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| **Name of Meeting**:  XFEL Commissioning Working Group | |  | | **Date:** | | 23.09.2011 | |
|  | |  |  | **Location:** | |  | |
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| **Meeting Chair:** | | **Participants** | | **Distribution List:** | | | |
| W. Decking | | Pflüger, Grünert, Sinn, Treusch, Tschentscher, Limberg, Yurkov, Shneydmiller, Decking | | Pflüger, Grünert, Sinn, Treusch, Tschentscher, Limberg, Yurkov, Shneydmiller, Decking, Schreiber | | | |
| **Minutes taken by:** | |
| W. Decking | |
| **Review by:** | |
|  | |
| **Status:** draft released | |
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| Topic: | | 1st Meeting of working group on XFEL commissioning | | | | | |
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| Agenda: | |  | | | | | |
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| No | Action Item | | | Due | Responsible | | Ref. |
| 1 | Schedule and pre-conditions to reach MS3 | | |  |  | |  |
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| **No** |  | **Keyword** | **Description** | **Responsible** | **Date** | **Status** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 |  | Accelerator Schedule | Global Schedule has been discussed   * Linac completion and cool down is foreseen for summer 2015 * First beam through linac autumn 2015, from then on beam can be put into undulator tunnels * System should be ready for first SASE end of 2015 |  |  |  |
| 2 |  | E-beam parameters | A first set of e-beam parameters was given   * Beam energy will be 17.5 GeV * Linac will be operated with several tens of bunches (not single bunch) as fast as possible * beam charge around 0.5 to 1 nC |  |  |  |
| 3 |  | Milestones | A first set of milestones was given. It is agreed that first lasing should be achieved asap after start-up, followed by a longer commissioning phase to consolidate the facility and add flexibility |  |  |  |
| 4 |  | Undulator sequence | Commissioning should start with SASE1 and continue with SASE3:   * eases initial e-beam operation * allows parallel commissioning of SA1 and SA3 photon beamlines * if availability of components prevents installation of SASE3 and SASE1 the decision to install SASE2 first should be made as early as possible * it is recommended from FLASH experience to focus activities on one beam line and commission this fully to benefit from the lessons learned and not double errors |  |  |  |
| 5 |  | Initial Wavelength | SASE search should be performed with fully closed gaps (i.e 0.16 nm wavelength at SASE1) |  |  |  |
| 6 |  | Experiments Schedule | A schedule of the sequence of experiments start-up was presented   * sequential commissioning with 1-2 month gap between experiments * all experiments expected operational by summer 2016 |  |  |  |
| 7 |  | Next Steps | Short-term: Establish rough initial commissioning schedule and list of prerequisites to reach milestone #3  Mid-term: establish strategy on how to continue after first lasing and what parameters might be available to start the initial operation phase, this will lead to recommendations on how to split/share beam time between users and commissioning in the first years of operation |  |  |  |
| 8 |  | Next Meeting | October 21, 2011; 30b/459 |  |  |  |
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