed-forward and feedbacks TBL+, X-band high power RF production & structure testing Two-Beam module string, test with beam CLIC 0 drive-beam front end facility (including Photoinjector option) Drive Beam Photo Injector Accelerator Beam System Tests (ATF, Damping Rings, FACET,...) Sources Beam System Tests	F. Tecker P. Skowronski S. Doebert - S. Doebert S. Doebert R. Tomas -	ABP request 2013 (see above) (Tasks holders: R.T., Y.P. and A.L.) Collaborators? split in 2 ?
Technical Developments Hermann Schmickler	CTC-001 CTC-002 CTC-003 CTC-004 CTC-005 CTC-006 CTC-008 CTC-011 CTC-012 CTC-013 CTC-014 CTC-015 CTC-016 CTC-017	CTC-WIG CTC-SUR CTC-QUA CTC-TBM CTC-WMP CTC-BDI CTC-PCLD CTC-CO CTC-RF CTC-EPC CTC-VAC CTC-MM CTC-BT CTC-MME	Damping Rings Superconducting Wiggler Survey & Alignment Quadrupole Stability Two-Beam module development Warm Magnet Prototypes Beam Instrumentation Post Collision Lines and Dumps Controls RF Systems (1 GHz klystrons & DB cavities, DR RF) Powering (Modulators, magnet converters) Vacuum Systems Magnetic stray Fields Measurements Beam Transport Equipment Creation of a "CLIC technology center@CERN"	P. Ferracin H. Mainaud K. Artoos G. Riddone M. Modena T. Lefevre E. Gschwendtner M. Draper E. Jensen (placeholder) S. Pittet C. Garion S. Russenschuck M. Barnes F. Bertinelli	BI request 2012 RF request 2014?
X-band Technologies Walter Wuensch	RF-DESIGN RF-XPROD RF-XTENDING RF-XTSTFAC RF-R&D	RF-DESIGN PRODUCTION TESTING TEST AREAS HIGH-GRADIENT	X-band Rf structure Design X-band Rf structure Production X-band Rf structure High Power Testing Creation and Operation of x-band High power Testing Facilities Basic High Gradient R&D	A.Grudiev, I. Syrathev G.Riddone S.Doebert E.Jensen (placeholder) S.Calatroni	RF request 2012, move construction to Technial Developments when defined
Implementation studies Philippe Lebrun		IS-CES IS-PIP	Civil Engineering & Services Project Implementation Studies	J. Osborne P.Lebrun	

The CLIC International Collaboration

CLIC multi-lateral collaboration - 41 institutes from 21 countries



ACAS (Australia)
 Aarhus University (Denmark)
 Ankara University (Turkey)
 Argonne National Laboratory (USA)
 Athens University (Greece)
 BINP (Russia)
 CERN
 CIEMAT (Spain)
 Cockcroft Institute (UK)
 ETHZurich (Switzerland)
 FNAL (USA)

Gazi Universities (Turkey)
 Helsinki Institute of Physics (Finland)
 IAP (Russia)
 IAP NASU (Ukraine)
 IHEP (China)
 INFN / LNF (Italy)
 Instituto de Fisica Corpuscular (Spain)
 IRFU / Saclay (France)
 Jefferson Lab (USA)
 John Adams Institute/Oxford (UK)

John Adams Institute/RHUL (UK)
 JINR (Russia)
 Karlsruhe University (Germany)
 KEK (Japan)
 LAL / Orsay (France)
 LAPP / ESIA (France)
 NIKHEF/Amsterdam (Netherlands)
 NCP (Pakistan)
 North-West. Univ. Illinois (USA)
 Patras University (Greece)

Polytech. Univ. of Catalonia (Spain)
 PSI (Switzerland)
 RAL (UK)
 RRCAT / Indore (India)
 SLAC (USA)
 Thrace University (Greece)
 Tsinghua University (China)
 University of Oslo (Norway)
 Uppsala University (Sweden)
 UCSC SCIIPP (USA)



Information needed

Collaborators: general information and resource estimate									
Institute:	??? Institute of Physics								
Main contacts:	Names of resp. at your institute								
CERN responsible:	Walter Wuensch (in this example), and/or name of work-package leader								
Activity/work package/task:	X-band rf/high-gradient/task 2 fundamental studies (in this example)								
Technical subject:	Fundamental breakdown studies (in this example)								
Working arrangement:	Independent group working in ???, PhD student at CERN, frequent visits and common workshops, hardware at home, testing at CER, etc .. (to be detailed in discussions)								
Funding status:	Have secured funds 2012-13, applying for 2014-15								
Formal agreement:	CFT3 collaboration agreement, k-contract, protocol(annex) to CERN co-operation agreement, etc. Valid until April 2012, expired								
Expected resources		2012	2013	2014	2015	2016	Comment		
	Material budget [CHF at current rate]	50	40	110	110	80	whatever		
	Manpower at institute [FTEyears]	3.5	3.5	3.5	3.5	3.5	2 phd.students, 0.5 prof, 1 engineer		
	Manpower at CERN [FTEyears]	1	1	1	1	1	1 phd student		



Collaboration

- The primary goal of this exercise is to identify the work-capability (WP-task-actual work) and resources (personnel and material) available in the collaboration for the various WPs
- The secondary goal is to understand the formal status (annexes to MoU or similar) of your link to CLIC and make sure we update and improve wherever needed for next period
- The third objective is to create direct links between people responsible for activities and work-packages and collaborators taking on responsibilities



List (not cross-checked)

Parameters and Design 1'

- Material:
- ANKARA-CD-RTML
 - ANL-CD-PSRC
 - Aarhus-CD-SIM
 - Ankara-CD several
 - Australia-CD-DR
 - BINP-CD-DR
 - CORNELL-CD-DR
 - IFIC-CD-BDS
 - IFIC-CD-DR
 - IFIC-CD-RTML
 - IFIC-CD-SIM
 - IHEP-RF-CD-to-be-split
 - INFN LNF-CD-DR
 - INFN LNF-CD-DRV
 - INFN-LNF-CD-RTML
 - JAI-CD-MDI_LUMI_SIM
 - JAI-Oxf-CD-DR
 - KIT-CD-DR
 - LAL-CD-BDS
 - LAPP-CD-SIM_MDI and CTC-QUA
 - Oslo-CD-CTF3-RF-split
 - RHUL-CD-BDS
 - SYMME-CD-SIM and CTC-QUA
 - TIARA-SVET-CD-DR
 - ULUDAG University-CD-PSRC
 - UPC-CD-BDS and CTC-BDI
 - turkey-CD-several
 - uludag-CD-PSRC

Experimental Verification 1'

- Material:
- IAP-CLIC-002
 - IFIC
 - INFN LNF-CTF3-002
 - IPM_WP_CLIC0-001_and_CTC-012
 - JAI-CTF3-002
 - Uppsala-RF-CTF3-split

Technical Developments 1'

- Material:
- ASL-Brussels, LAPP, LNFN, PSI, SLAC
 - CIEMAT-CTC-TBM
 - CIEMAT-CTC-TBM and CTC-SUR
 - Dundee-CTC-BDI
 - HIP-CTC-TBM
 - INFN LNF-CTC-RF
 - JAI-CTC-BDI
 - KIT-CTC-WIG
 - LAPP-CD-SIM_MDI and CTC-QUA
 - LNBL-SCIPP-CTC-BDI
 - NTUA-CTC-SUR
 - NTUA-CTC-TBM
 - STFC-CTC-WPM
 - STFC-Cockcroft-CTC-WMP
 - SYMME-CD-SIM and CTC-QUA

X-Band Technologies 1'

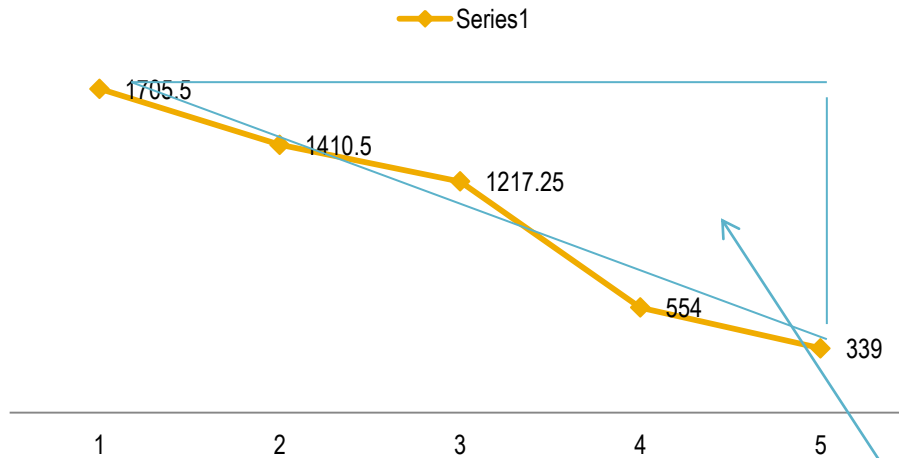
- Material:
- Helsinki-RF-CTC-split
 - IFIC test areas
 - KEK-WP all
 - Lancaster - design
 - Manchester-WP design
 - Oslo design and high gradient
 - PSI - design, production and high-gradient
 - Saclay-WP test and test areas
 - Tsinghua design and production
 - Uppsala - test areas, testing and high gradient

Implementation Studies 1'



Based on 33 EOI's (out of around 64 submitted)

KCHF (2012-2016)

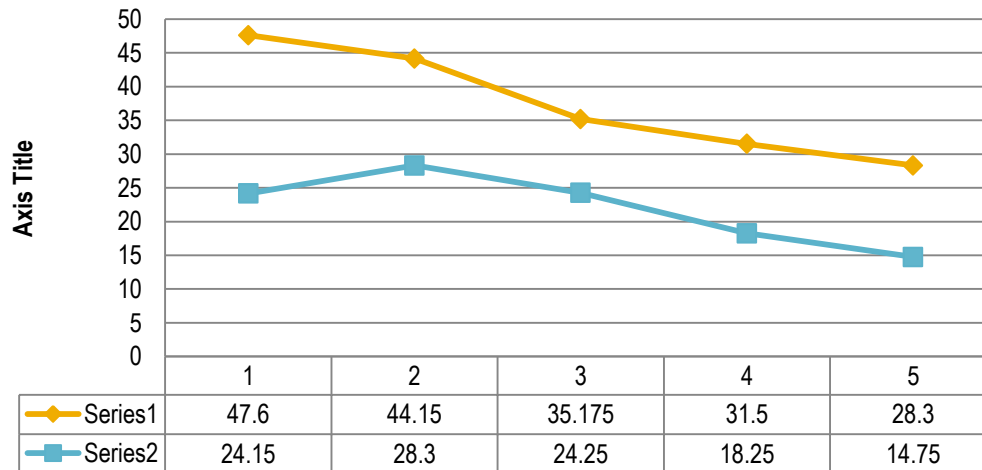


Total: 5.2 MCHF x 2 for missing EOI's x 2 for "upper triangle"
→ 15 – 20 MCHF in reach



Based on 33 EOI's (out of around 64 submitted)

P@coll (yellow) P@CERN(blue) (FTEyears)

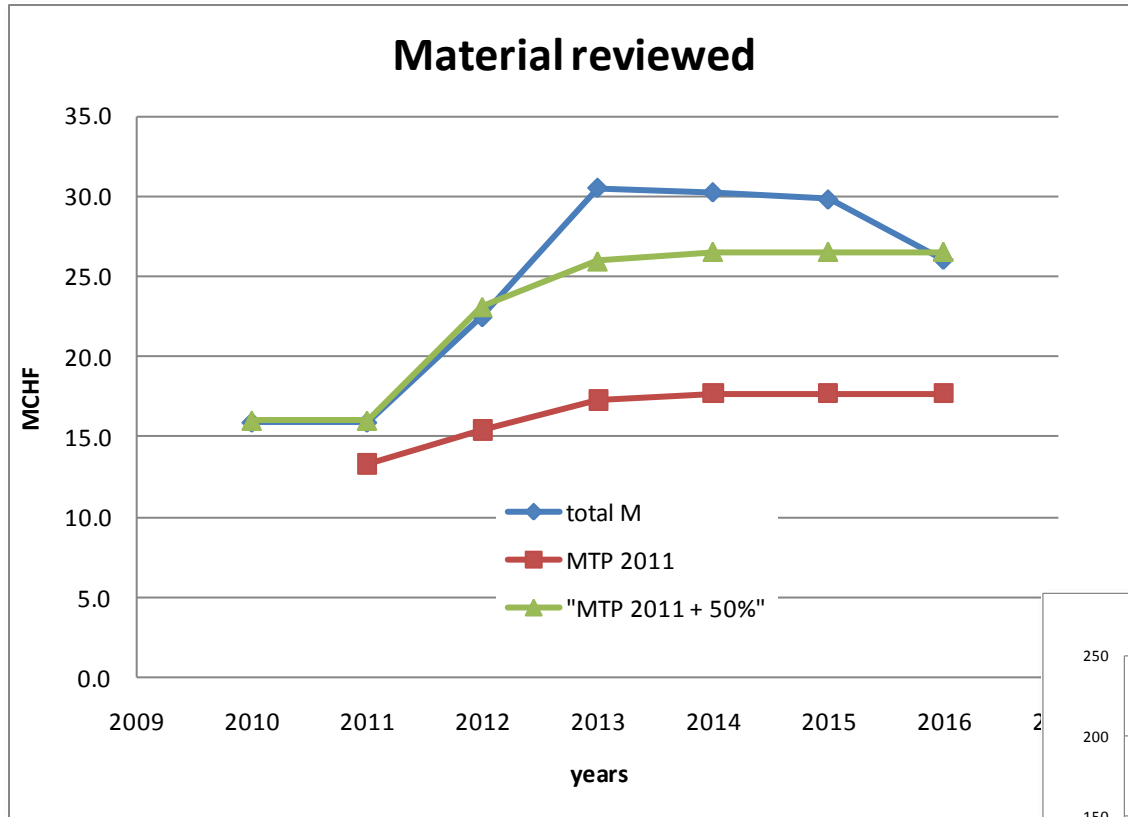


Total: 187 (yellow) + 110 (blue) ~ 300 FTEyears

Assume: Factor 2 for missing EOI's and 30% more for commitments in later years

→ 800 FTE years (Whouw!!!)

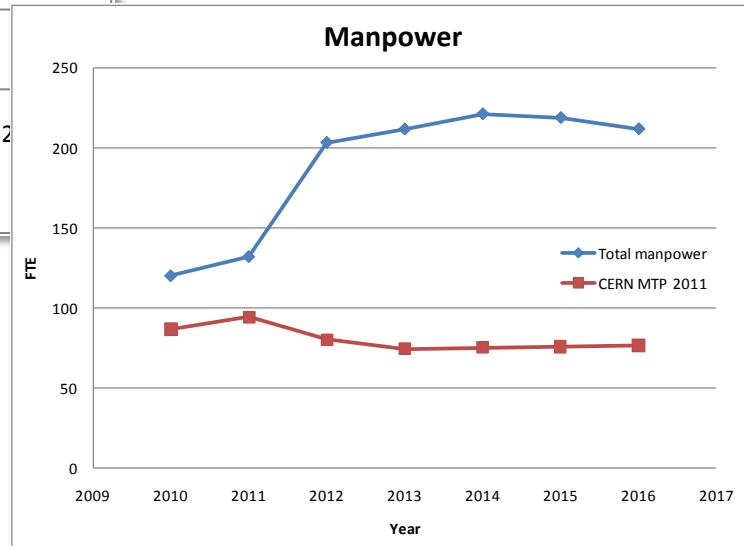
Initial resource planning versus availability in CERN MTP



Problem for personnel worse, as CERN planning is essentially flat

Total integrated: 140 MCHF (still being re-fined)
In CERN MTP: 86 MCHF

S





Next steps

Improve existing forms (a combination of central work and collaborators):

- If you already know about something you need to fix do it immediately in contact with work-package leaders and activity leaders
- We will quickly set up guidelines for the adaptations needed (hopefully not large for most collaborators)

Need to set up a accessible central place for the information (also for collaborators)

Please follow up contacts for the real technical work immediately

Collaborators that have not sent in forms:

- We need input from all collaborators, if at all possible by the end of the meeting, and latest by 15.1

Finally - a significant of work is needed for MoU annexes and other agreements (will come slightly later)

And again: many thanks for the excellent response, we have made a huge steps towards a real collaborative CLIC programme for 2012 ...



14thCLIC/CTF3 Collaboration Board

chaired by Ken Peach (JAI)

Friday, November 4, 2011 from 13:30 to 16:30 (Europe/Zurich)
at CERN (To be defined)

Description

Participants P. D. Gupta; Kenneth Osterberg; Lenny Rivkin; Purushottam Shrivastava

Registration Want to participate? [Apply here](#)

Friday, November 4, 2011

- | | |
|---------------|---|
| 13:30 - 13:35 | Introduction by chairman 5'
Speaker: Ken Peach (University of Oxford (GB)) |
| 13:35 - 13:40 | Approval of minutes of previous meeting 5'
Speaker: Ken Peach (University of Oxford (GB)) |
| 13:40 - 13:45 | Matters arising 5'
Speaker: Ken Peach (University of Oxford (GB)) |
| 13:45 - 14:15 | Discussion on the CCB chair mandate, re-launch of CCB chair election procedure 30' |
| 14:15 - 14:45 | Update on the future LC organization 30'
Speaker: Steinar Stapnes (CERN) |
| 14:45 - 15:45 | WPs: summary of workshop, future plans and "Tour de Table" 1h0' |
| 15:45 - 16:15 | Status of the CDR 30'
Speakers: Dr. Hermann Schmickler (CERN), Lucie Linssen (CERN) |
| 16:15 - 16:30 | AOB 15' |