Summary

- Manpower estimate
- Present and future manpower
- Major Milestones
- ONCS Budget
- Issues and Concerns

ONCS Manpower Estimate

	96	97	98/99	Sum (to 98/99)
ONCS group management	0.3	0.3	0.3	0.9/1.2
Physical plant	0.2	0.5	0.6	1.1/1.7
SW & Sys Maintenance	0.2	0.5	1.0	1.7/2.7
SS support/maintenance	0.3	1.0	1.2	2.5/3.5
ONCS OOA	2.0	2.5	1.0	3.5/4.5
UIF	0.3	0.5	0.6	1.4/2.0
Monitoring/alarm/status	0.3	0.8	0.8	1.4/2.0
Offline interface	0.1	0.3	0.3	0.7/1.0
Process IO	0.8	1.5	1.5	3.8/5.3
Architecture	2.0	2.0	1.5	4.5/6.0
Database/logbook	0.6	2.0	1.4	4.0/5.4
Sum	7.0	11.9	10.2	28.6/38.8

(see ONCS planning note # 7)

Manpower Situation

Manpower	FY 96	FY 97	FY 98	FY 99
Physics Dept	1.3	2.5	3	3
Phenix Constr. $	2.8	5.5	6.5	6.5
From other institutions	0	1.0	2.0	2.0
Sum	4.1	8.0 + 1	9.5 + 2	9.5 + 2

Total sum: 31 (36) manyears

Major Milesstones:

- March 97: ONCS software simulation
- Sept 97: Release 1.5 for sector test
- Dec 97: Release 2.0
- July 98: Access to at least 2 granules in detector area
- Dec 98: Release 3.0 for cosmic runs

Major Projects (current):

- PHLOPS:
  TK (detector description, connection to EPICS)
  CW (DAQ, code generation)
- Communication mechanism/CORBA: ED
- Event “generation” and routing: MLP
- Hardware evaluation: JH
- User Interface: HJK (part time ONCS)
- HV hardware: Steve Pate (part time ONCS)

Next Steps......

- SEBs
- Computing hardware evaluation and decisions
- Contact to detector groups
- Database
- EPICS

- Goal of having more than one person per project
- Every piece of PHENIX DAQ hardware needs an ONCS “godfather”

Budget

- Currently redoing “budget excercise” and will be handed over to B.Ernst
- Main cost is manpower (depends whom we hire)
- Hardware cost hasn’t changed since original estimate by T.Carey
- With computing hardware evaluation and decision we can be much more specific

- Purchasing of hardware by Fiscal Year:
  FY97: 10%, FY98: 50%, FY99: 100%
- Computers and networking hardware: 450k
- Event data archive: 120k
- Subsystem control nodes: 390k

Issues and Concerns

- **Took longer than anticipated to hire additional people, but this is finally coming to an end**

- **In assessing the progress in 1996, one should keep in mind that for most of the year ONCS consisted of 3 FTEs.**

  Being so seriously understaffed we had the option of either developping a first very simple prototype (opening ourselves to the critism of "working on a solution before the problem is defined") or trying to define the system in detail as good as we can (opening ourselves to the critism of not writing code and working on a prototype from which we can learn as we go along).

  Naturally we worked in both areas with the result of being close to a prototype (release 1.0 software emulation) but we are also aware that many things are still not specified at this point.

- **ONCS feels confident that it can do the job with these new people**

- **With new people, we must make sure that we all speak the same language and we find and fix disconnects within our own group.**

- **We are maybe 6 months behind schedule as presented to the TAC last spring**
  (but we are not the only ones)

- It is <u>VERY IMPORTANT</u> that ONCS gets access to PHENIX hardware (chain test) soon (March) for the following reasons:
  - You can't do everything with a software emulation
  - It automatically forces us to be more specific on many things that are not specified/defined at this point
  - Integrating non-commercial hardware will take a long time

- We are particularly concerned that people expect things to work as soon as their particular piece of hardware arrives at BNL.
  Integrating non-commercial hardware takes normally more time than one expects.

- Many online design decisions will have to be taken in 1997
  - ONCS internal ones
  - PHENIX online decisions:
    Should we adopt a very narrow job definition for ONCS or a broader one?

ONCS (Post Xmas) "Wishlist"

- **Decide on FINAL design for readout of DCM and event builder technology within the next 3 months**

- **Use only commercial electronics beyond DCMs**

- **Is it possible to simplify (standardize) the VME protocol for the DCMs?**
  (one day users may want to take advantage of the DCM processing power but Chi may not be around)

- **Ancillary Systems:**
  Ancillary systems must be defined in the first 6 months of 1997 - currently only HV is decided.
  ONCS favors commercial products THAT ARE ALREADY INTEGRATED INTO EPICS.
  If non-commercial non-EPICS products are used, then it must be decided who integrates them into EPICS.
  If it is ONCS, then this will increase our budget significantly.