

ORGANIZATION OF FP7 PROPOSALS
IN
"EUROPEAN PROTON ACCELERATOR R & D"
EPARD

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FP7 CERN LoI

Systems	Type	Subject	Total budget (MEuros person-year/Material)
LHC	D S	The Upgrade in Luminosity of the CERN-LHC in Europe: EURO-LUMI	7.2 40 / 2.8
	JRA	High Temperature Superconducting Link (DC) for LHC: HTS SL	1.3 6 / 0.6
	JRA	High Field Magnets for LHC upgrades: HFM	13.85 45 / 8.9
PAF	JRA	Superconducting Linac Based Proton Driver: SPL Driver	10.2 46 / 5.1
	D S	Fast Cycling Synchrotron Design Study: EURO-SYNCHROTRON	7.2 40 / 2.8
	JRA	Fast Cycling Superconducting Magnets for Synchrotrons: FAM	8.75 25 / 6
	JRA	ELENA Electron Cooler	1.7 7 / 0.9
	JRA	Collimators and Material for High Power Accelerators	10 55 / 4
CLIC	JRA	High Gradient RF structures	5.0 22 / 2.5
	JRA	EURODRIVE	5.0 39 / 0.7
MultiTeV LC R&D	JRA	Luminosity Ensuring Design: LED	5.4 25 / 2.7
	JRA	Generation And Diagnostics Gear for tiny Emittance: GADGET	5.9 30 / 2.6
"MuTeV" (I3)	JRA	L-band, High Power and High Efficiency Multibeam RF Amplifier: HEMBA	7.0 32 / 3.5
	JRA	3Ka-band Stand Alone Power Source: SAPS	7.0 10 / 5.9
TOTAL	2DS & 11JRA		95.5 422 / 49

Reorganized with the following goals:

- Avoid duplication
- Regroup similar subjects
- Refocus proposals if necessary
- Economical balance between subjects
- Limit the total resources to ~ 45 MEuros (3 x the maximum European subvention)

Networks

Name	Type	Description	New Cost (Meuro)	Duration (years)	Priority	Comment
EURO-LUMI	Network	LHC Luminosity upgrade	1	4-5 ?	1	~ HHH
EURO-DRIVER for neutrinos	Network	Proton Driver for a future neutrino facility	0.6	4	2	~ Part of BENE

No longer competing for DS in 2007

Development of superconducting magnets

Name	Type	Description	New Cost (Meuro)	Duration (years)	Priority	Comment
HFM	JRA	High Field Magnets for LHC upgrades	12	4-5	1	Contains LUMAG
HTS_SL	JRA	HT superconducting link	1	4-5	1	
FAM	JRA	Fast Cycling Superconducting Magnets for Synchrotrons	8	4-5	2	Goals to be reviewed
CryoMag Net	TA	Characterization of conductors for superconducting magnets	1	4-5	1	

Development of target and collimators

Name	Type	Description	New Cost (Meuro)	Duration (years)	Priority	Comment
ColMat	JRA	Collimators and Materials for High Power Accelerators	9 ?	5	1	
HiRadMat	TA	Test of materials in extreme irradiation	1 ?	5	1	Test facility for ColMat

High power proton linac

Name	Type	Description	New Cost (Meuro)	Duration (years)	Priority	Comment
SLPD	JRA	Superconducting linac-based Proton Driver	7	4	2	H- ion source development moved to H-ISAPS
H-ISAPS	JRA	H- Ion Sources and Associated Plasma Studies	4	5	2	LISAPS limited to H-

Summary of EPARD

2 networks

2 TAs

6 JRAs

Total Funding 44.6 MEuros

- Preparation of the requests will start in Spring 2007
- Once the EC support will be better quantified (1, 2 or 3 IA's allowed ?)
- Once is will be clear that CERN will have additional resources beside the core activity.