

TOTEM FINANCIAL STATUS

- 1. CONSTRUCTION MoU**
- 2. INSTITUTES PARTICIPATION**
- 3. FINANCIAL MATRIX**
- 4. COMMON FUND**

1. Construction MoU

			CERN	INFN	Finland	Brunel	Estonia	Prague	Warsaw	NSF	C. Projects
1	ROMAN POTS	2476									
	1. Roman Pot mechanics	651	456					195			
	2. Movement	204	204								
	3. Beam position monitor	171	169					2			
	4. Detector mechanics	133	133								
	5. Silicon sensors	228	110		55					63	
	6. Cooling	209	209								
	7. Electronics	554	175				40			324	15
	8. Power supplies and cables	287	160						127		
	9. Miscellaneous	40	40								
2	T1-CSC	1820									
	1. 70 CSC Detectors	627		627							
	2. Electronics	666	73	509						70	15
	3. Power supplies and cables	159	119	40							0
	4. Supports and services	369	249	50							70
3	T2-GEM	1303									
	1. 50 GEM Detectors	434			434						
	2. Electronics	533		518						0	15
	3. Power supplies and cables	138		138							
	4. Supports and services	199			90						109
4	TEST SETUP	150									
	1. Cables, power supplies and infrastructure	40									40
	2. Electronics DAQ and computing	70									70
	3. Pool rental & Consumables	40									40
5	DAQ EVENT BUILDER	720									
	1. Readout column	170	0	170			0			0	
	2. Link into CMS DAQ*	500	500	0						0	
	3. Online PC & storage	50		33						0	17
	TOTAL TOTEM	6470	2095	2085	524	55	40	197	127	457	390
			500*								
*	5.2 will be staged										

Tab.1 Contributions in kCHF by funding agencies and sub-detector, including common projects, according to the TOTEM MoU.

2. Institutes Participation

* No longer in the collaboration

Sub-DETECTO R	respo nsibilities										
	Brun el (*)	CERN	Helsinki	INFN (Bari)	INFN (Genoa)	INFN (Pisa)	Warsa w (*)	EAS (Tall in n)	Prague	USA (Penn St.)	USA (CWRU)
Roman Pots											
Mechanics		x							x		
Si-Detecto rs		x									
FE electronics for Si-Det.		x			x		x	x		x	
Support an d installat ion		x							x		
Proto n Trigger		x		x		x		x		x	x
T1 Detector											
CSC Detecto rs					x						
CSC FE electr onics		x			x						
Support an d installat ion		x			x						
Inel astic Trigger				x	x	x					
T2 Detector											
GEM Detecto rs		x	x								
GEM FE electr onics		x	x	x		x				x	x
Support an d installat ion		x	x								
Inel astic Trigger		x		x		x					
DAQ electronics		x		x							
Test Setup	x	x	x	x	x	x	x	x	x	x	x
Large Size GEM Prototypes		x		x	x	x				x	x

Tab.2 Overview of the technical participation of the institutes in the detector construction, operation and maintenance.

As proposed by the TOTEM Collaboration Board, the missing contribution from Warsaw, which is no longer a member of the collaboration, should be compensated proportional to the institute investments in the construction.

Compensation for missing Warsaw contribution (kCHF)

CERN:	59	
INFN:	48	(agreed and allocated)
Finland:	13	(agreed)
Estonia:	2	(agreed and paid)
Prague:	5	(agreed and allocated)
NSF:	13	(agreed)

3. Financial Matrix

Tab.3 TOTEM financial matrix, containing the breakdown of the expenditures by funding agency and by project with respect to the MoU forecast. Item 1.8 includes the redistributed Polish funds.

TOTEM -18/10/2007 - Financial Matrix

TOTEM	TOTAL			CERN			INFN			Finland			Brunel			Estonia			Prague			NSF			C.Projects		
	MoU	Proj	Paid	MoU	Proj	Paid	MoU	Proj	Paid	MoU	Proj	Paid	MoU	Proj	Paid	MoU	Proj	Paid	MoU	Proj	Paid	MoU	Proj	Paid	MoU	In	Out
1. ROMAN POTS	2476	3003		1702	2297	1889																					
1.1 Roman Pot mechanics	651	840		456	593	557													195		247						
1.2 Movement	204	216		204	216	216																					
1.3 Beam position monitor	171	122		169	120	88													2		2						
1.4 Detector mechanics	133	160		133	160	101																					
1.5 Silicon sensors	228	333		110	278	198							55									63					
1.6 Cooling	209	306		209	306	141																					
1.7 Electronics	554	588		175	186	160			21							40		44				324		114	15		-2
1.8 Power supplies and cables*	287	345		206	345	345	48			13						2			5			13					
1.9 Miscellaneous	40	93		40	93	83																					
2. T1-CSC	1820	1728		441	341	207																					
2.1 70 CSC Detectors	627	627					627			626																	
2.2 Electronics	666	596		73	66	55	509	439	171												70		70	15		21	
2.3 Power supplies and cables	159	191		119	81	11	40	110	40																		
2.4 Supports and services	369	314		249	194	141	50		50															70		26	
3. T2-GEM	1303	1317																									
3.1 50 GEM Detectors	434	326								434		326															
3.2 Electronics	533	533				51	518		277																15		8
3.3 Power supplies and cables	138	158				20	138		77																		
3.4 Supports and services	199	300				35				90		156													109		48
4. TEST SETUP	150	150																									
4.1 Cables, power supplies & infrastr.	40	40																							40		20
4.2 Electronics DAQ and computing	70	50							20																70		7
4.3 Pool rental & Consumables	40	60				8			8																40		53
5. DAQ EVENT BUILDER	720	722																									
5.1 Readout column	170	170					170		7																		
5.2 Link into CMS DAQ	500	500		(500)																							
5.3 Online PC & storage	50	52					33		35																17		0
TOTAL TOTEM	6470	6920		2154	2638	2222	2133		1332	537		482	55			42		44	202		249	470		184	390	292	181
6. POST-MOU ITEMS	0	0																									
6.1 Slow Controls	0					12																					

	MOU	New projection	MOU – Proj.	Additional contributions				Balance
				CERN	Prague	Estonia	CF	
1. Roman pots	2476	3003	- 527	438	52	4	12	- 21
2. T1	1820	1728	92					92
3. T2	1303	1317	- 14					-14
4. Test set-up	150	150	0					0
5. DAQ	720	722	- 2					- 2
TOTAL	6470	6920	- 450	506				56

Tab.4 Financial status of the TOTEM experiment (Oct. 2007)

4. Common Fund

TOTEM - 02/10/2007 - Common Projects - T299551							
CF	2006 MoU	2006 Paid	2007 MoU	2007 Paid	Total MoU	Total Paid	Balance
CERN	25.5	26.0	25.5	26.0	51.0	52.0	1.0
INFN	28.0	28.0	28.0	28.0	56.0	56.0	0.0
Finland	40.5	40.5	40.5	40.5	81.0	81.0	0.0
Brunel	6.0	10.0	6.0	0.0	12.0	10.0	-2.0
Estonia	23.0	23.0	23.0	25.0	46.0	48.0	2.0
Prague	6.0	12.0	6.0	12.0	12.0	24.0	12.0
NSF	60.0	0.0	60.0	21.0+59.0	120.0	21.0+59.0	-99.+59.
Warsaw	6.0	0.0	6.0	0.0	12.0	0.0	-12.0

Tab.5 Common Fund contributions for 2006 and 2007 (summing up to 292 kCHF on 1st October 2007, and to 354 kCHF to date, of the total 390 kCHF).

The CF was positive at **131 kCHF** on 1st October 2007 corresponding to the book-closing made in sync with FI division.

After this date US institutes have paid 50k\$ = 59kCHF, representing the most of their remaining CF contribution for 2006 and 2007 (as shown in Tab.5).

Therefore the actual status of the CF account sums up to about: **190 kCHF**.