

CHIPP Long-Term Financial Table: *moderating the ambitions (round 2)*

August 2012/JPR

Introduction

15 projects in the CHIPP Long-Term Financial Table have been presented in the June Board meeting. After the meeting, a number of questions have been circulated to the responsible Board members, asking for complementing and completing information. The overarching goal of the exercise is to arrive at a realistic view of the future financial needs expected from the FORCE (CERN) and FOLIS (other large infrastructures) for existing and planned project participation, taking into account the financial, human and technical resources available in the involved groups and from the funding agencies concerned. In fine, an extract of this table, complemented with those projects in the field of particle and astroparticle physics that are not in the focus in this specific round, will be handed over (as every year) for planning purposes for the combined fund, called FLARE, to the State Secretariat for Education and Research SER and the Swiss National Science Foundation SNF.

Revised tables

The attached version of the tables (28 August 2012) contains – in addition to the numbers provided by the project leaders in May/June – additional information extracted from the presentations at the June Board, a few specific revisions received individually from some of the project leaders, as well as numbers and information extracted from the project leaders in bilateral discussions. In addition to the general (full) survey and the extracts for 2012, 2013-2016, and 2017-2020, a new table has been added (name: 'FLARE shares'). It shows the share each project expects to receive from FORCE and FOLIS (as well as from the combined funding FLARE). This new table shows clearly where problems must be expected and highlights also the points to be discussed at the Board (see section 'Open Points').

Nevertheless, a positive evolution should not go unnoticed: Compared to the numbers available in November 2011 the present table shows a remarkable success of the moderation exercise carried out over the last months. The overall funding requests for the period 2013-2016 (the period already covered by the November 2011 tables) have roughly been cut in half. The FORCE expectations went down from 42 MCHF in November 2011 to 22 MCHF in August 2012, and the funds expected from FOLIS decreased from 28 MCHF to 11 MCHF for the same period.

These reductions and moderations are encouraging, but not yet sufficient, because the oversubscription rate for the FOLIS part is still worrying (see below).

Open Points

Funding: Whereas the resulting funding need for FORCE seems not to pose a problem (oversubscription 115% [2013-2016], and 130% [2017-2020]), the discussion will have to focus on the FOLIS projects. For the period 2013-2016 some 8 MCHF are missing in the FOLIS pot and will have to be found elsewhere in the Swiss funding system. For the second 4-year-period up to 2020, the missing FOLIS funds amount even to 10 MCHF. Does the Swiss funding system have the potential

(and the will) to make 18 MCHF available to the particle and astroparticle physics community in addition to the regular and already envisaged support? Should the Board start working with the SER on a substantial increase of the FOLIS funds, aiming at reaching approximately the same level as the FORCE part?

New projects: There are three large new projects, DARWIN, LAGUNA and CTA, reaching full development speed in the period 2013-2020. This goes hand in hand with a corresponding increase in manpower and technical resources required in Switzerland. Does the Swiss university system have the potential to embark on all three experiments simultaneously without reducing or cancelling other activities?

Procedure

It is suggested that the Board takes the summary table 'FLARE shares' as the basis of its debate and holds a discussion about the open points and the possible next steps in the preparation of the regular CHIPP tables to be submitted to SER and SNF in November.

The Board (applying Article 27, litt. b) is requested

- to discuss the table established on the basis of the input from the projects,
- to provide answers and solutions for the open points, and
- to assess the expected FLARE funds (= FORCE + FOLIS) against the sums earmarked for this purpose at SER/SNF.

Claimed/calculated shares ('fair shares?')
for CH projects over 2013-2020

FORCE part of FLARE
FOLIS part of FLARE

FTE distribution of 3 Professors
unknown for the 3 projects
bold red: requires > 30% of the available funding

funding:
* known
** estimate
*** guess

	BG	2013-2016			2017-2020			2013-2020			28.8.2012/JPR																			
		Prof.	FORCE	FOLIS	FLARE	FORCE	FOLIS	FLARE	FORCE	FOLIS	FLARE																			
			19/200*	2/500**	21/700	19/200**	6/000***	25/200	38/400	8/500	46/900																			
		FTEs	KCHF	%	KCHF	%	KCHF	%	KCHF	%	KCHF	%																		
18	22	ATLAS	6	4889.5	25.5%	4889.5	22.5%	5950.0	31.0%	5950.0	23.6%	10839.5	28.2%	10839.5	23.1%	numbers in line with presentation and input for table														
33	38	CMS	7	6520.0	34.0%	6520.0	30.0%	8120.0	42.3%	8120.0	32.2%	14640.0	38.1%	14640.0	31.2%	numbers for 2013-2016 in line with presentation and input for table, 2017-202: input only.														
49	53	LHCb	4	3522.8	18.3%	3522.8	16.2%	2934.4	15.3%	2934.4	11.6%	6457.2	16.8%	6457.2	13.8%	numbers in line with presentation and input for table														
62	65	CLOUD	0.2	870.0	4.5%	870.0	4.0%	450.0	2.3%	450.0	1.8%	1320.0	3.4%	1320.0	2.8%	numbers in line with presentation and input for table														
74	78	OPERA	0.9	300.0	1.6%	300.0	1.4%	0.0	0.0%	0.0	0.0%	300.0	0.8%	300.0	0.6%	total FLARE needs in line with presentation; very few other numbers given														
89	94	T2K		0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	reduced input for table, partly complemented with presentation; some numbers provided in bilateral meeting.														
106	111	NA61		520.0	2.7%	520.0	2.4%	420.0	2.2%	420.0	1.7%	940.0	2.4%	940.0	2.0%	reduced input for table, partly complemented with presentation; some numbers provided in bilateral meeting.														
123	128	LAGUNA-LBNO		2120.0	11.0%	1590.0	63.6%	3710.0	17.1%	5680.5	29.6%	6692.0	111.5%	12372.5	49.1%	7800.5	20.3%	8282.0	97.4%	16082.5	34.3%	reduced input for table, complemented with presentation; ~30% overall funding expectations confirmed, estimate split between FORCE and FOLIS								
138	141	EXO	1	0.0	0.0%	670.0	26.8%	670.0	3.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	670.0	7.9%	670.0	7.9%	670.0	1.4%	numbers in line with presentation and input for table								
149	152	GERDA	0.3	0.0	0.0%	228.0	9.1%	228.0	1.1%	0.0	0.0%	0.0	0.0%	0.0	0.0%	228.0	2.7%	228.0	2.7%	228.0	0.5%	numbers in line with presentation and input for table								
160	163	XENON	0.5	0.0	0.0%	812.7	32.5%	812.7	3.7%	0.0	0.0%	378.0	6.3%	378.0	1.5%	1190.7	14.0%	1190.7	14.0%	1190.7	2.5%	numbers in line with presentation and input for table								
172	176	DARWIN	0.4	0.0	0.0%	2125.0	85.0%	2125.0	9.8%	0.0	0.0%	2578.0	43.0%	2578.0	10.2%	4703.0	55.3%	4703.0	55.3%	4703.0	10.0%	numbers in line with presentation and input for table								
185	188	MAGIC	0.5	0.0	0.0%	202.4	8.1%	202.4	0.9%	0.0	0.0%	202.4	3.4%	202.4	0.8%	404.8	4.8%	404.8	4.8%	404.8	0.9%	numbers in line with presentation and input for table								
200	207	CTA	1.5	0.0	0.0%	5094.4	203.8%	5094.4	23.5%	0.0	0.0%	6320.0	105.3%	6320.0	25.1%	11414.4	134.3%	11414.4	134.3%	11414.4	24.3%	numbers in line with presentation and input for table								
220	224	ICECUBE	1.1	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0%	0.0%	numbers in line with presentation and input for table						
239	248	Tier-2		3262.0	17.0%	0.0	0.0%	3262.0	15.0%	3816.0	19.9%	0.0	0.0%	3816.0	15.1%	7078.0	18.4%	7078.0	18.4%	7078.0	15.1%	7078.0	15.1%	7078.0	15.1%	7078.0	15.1%	numbers in line with input for table		
			26.4	22004.3	114.6%	10722.5	428.9%	32726.8	150.8%	27370.9	142.6%	16170.4	269.5%	43541.3	172.8%	49375.2	128.6%	26892.9	316.4%	76268.1	162.6%	76268.1	162.6%	76268.1	162.6%	76268.1	162.6%	76268.1	162.6%	76268.1

2013-2016: Comparison with CHIPP L long-term financial estimates Nov 2011

	FORCE	FOLIS
	KCHF	%
Grand Total August 2012	22004	10723
Oversubscription 2012	115%	429%
Grand Total Nov 2011	42013	28290
Oversubscription 2011	219%	1132%
Moderation	20009	17568
	104%	703%