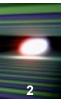




### Introduction

Tobias Haas 12 May 2017

#### **Topics**



- On-Call Duty Organisation
- Time Schedule for finishing SASE3/XTD10
- Status tunnels and hall

### **On-Call Organisation**



- An effective and economical On-Call Organisation is needed
  - Commissioning of tunnels and instruments needs to be adequately supported
    - Response time should be short in case of immediate need
    - Clear instructions for shift crews must be available
  - Sensitive equipment must be protected
    - Intervention might be required on weekends or holiday
  - Key infrastructure groups should also be protected from a major resource drain



#### **Basics in the OCD Works Agreement**



- Regular service time on working days from 08:00 until 19:00
- OCD on working days from 19:00 until 08:00 next day
- OCD on Saturdays, Sundays and public holidays from 08:00 until 08:00 next day
- If a colleague with OCD had no continuous rest period of 11 hours during the time from 08h00 until 08h00 of the following day, he/she must have this rest period after the last OCD assignment during this period
  - e. g. if a person is called to work from 3 4 AM, the person should not work until 15:00 again
  - This is a problem for some groups with few experts that are needed also for regular work during the day

### **Proposal**



- Result of a discussion between H. Sinn, J, Grünert, P. Gessler and THa:
  - The first point of contact from BKR will always be made via the CAS person on call
    - this was already foreseen previously
  - CAS expert on call will analyse the issue and
    - solve it if it is a software problem
    - → forward it to the AE expert, ITDM, VAC, or Hardware experts on call if it appears to be an AE/ITDM/Hardware issue
  - Photon commissioning team will try to avoid calling the OCD between 2300 and 0800



#### **Time Schedule SASE3/XTD10**



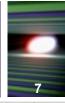
- XTD10 is now closed
  - except for maintenance periods
- A lot of work remains
  - Some mechanical work
  - Alignment of components
  - A lot of cabling
  - All of technical commissioning
- PSPO would like to generate a detailed schedule
  - Reasonable estimate of time required to finish
    - Possibly ask for an appropriate contiguous period
  - Allow planning for a dedicated finishing effort





#### TechMeet: Introduction

### Start from Sabine's Installation List



	F	G	Н	J	K	L	N		0	P	Q	R	S	T	U	AB	AK
1	criterion	criterion group / WP	DEVICE_class	4		calendar week	On Box	Ren Con	Tune Company of the C	(transmitted)	(to) supplied to the state of t	Proposition	(6) M Control	Sandar	(to) (to)	(a) Long to the long (b) (a) (a) (b) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	( ( )
2	vV	0 💌	0 00	(m) ×		01											?
17	pb-device	73	SRA(DN100/DN100)	3114,6913			5										
19	pb-device	73	Collimator 15mm (DN40/DN40)	3118,5203			5										
26	pb-device	73	Gas attenuator DN63 start (length without reducers)	3149,2892			thposit	tione	đ								
35	pb-device	73	Gas-attenuator DN63 end	3186,0288			thposit	tione	đ								
43	pb-device	73	Alignment laser DN63	3195,9928			pipe	_	na					ла		na	
45	pb-device	73	Collimator 20mm (DN63/63)	3197,0665			9										
47	pb-device	73	1st offset mirror (M1)	3200,3156			2										
50	pb-device	73	PBLM+HSLIT (reducer+bellows DN160 incl.)	3201,9152			9										
52	pb-device	73	2nd offset mirror (M2) x++76mm;	3203,2149			ø										
56	pb-device	73	Absorber (DN200/DN200) x=+75mm	3206,7190				-04									
64	pb-device	73	Collimator 85x20mm (DN160/160) x=+75mm	3213,6721				-08									
69	pb-device	73	Vertical slit (DN160/DN160) bellow DN160 ds. x++75mm	3218,0599				00									
73	pb-device	73	soft X-ray monochromator	3219,7105			ø										
78	pb-device	73	defraction order dump 1 (DN160/160) x=+73mm;y=+25mm	3222,3098			9										
80	pb-device	73	defraction order dump 2 (DN160/160) x=+73mm;y=+22mm	3224,3093			2										
82	pb-device	73	defraction order dump 3 (DN160/160) x=+73mm;y=+15mm	3228,3082			9										
88	pb-device	73	defraction order dump 4 (DN160/160) x=+73mm;y=+5mm	3236,3061			ø										
101	pb-device	73	defraction order dump 5 (DN160/160) x=+73mm;y=+5mm	3241,3048			9										
109	pb-device	73	PBLM x=+60mm;y=+5mm (DN100/100) RV/VV incl.	3255,2731			2										
110	pb-device	73	distribution mirror SCS (M5) x++60mm;y++5mm	3258,3003			9										
113	pb-device	73	distribution mirror SQS2 (M6) ** y=+5mm	3263,7988													
114	vaofivalve	73	Fast Valve x++45mm;y++5mm	3289,0422			9		na								
115	pb-device	73	Horizontal slit x=+50,7mm;y=+5mm	3293,2910				-08									
120	vacfvalve	73	Fast Valve x++45mm;y++5mm	3294,2469			9		na								
126	pb-device	73	collimator 38x31mm; x=+51mm;y=+3,2mm (DN100/100)	3318,5813			ø										
128	pb-device	73	collimator 38x31mm; x=+51mm;y=3,2mm (DN100/100)	3318,5813			9										
129	pb-device	73	vertical exit slits x++51mm;y++3,2mm	3319,2841		com-	2										
131	pb-device	73	vertical exit slits x++51mm;y++3,2mm	3319,2841		com-	9										
134	pb-device	73	PBLM (DN63/DN63) x=+47mmy=0	3326,5845			g										
137	pb-device	73	PBLM (DN63/DN63) x++47mmy=0	3332,4830			9										
138	pb-device	74	Transmissive imager (OTR-C+fitter cham.)	3098,2257													
139	pb-device	74	K-Monochromator system (DN100/DN40)	3117,0000			9										
											1				1		1



#### Schedule for SASE3/XTD10



- Start from Sabine's Tunnel list
- Fine tune the workflow
- Assign group and personal names to all components
- Sort list by group:
  - Individual interviews with component responsible
    - → Vacuum (M. Dommach, J. Eidam, R. Villanueva)
    - Diagnostics (J. Grünert, A. Koch)
    - Optics (H. Sinn)
  - Identify current status, missing steps and estimates for each step
  - Identify dependencies
  - Come up with a minimum required time



#### **Accelerator Status - Activities Last Week**



- Beam-based alignment started in order to have better conditions for lasing
- There was a longer access this week
  - Fix a vacuum leak in the TLD dump
  - Continue installation of SASE3
- Interlocks in XTD2/4/10 were reset yesterday
- Beam operation started for photon commissioning today
  - Photon Commissioning team is on shift now
- A special effort was made by AE to get MCP integrated
  - Tool for SASE search
- We expect to close XTD9 some time next week
  - Depends on progress with photon commissioning



### Longorto



### FEL Longer term plans according to W. Decking

- Next maintenance days:
  - **30.05**
  - **19.06-28.06**
  - **25.07**
  - 14.08-20.08 (tentative)
  - **•** 03.10-22.10

#### SASE1

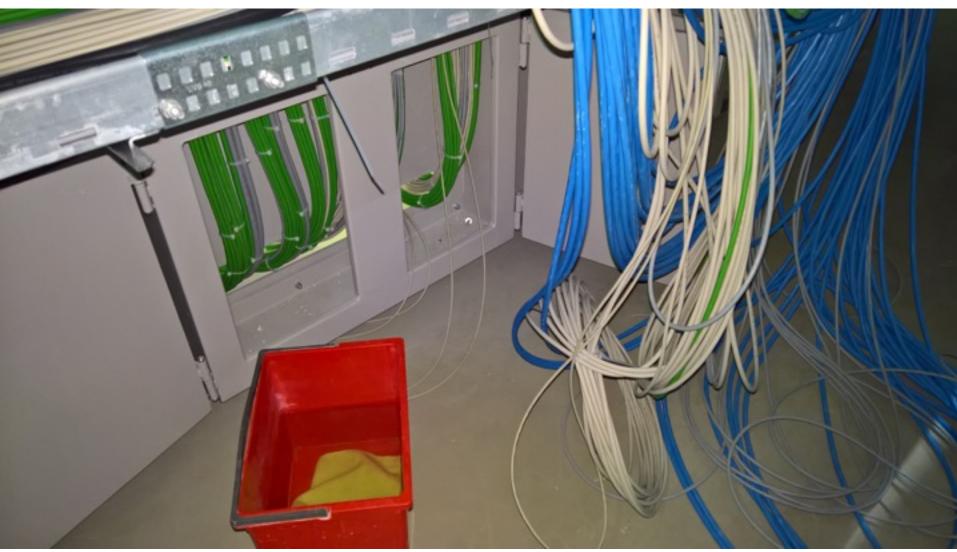


- All TGA work is done and handed over
  - Big cleaning effort on all horizontal surfaces including under air ducts etc...
- Phase II Cabling is still ongoing in SPB/ Instruments
- WP75 started to wire the AGIPD power cables
- SPB finishing tests of the tunnel components
  - CRL, Attenuator, Monitor and Pulse Picker
- FXE continues testing in the instrument hutch



## XFEL Phase II Cabling SPB/SFX







# XFEL SASE1: Cleaning on top of SPB/SFX







## XFEL SASE1: Cabling for AGIPD by WP75





#### SASE3



- We received a significantly reduced offer by Caverion (and ENGIE for SASE2) for modifications to AC curtains and plenums
- Cable pulling for main supplies and individual supplies is in full swing
- SCS Sample chamber arrived together with the big HED chamber



### XFEL SASE3: Main power cables being pulled







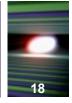
### XFEL SASE3: Pulling of Electricity Cables







### XFEL SASE3: SCS Sample Chamber





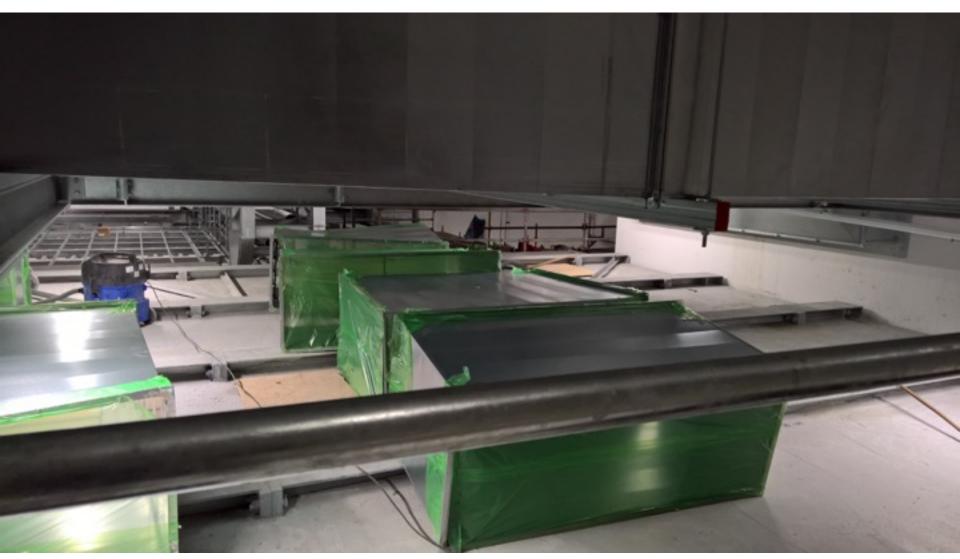
#### SASE2



- Big cost reduction for AC curtains and plenums by ENGIE
- Ceiling of A.23 (High Power Laser) was cast
- Chicanes in HED were closed with lead bricks
- The big HED sample chamber arrived and is being prepared for installation

### XFEL SASE: Ceiling of A.23







# XFEL SASE: Unloading HED chamber







### XFEL SASE2: HED chamber





### XFEL SASE2: HED chamber being opened





### Next meetings



- SASE1 Readiness (Focus on Instruments, Laser, Detectors)
  - 09:00 here
- SASE1 Readiness Dispatch
  - Mo 09:00 @ DESY BKR
    - → Van leaves XFEL @ 0830
  - Wed 09:30 @ Mockup Control Room in XHQ
  - Fr 09:00
- XHEXP1 Coordination
  - Fr 19 May 08:30
- No TC/S1R Meetings on 26 May
  - Ascension day on Thursday