CORE Subgroup
(Content, Resource, and Service Discovery)

• Deliverables (from charter)
  – Problem statement (completed)
  – Survey of related work (underway)
  – Experimental plan
  – Experimental results

• Problem Statement
  – draft-irtf-p2prg-core-problem-statement-00.txt
  – John Buford, Keith Ross, Mario Kolberg

• Purpose
  – Define a research agenda
  – Attract participation from other researchers interested in these problems and develop a coordinated research approach within the P2PRG CORE subgroup.
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• Research Issues
  – Global Scale Service Discovery
  – Service-Oriented Overlays
  – Internet Infrastructure Uses
  – Content and Resource Discovery / Search

• Examples
  – John Buford, Alan Brown, Mario Kolberg. Meta Service Discovery. 3rd IEEE International Workshop on Mobile Peer-to-Peer Computing (MP2P'06)
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• Problem statement - feedback on email list
  – Some suggestions about definition section
  – Different ways of classifying P2P systems (taxonomy)

• Next steps
  – Update problem statement draft based on feedback
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• Deliverable 2: Survey of related work
• Preliminary outline (see subsequent slide)
• Looking for volunteers to contribute sections
CORE Subgroup: Deliverable 2: Survey of Related Work

• Approach
  – Avoid repeating discussions found already in surveys of P2P overlays (so cite heavily)
  – Create a document that can cover (through contributions from others) many more systems than one usually finds in papers.
  – Some organizing principle should be followed, like the architecture taxonomy in previous slides, or Aberer et al's design space
  – Perhaps each P2P overlay should be summarized in a table format for comparison
CORE Subgroup:
Deliverable 2: Survey of Related Work

Possible outline:

I. P2P Overlay Network Architecture
   A. Topology Taxonomy
      Structured, Unstructured, Hybrid, Hierarchical
   B. Functional Taxonomy
      Filesharing, VoIP, Service

II. P2P Service Overlay
   A. Layered (e.g., INS/Twine on Chord)
   B. Integrated into Routing
      (e.g., semantic routing)
   C. Federated
      (supporting multi discovery methods)

III. Service Description Format

IV. Group Mechanism

V. Performance

VI. Summary Tables