Dirac: The video compression family using open technology

Anuradha Suraparaju
BBC Research & Innovation

Dirac: Activity

- **Project Aim**
  - Advanced Video Compression System
  - Open Technology

- **Features**
  - Flexibility and low complexity
  - Dirac reference implementation
  - Schroedinger project – optimised implementation
  - DiracPro/VC-2 optimised for professional production and archiving applications
  - Hardware – Dirac Pro 1.5 and Dirac Pro 270
Dirac: Challenges

- Dirac Specification completion
- Documentation
- Useable software implementation
- Integrating with existing multi-media application
- Adoption
Dirac: Dependencies

• Dirac Reference Software
  – None

• Schrödinger
  – liboil

• Projects we depend on for adoption
  – Players (vlc, mplayer, etc)
  – Multimedia libraries (ffmpeg, transcode)
  – Multimedia framework libraries (gstreamer)
Dirac: Next Steps

• Release full Dirac Specification

• Standardisation
  – Complete Standardisation of VC-2 through SMPTE
  – Submission of Dirac at ITU(???)

• Software
  – Release full spec compliant, useable software
  – Dirac support in FFMpeg
  – DirectShow Filter

• Documentation

• Further Hardware Development

• Further Algorithm Development