



AGIPD Meeting September 2012





- 13:00 - 13:15 **General Issues (*Heinz Graafsma, Stefanie Jack*)**
- Budget Status
 - Evaluation Report of the 11th XDAC Meeting
 - Experiment at P10 (*Julian Becker*)
- 13:15 – 13:30 **Sensor Reception and Quality Control (*Robert Klanner*)**
- 13:30 – 15:00 **ASICs (*Bernd Schmitt*)**
- Result of test chips
 - Status AGIPD-1.0
- 15:00 – 15:30 *Break***
- 15:30 – 16:00 **Calibration (*Laura Bianco*)**
- 16:00 – 17:00 **Interface electronics + back-end electronics (*Peter Göttlicher*)**
- Discussion ASIC Interface
- 17:00 – 18:00 **Mechanics (*Julian Becker, Helmut Hirsemann*)**
- Front-end module
 - Overall system
- 19.00 *Dinner (Country Kitchen, Hemmingstedter Weg 2)***



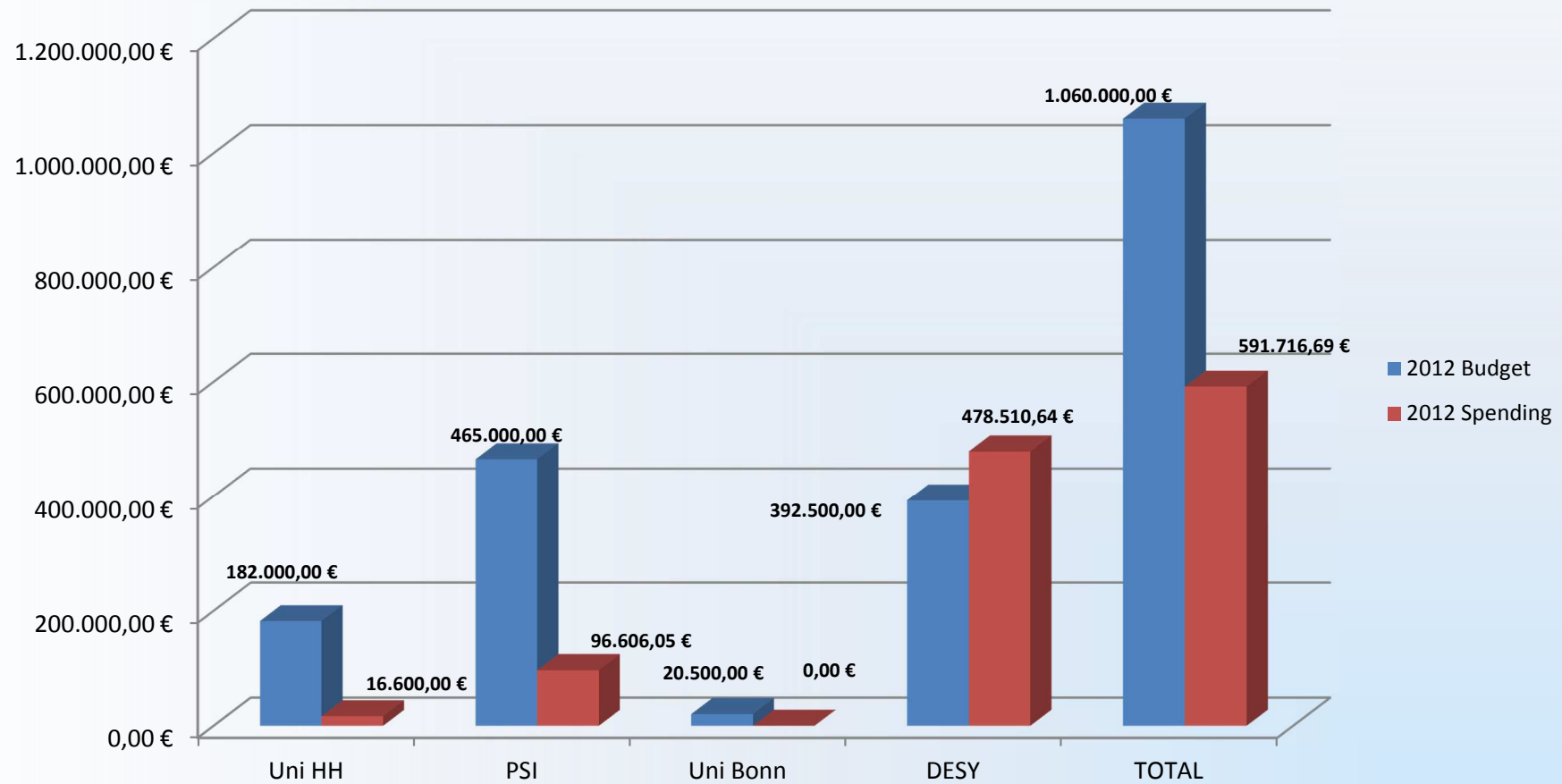
- 9:00 – 9:30 **Production of first two 1M systems (*Julian Becker, Heinz Graafsma*)**
- 9:30 – 10:00 **AGIPD 2.0 discussion**
- 10:00 – 10:30** **Break**
- 10:30 – 11:00 **12th XFEL DAC Meeting – November 19th – 21st, 2012 (*Heinz Graafsma*)**
- XDAC Report
 - XDAC Talks
 - XDAC Meeting attendance
- 11:00 – 12:00 **Milestone Review (*H. Graafsma, B. Schmitt, U. Trunk, R. Klanner, S. Jack, J. Becker*)**

Budget versus Actual 2012



2012			
	Budget	Spending	Difference
Uni HH	182.000,00 €	16.600,00 €	165.400,00 €
PSI	465.000,00 €	96.606,05 €	368.393,95 €
Uni Bonn	20.500,00 €	0,00 €	20.500,00 €
DESY	392.500,00 €	478.510,64 €	-86.010,64 €
TOTAL	1.060.000,00 €	591.716,69 €	468.283,31 €

Budget versus Actual 2012

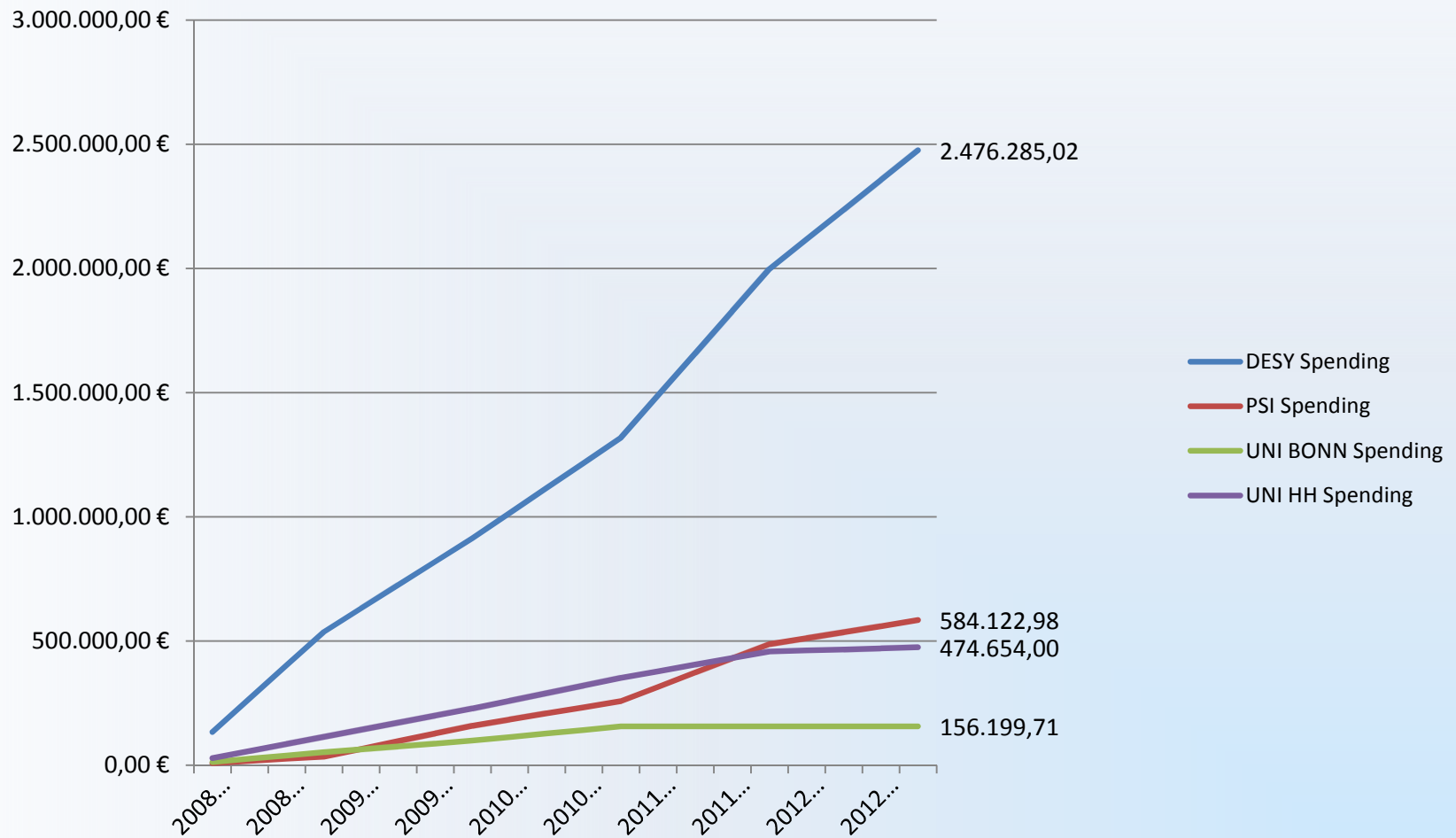


Actual Spending 2008 - 2012

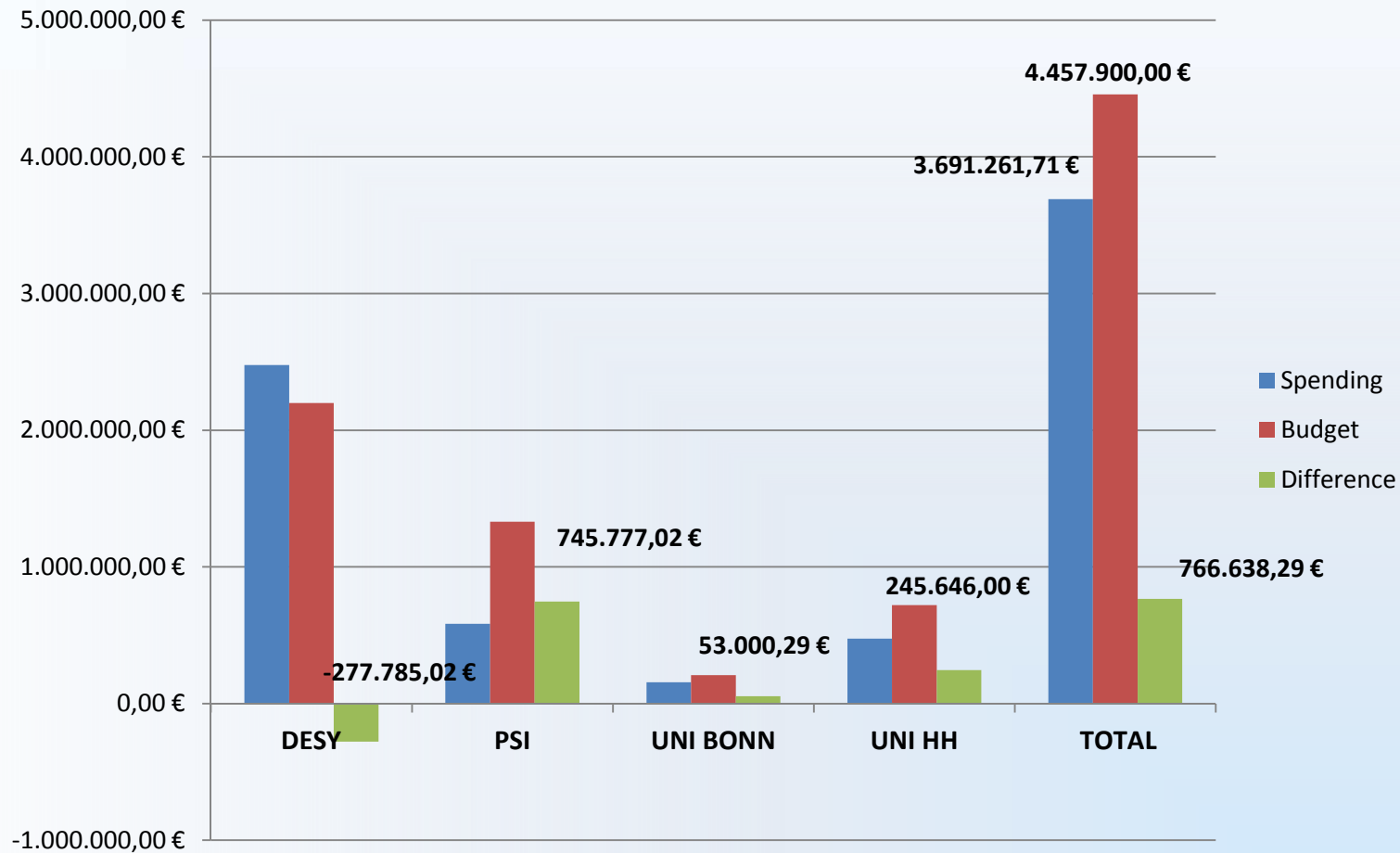


Uni Hamburg	2008	2009	2010	2011	2012
Personnel	76.320,00 €	82.781,00 €	89.000,00 €	38.600,00 €	14.300,00 €
Consumables	10.000,00 €	7.290,00 €	10.000,00 €	10.000,00 €	0,00 €
Investments	25.000,00 €	20.000,00 €	15.000,00 €	50.63600 €	0,00 €
Travel	3.000,00 €	4.427,00 €	9.000,00 €	7.000,00 €	2.30000 €
Total Hamburg	114.320,00 €	114.498,00 €	123.000,00 €	106.247,00 €	16.600,00 €
<i>Non FTE Hamburg</i>	<i>38.000,00 €</i>	<i>31.717,00 €</i>	<i>34.000,00 €</i>	<i>67636,00 €</i>	<i>2.300,00 €</i>
PSI					
Personnel	31.601,00 €	77.949,91 €	99.337,92 €	178.425,47 €	96.606,05 €
Consumables	0,00 €	0,00 €	0,00 €	0,00 €	0,00 €
Investments	0,00 €	46.485,93 €	0,00 €	50.717,70 €	0,00 €
Travel	3.000,00 €	0,00 €	0,00 €	0,00 €	0,00 €
Total PSI	34.601,00 €	124.435,84 €	99.337,92 €	229.143,17 €	96.606,05 €
<i>Non FTE PSI</i>	<i>3.000,00 €</i>	<i>46.485,93 €</i>	<i>0,00 €</i>	<i>50.717,70 €</i>	<i>0,00 €</i>
Uni Bonn					
Personnel	31.254,00 €	45.885,02 €	57.017,98 €	0,00 €	0,00 €
Consumables	2.238,00 €	197,36 €	0,00 €	0,00 €	0,00 €
Investments	16.016,00 €	0,00 €	0,00 €	0,00 €	0,00 €
Travel	2.831,00 €	760,35 €	0,00 €	0,00 €	0,00 €
Total Bonn	52.339,00 €	46.842,73 €	57.017,98 €	0,00 €	0,00 €
<i>Non FTE Bonn</i>	<i>21.085,00 €</i>	<i>957,71 €</i>	<i>0,00 €</i>	<i>0,00 €</i>	<i>0,00 €</i>
Total Partner Spending	201.260,00 €	285.776,57 €	279.355,90 €	337.390,17 €	113.206,05 €
DESY					
SAP as of 18.09.2012					
Personnel	251.183,26 €	269.323,55 €	265.458,34 €	396.266,50 €	318.311,11 €
<i>FTE's</i>	<i>4,46</i>	<i>3,55</i>	<i>3,92</i>	<i>5,81</i>	<i>7,95</i>
Overhead	63.332,00 €	51.475,00 €	58.016,00 €	102.256,00 €	135.945,00 €
Personnel incl. Overhead	314.515,26 €	320.798,55 €	323.474,34 €	498.482,50 €	454.256,11 €
Consumables	9.090,99 €	19.924,07 €	14.518,33 €	13.947,50 €	2.438,76 €
Investments	207.118,60 €	29.253,53 €	61.950,67 €	158.317,20 €	9.902,93 €
Travel	6.116,70 €	6.841,56 €	5.221,41 €	8.202,78 €	11.92,94 €
DESY Consumables, Investments and Travel	222.326,29 €	56.019,16 €	81.690,80 €	180.467,48 €	24.254,53 €
Total DESY	536.841,55 €	376.817,71 €	405.165,14 €	678.99,98 €	478.510,64 €
Total All Spending	738.101,55 €	662.594,28 €	684.521,04 €	1.016.340,15 €	591.716,69 €
Total All Budget	738.000,00 €	662.600,00 €	820.500,00 €	1.176.800,00 €	1.060.000,00 €
Difference	-101,55 €	5,72 €	135.978,96 €	160.459,85 €	46.283,31 €

Accumulation Partners 2008 - 2012



Budget versus Actual 2008 - 2012



	Spending	Budget	Difference
DESY	2.476.285,02 €	2.198.500,00 €	-277.785,02 €
PSI	584.122,98 €	1.329.900,00 €	745.777,02 €
UNI BONN	156.199,71 €	209.200,00 €	53.000,29 €
UNI HH	474.654,00 €	720.300,00 €	245.646,00 €
TOTAL	3.691.261,71 €	4.457.900,00 €	766.638,29 €



- **Calibration:** The XDAC appreciates the start of the activities of the calibration working group and encourages the efforts initiated to define an action plan....
- ...
- The continued availability of fast 2D imaging detectors at the European XFEL facility is essential.... Therefore the XDAC strongly recommends the purchase of the proposed **detector spares**.

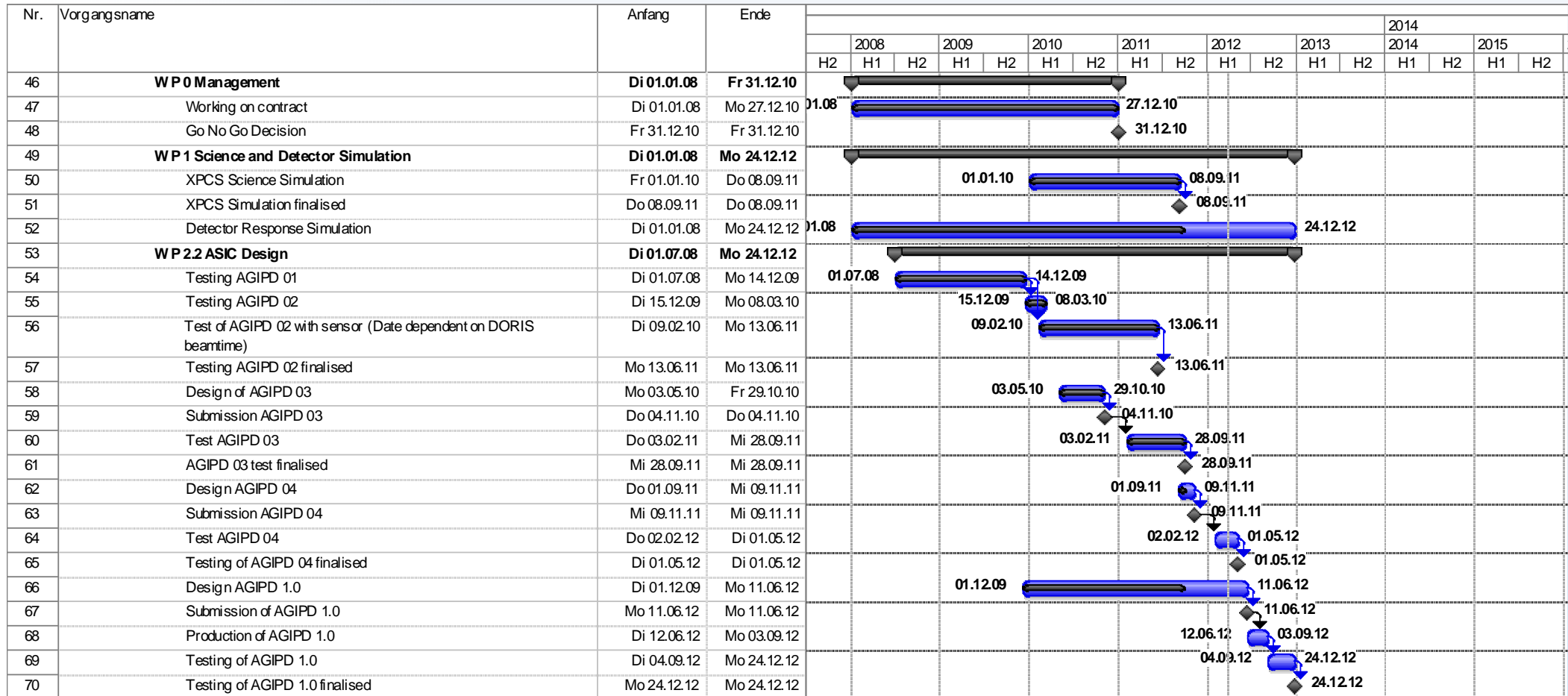


- The XDAC acknowledges the thorough approach that has been taken to obtain the best performance from the detector for an extraordinarily wide variety of experimental situations. However,... we suggest to consider a more conventional, narrower guard ring...
- The XDAC acknowledges the ASIC review performed by the AGIPD team... Unfortunately, ...some unwanted performance features will only become apparent when a large chip is fabricated and tested. Therefore, we suggest that the project should have plans in case, or even assuming, that a second submission is needed.

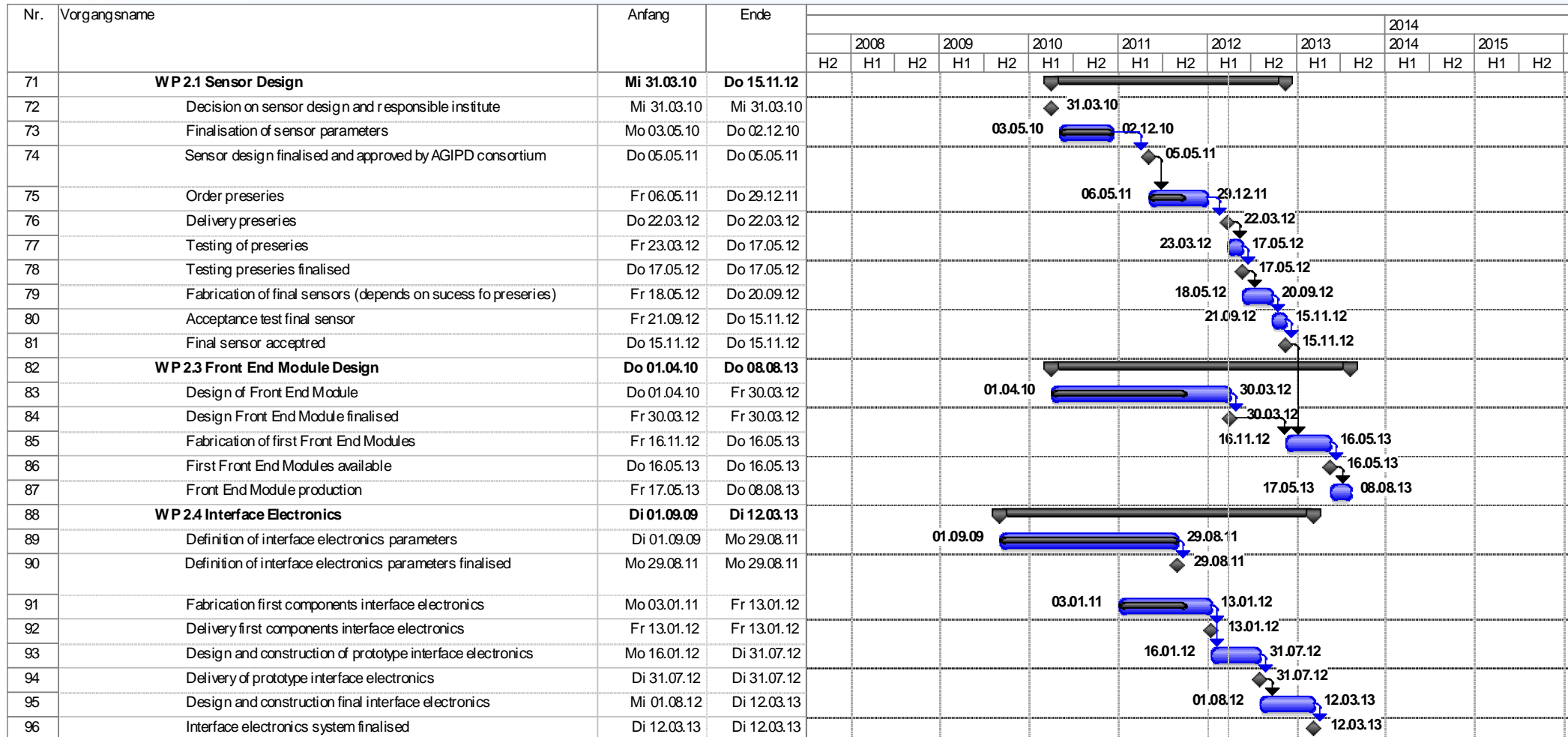


- There is a pressing need to move more quickly on defining a mechanical layout for the detector... Resolution of these issues clearly will involve coming to closure with the beam line scientists.
- It is critical that calibration procedures be developed. There is concern that droop will complicate calibrations, and that calibration procedures may prove to be onerous. We suggest to consider a layout where all storage cells of a pixel will see the same dose...

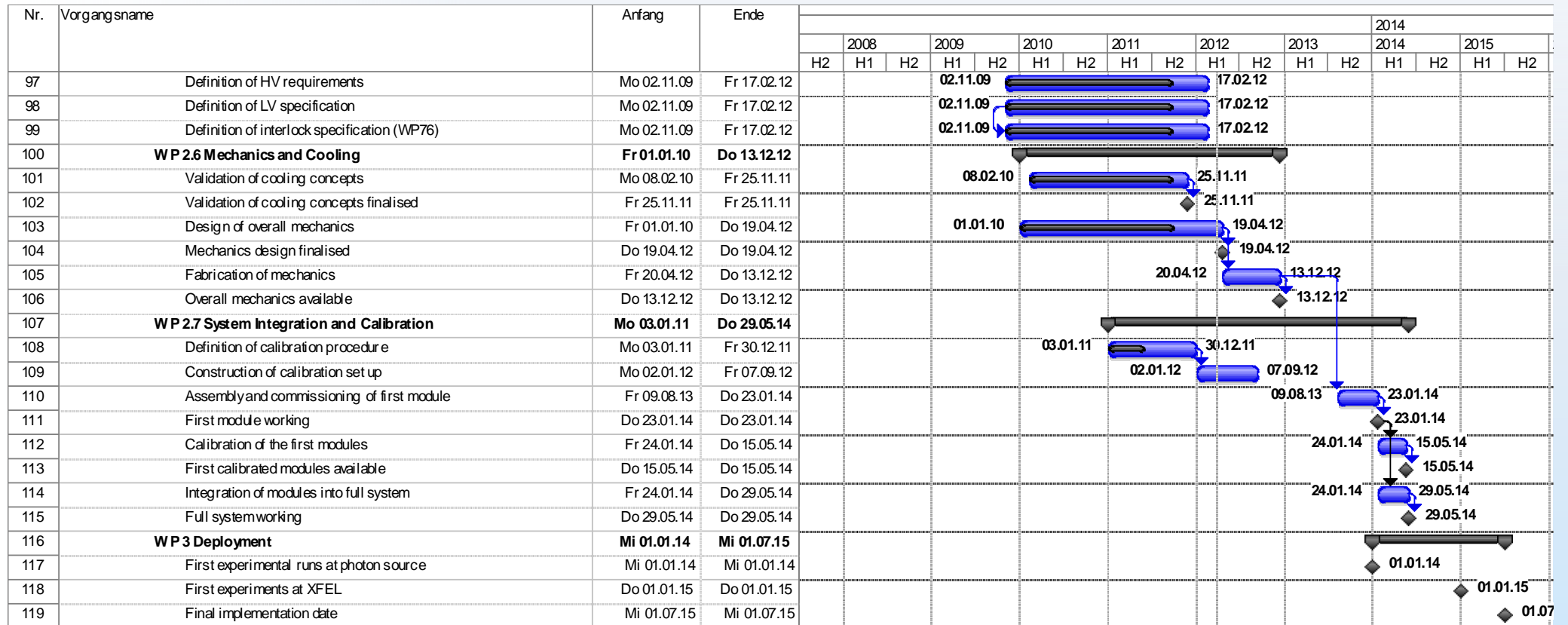
AGIPD Project Timing



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AGIPD Project Timing



Milestones



		Initial Planning	Updated Planning 26.9.2011	Updated Planning 04.04.2012
M1	Submission AGIPD-03	04.11.2010	04.11.2010	Done
M2	Definition of Interface Electronics Parameters finalized	29.12.2010	29.12.2010	Done
M3	Go-no-Go decision	31.12.2010	31.12.2010	Done
M4	Sensor design finalized and approved	02.02.2011	05.05.2011	13.4.2012
M5	Testing AGIPD-02 finalized	07.02.2011	13.06.2011	Done
M6	Delivery of Pre-series	22.06.2011	22.03.2012	No pre-series will be delivered
M7	Delivery first Components Interface Electronics finished	12.08.2011	13.01.2012	Done
M8	Science simulations XPCS finished	08.09.2011	08.09.2011	Done
M9	Testing AGIPD-03 finished	28.09.2011	28.09.2011	Done
M10	Validation of Cooling Concepts finalized	30.09.2011	25.11.2011	Done
M10a	Cooling tests of dummy system finalized			31.12.2012
M11	Testing Pre-series finalized	21.12.2011	17.05.2012	No pre-series will be delivered
M12	Submission AGIPD-1.0	20.02.2012	11.06.2012	28.02.2013
M13	Design of Front End Module finished	30.03.2012	30.03.2012	29.11.2012
M14	First mechanic concept finalized	19.04.2012	19.04.2012	31.08.2012

Milestones



		Initial Planning	Updated Planning 26.9.2011	Updated Planning 04.04.2012
M14a	First mechanics designed			31.12.2012
M15	Final Sensors accepted	20.06.2012	15.11.2012	15.03.2013
M16	Delivery of Prototype Interface Electronics	27.07.2012	31.07.2012	29.10.2012
M17	First Front End Module available	28.09.2012	16.05.2013	30.08.2013
M18	Testing AGIPD-1.0 finalized	29.10.2012	24.12.2012	27.12.2013
M19	Overall Mechanics available	13.12.2012	13.12.2012	23.08.2013
M20	Interface Electronics System finished	08.03.2013	12.03.2013	05.08.2013
M21	First Module working (full module incl. sensor)	23.08.2013	23.01.2014	14.01.2014
M22	Full System working	27.12.2013	29.05.2014	26.08.2014
M23	First calibrated Modules available	13.12.2013	13.12.2013	06.05.2014
M24	First Experimental Runs at Photon Source	01.01.2014	01.01.2014	03.03.2014
M25	First Experiments at XFEL	01.01.2015	01.01.2015	XFEL to advise
M26	Final Implementation Date	01.07.2015	01.07.2015	XFEL to advise
M27	AGIPD 04 submitted			Done
M28	AGIPD 04 tested		31.05.2012	29.05.2012