Milestone Tables

Table 1. Milestones for the period Sep 2006 – May 2007						
WP1.19 Successful end of 2006	Oct 2006	Achieved				
CERN test beam run						
WP1.27 Present interim results at	May 2007	Achieved				
LCWS07						
WP2.67 Present simulation results	Dec 2006	Complete Apr 2007				
WP2.17 Test bench 0 hardware	Jan 2007	Complete May 2007				
ready and commissioned						
WP2.40 Report on FPGA Ethernet	Jan 2007	Complete Apr 2007				
work						
WP2.56 Acquire optical switch	Mar 2007	Complete May 2007				
WP2.90 Initial prototype complete	Mar 2007	Achieved				
WP3.5 First sensor interim design	Oct 2006	Complete Jan 2007				
review						
WP3.6 First sensor design review	Dec 2006	Complete Mar 2007				
WP3.7 First sensor design to	Jan 2007	Complete Apr 2007				
foundry						
WP3.9 First sensor fabrication	May 2007	Expected Jul 2007				
complete						
WP4.4 Glue literature research	Sep 2006	Complete Dec 2006				
report						
WP4.7 Report on glue ageing	May 2007	Achieved				
results						
WP5.34 Generic physics analysis	Sep 2006	Achieved				
implemented						
WP5.16 Present first physics	Nov 2006	Milestone deleted (see note 2 at				
benchmarks results at Valencia		end)				
WP5.11 Presentation of physics	Apr 2007	Achieved				
benchmark results at LCWS07						

Table 2. Milestones for the period Jun –	Dec 2007
WP1.14 Complete analysis of DESY	Expected
data	Oct 2007
WP1.20 Successful end of 2007 CERN	Expected
test beam run	Aug 2007
WP1.24 Submit paper on electron results	Expected
	Dec 2007
WP1.29 Complete internal report on	Dec 2007
hadron data	
WP2.70 Make proposal for	Jun 2007
robust/flexible system	
WP2.73 Demonstrate remote FPGA reset	Jun 2007
and reconfigure	
WP2.20 Concepts established for 1.5m	Jul 2007
data path	
WP2.7 Successful readout of 2007	Retired
ASICs	
WP2.50 Component selection	Sep 2007
WP2.77 Demonstrate system lock and	Sep 2007
data interface	
WP2.94 Initial system complete	Dec 2007
WP3.14 Second sensor interim design	Expected
review	Dec 2007
WP3.15 Second sensor design review	Expected
Į.	Mar 2008
WP5.36 Alternative benchmark analysis	Sep 2007
available	
WP5.24 First results from mechanical	Dec 2007
imperfections simulation	

Т	Table 3 – Ov	erall milestor	ne list			
	As at Sep	As at May	Delay	due to	Affects	See
	2006	2007	UK?	Other	critical	note
		Changes		Collabor-	path?	
		in bold		ators?		
WP1.9 Successful end of DESY	May 2005	Achieved				
test beam run						
WP1.19 Successful end of 2006	Oct 2006	Achieved				
CERN test beam run						
WP1.27 Present interim results	May 2007	Achieved				
at LCWS07						
WP1.14 Complete analysis of	Jun 2007	Expected				
DESY data		Oct 2007				
WP1.20 Successful end of 2007	Jul 2007	Expected	N		N	
CERN test beam run		Aug 2007				
WP1.24 Submit paper on	Sep 2007	Expected				
electron results		Dec 2007				
WP1.29 Complete internal report	Dec 2007	Dec 2007				
on hadron data						
WP1.33 Successful completion	Jun 2008	Expected				
of FNAL test beam run		Sep 2008				
WP1.37 Submit paper on hadron	Mar 2009	Mar 2009				
results						
W.D. 0 (D. D.C.)	7.5 000.6					
WP2.86 Buy PCI cards	May 2006	Achieved				
WP2.66 Present simulation	Dec 2006	Complete				
results	1 2007	Apr 2007				
WP2.17 Test bench 0 hardware	Jan 2007	Complete				
ready and commissioned	J 2007	May 2007				
WP2.40 Report on FPGA	Jan 2007	Complete				
Ethernet work	Mar 2007	Apr 2007	Y	NT	NT	
WP2.56 Acquire optical switch	Mar 2007	Complete	I	N	N	
WP2.90 Initial prototype	Mar 2007	May 2007 Achieved				
complete	1VIai 2007	Acmeved				
WP2.70 Make proposal for	Jun 2007	Jun 2007			1	
robust/flexible system	Jun 2007	Juli 2007				
WP2.73 Demonstrate remote	Jun 2007	Jun 2007				
FPGA reset and reconfigure	Juli 2007	Juli 2007				
WP2.20 Concepts established for	Jul 2007	Jul 2007				
1.5m data path	341 2007	341 2007				
WP2.7 Successful readout of	Sep 2007	Retired	N	Y	N	4
2007 ASICs	2007	11001100	1	_	1	'
WP2.50 Component selection	Sep 2007	Sep 2007			1	
WP2.77 Demonstrate system	Sep 2007	Sep 2007				
z z.r. r z emensuace s jotem	2007	50p 2007	1	1	1	

lock and data interface						
WP2.94 Initial system complete	Dec 2007	Dec 2007				
WP2.23 Test bench 1 hardware	Jan 2008	Jan 2008				
ready and commissioned	34 11 2 000	Juli 2000				
WP2.60 Demonstrate optically	Jan 2008	Jan 2008				
switched network	Jan 2000	Juli 2000				
WP2.43 Report on suitability of	Feb 2008	Feb 2008				
FPGAs for real-time conversion	100 2000	100 2000				
WP2.80 Demonstrate trigger can	Jun 2008	Jun 2008				
C + C interface	Juli 2008	Juli 2008				
	Aug 2009	Aug 2009				
WP2.27 Realistic design of VFE	Aug 2008	Aug 2008				
system established	A == 2000	A ~ 2000				
WP2.53 Report on 10Gb performance	Aug 2008	Aug 2008				
1	C 2000	C 2000				
WP2.12 Successful readout of	Sep 2008	Sep 2008				
2008 ASICs	0 4 2000	0.42000				
WP2.30 VFE design finished	Oct 2008	Oct 2008				
WP2.32 Freeze VFE system	Dec 2008	Dec 2008				
design	F 1 2000	E 1 2000				
WP2.34 Complete draft of TDR	Feb 2009	Feb 2009				
section	1.5 2000	1.5 2000				
WP2.64 Delivery of busy system	Mar 2009	Mar 2009				
WP2.83 Demonstrate work-	Mar 2009	Mar 2009				
ability from single trigger						
W/D2 2 D 1' ' 1 '	A 2006	A 1 ' 1				
WP3.3 Preliminary design	Apr 2006	Achieved				
review	0 + 2006	C 1.4				
WP3.5 First sensor interim	Oct 2006	Complete				
design review	D 2006	Jan 2007	3.7	NT.	37	1
WP3.6 First sensor design	Dec 2006	Complete	Y	N	Y	1
review	1 2007	Mar 2007	* 7	N T	3.7	1
WP3.7 First sensor design to	Jan 2007	Complete	Y	N	Y	1
foundry	14 2007	Apr 2007	3.7	NT.	37	1
WP3.9 First sensor fabrication	May 2007	Expected	Y	N	Y	1
complete	G 2007	Jul 2007	* 7) T	***	
WP3.14 Second sensor interim	Sep 2007	Expected	Y	N	Y	1
design review	5 2005	Dec 2007				
WP3.15 Second sensor design	Dec 2007	Expected	Y	N	Y	1
review	7 6000	Mar 2008	* 7			
WP3.16 Second sensor design to	Jan 2008	Expected	Y	N	Y	1
foundry	3.6 2000	Apr 2008	X 7) T	**	4
WP3.18 Second fabrication	May 2008	Expected	Y	N	Y	1
complete		Aug 2008	1	1		
WP3.24 Beam tests start	Oct 2008	Expected	Y	N	Y	1
	ļ	Dec 2008				
I.						

WP4.13 Thermal simulation	Jan 2006	Achieved				
report						
WP4.4 Glue literature research	Sep 2006	Complete	Y	N	N	
report		Jan 2007				
WP4.7 Report on glue ageing	May 2007	Achieved				
results						
WP4.17 Cooling system	Apr 2008	Apr 2008				
proposal						
WP4.25 Assembly design report	Mar 2009	Mar 2009				
WP5.14 Present initial result	Mar 2006	Achieved				
from single particle studies						
WP5.26 MAPS implemented in	May 2006	Achieved				
Mokka						
WP5.33 Status report at regional	May 2006	Achieved				
workshop						
WP5.4 Comparison of existing	Jun 2006	Achieved				
PFAs						
WP5.8 Release of V1 of	Aug 2006	Achieved				
algorithm						
WP5.34 Generic physics	Sep 2006	Achieved				
analysis implemented						
WP5.16 Present first physics	Nov 2006	Deleted	Y	N	N	2
benchmarks results at Valencia		7.5 2005			27	2
WP5.11 Presentation of physics	Apr 2007	May 2007	N		N	3
benchmark results at LCWS07	G 2007	G 2005				
WP5.36 Alternative benchmark	Sep 2007	Sep 2007				
analysis available	D 2007	D 2007				
WP5.24 First results from	Dec 2007	Dec 2007				
mechanical imperfections						
simulation WP5.28 Simulation of MAPS	Mon 2009	Mon 2000				
	Mar 2008	Mar 2008				
tets beam	Jun 2009	Jun 2000				
WP5.38 Report on hadronic	Jun 2008	Jun 2008				
modelling studies with test beam						

Notes:

- 1. Simulation studies showed that additional design work of a deep p-well process by the foundry was required to achieve the target signal:noise ratio.
- 2. Initial results were presented earlier to collaboration meetings and we decided to wait until LCWS07 before presenting further results.
- 3. LCWS07 date fixed as May 2007 after we had set this benchmark.
- 4. Phase 1 of ASIC development skipped by our collaborators.