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Russia plans for LHC(b) computing

- <u>May 1999:</u>

  10 Russian Institutes signed Memorandum

  "Russian Regional Compuing Facilities for LHC data processing and analysis"

  – IHEP,ITEP,Kurchatov, INR, Budker,MEPHI, NPI/MSU,JINR, Lebedev, PINR

- <u>Nov 1999:</u>

  Project was supported by Ministery

- <u>End of 1999:</u>

  4 working groups are established

- <u>End of 1999 - begin of 2000:</u>

  Test MC production for CMS at ITEP - NPI/MSU cluster

Russian Regional Computing Facilities for LHC

4 components:

- **A** *"dedicated"* **link from CERN to Moscow**

- *"Dedicated"* **links from Moscow to all participating institutes**

- **Moscow (distributed) Regional Center (Tier-I)**

- **Set of Tier-II center in non-Moscow Institutes**

- **Phase-I: 1999-2001**
  - **Conceptual solution & design**
  - **prototypes**
  - **tests**

- **no substantional funding before 2004**

1999

- Prototype-0 on the base of ITEP-NPI/MSU

- common PC/Linux cluster

- Test MC production for CMS

2000/2001

	MIPS	Gbytes
ITEP+NPI/MSU	30k	500
JINR	32k	500
IHEP	20	200
PINR	10k	100
Lebedev	5k	60

Tape drivers at JINR and IHEP (5+5 TBytes)

Links

CERN connection

- now

  Satellite link $\sim$ 1.5-2 Mbit/s

  no interactive work

- under discussion plans with connection to European 155 MBit/s

Inter connections

- now $\sim$ 2 Mbit/s

- G.Soros Ring

  – bandwidth overall 100 Mbit/s

  – bandwidth per institute $\sim$ 10 Mbit/s

  – extendable up to ATM

  – several optic lines

  – dedicated lines?

ITEP-NPI/MSU PC/Linux farm

- Installed in end of summer 1999

- Test MC production for CMS - end of 1999

- all releases of Geant4 instaleld and running

- up to date CMS software is installed

- $\mathcal{GAUDI}$ release 3 is installed and running