DM & SM Topics and their Interdependencies

	Timescale
Federation	**Medium**
1 HTTP plugin to xroot	
2 Monitoring of federation network bandwidth	
3 Topical working groups	
Point-to-Point Transfer	**Medium**
4 gridFTP: use recent versions, exploit session reuse	
5 Ensure xrootd support in all storage	
6 HTTP: continue tests; explore at scale.	
Managed Transfer	**Long**
7 Update FTS3 design and workplan with requirements expressed here	
8 Cross-experiment test of FTS3 features matched to requirements	
Catalogs and Namespaces	**Medium**
9 LFC not required for LHC in medium-term	
Archive/Disk Seperation	**Short**
10 Maintain support for HSM in managing disk buffer in front of archive	
11 Adapt experiment workflows to support archive/disk management in transfer	
Storage Interfaces (SRM and Clouds)	**Long**
12 Maintain SRM at archive sites at which there is no replacement.	
13 Evaluation of proposed SRM alternatives by working group	
14 Monitor and evaluate emerging developments in other storage interfaces	

Site Performance   **Medium**

  15 Benchmarking and I/O requirement gathering

  16 Protocol evolution: develop direct-access, nfs 4.1 and http

  17 Explicitly determine storage error types and ensure application handling

  18 Storage technology review.

  19 Research on high-throughput computing

Site Operations   **Medium**

  20 Site involvement in protocol and requirement evolution

  21 Expectations on data availability and access and the handling of data losses

  22 Improved activity monitoring

  23 Storage accounting: support StAR accounting record

POOL persistency   **Medium**

  24 POOL development not required in medium term

Security   **Medium**

  25 Remove backdoors from CASTOR

  26 Checks actual permissions implemented by SEs

  27 Resolve issues with data ownership (Ch. 3)

Data & Storage Management

- Recommended several WGs
  - defined topics
  - defined (to first approximation) mandates
- Missing:
  - Dependencies between the WGs
  - Link to pilots, tests and benchmarks
    - list of missing facts

Sequence

- Access Patterns and Data Popularity (AP &DP)
- Benchmarks (BM)
- Read-only with relaxed AA   (RRAA)
- Federations   (Fed)
  - cache/populate
  - repair / repopulate (local/central management)
- WN staging/not staging (WNS)