

BDS Instrumentation Plans

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Draft BDS Instrumentation WBS

1. **BPMs**
2. **Emittance: transverse**
3. **Emittance: longitudinal**
4. **Beam current monitors**
5. **Beam phase monitors**
6. **Beam loss monitors**
7. **Beam feedback systems**
8. **Beam energy measurements**
9. **Beam polarisation measurement**
10. **Background monitors**
11. **Collision diagnostics**

Suggested work package outline

scope – see next slide

goals

schedule

milestones

deliverables

co-ordinator

institutional contributors

resources (personnel, materials, infrastructure)

Generalised scope of each task

Review of performance requirements

Document listing specifications

resolution, timing, dynamic range, linearity ...

Review of state of the art / technologies

Specification of baseline / alternate technology

Conceptual engineering specification

Drawing / manufacturer's part number ...

Specification of R&D programme with deliverables

Revised cost estimate

Expressions of interest

Button, stripline, cavity BPMs	FNAL
Laserwire	UK
Bunch length (also beam phase)	UK, FNAL
OTR/ODR monitors	UK, FNAL
Toroids	FNAL
Feedback systems	UK, FNAL
E-spectrometer	UK, UCB, JINR, DESY, SLAC, Notre Dame, Oregon
Polarimeter	Iowa, INFN, SLAC, Tufts
Gamcal	BNL, Yale, DESY
<i>BDS/IR alignment</i>	<i>UK</i>
<i>Shintake Monitor (ATF2)</i>	<i>Tokyo</i>

Comments, way forward

Need to define SCOPE of each work package:

spectrum may vary from 'major R&D required' to 'look up the number in the catalogue'

General guidance from Project Managers at BDS KOM:

instrumentation requires 'light touch' on EDR timescale

After discussion with BDS Managers (20/11/07), propose:

PB + MW draft scope of each package

iterate with L3 manager (Andrei) + with PM team

discuss/invite participation from groups who sent Eols

try to fill holes – draw experience from relevant labs worldwide

appoint package coordinators ASAP + start work!

Proposal for meetings

Monthly meetings of BDS Instrumentation group:

managerial issues / news

focus on a particular system + review status/progress/plans

28/11/07

Transverse emittance

19-21/12/07

ATF2 meeting (KEK): BPMs, FB, laserwire ...

2008:

BPMs

bunch-length measurements

collision diagnostics

beam loss, background monitors, halo monitors

9-11/4/08

polarisation + energy measurement (Zeuthen)