



Review of Compression Symposium 1

May 13 – 16, 2002

NIMA/Arnold Facility

Arnold, Missouri



Review of Agenda

- The first half of the previous symposium was based on understanding the history, current compression algorithms, and the issues related to the current compression algorithms.
- The status of 2002 JPEG 2000 projects
 - ISO JPEG 2000
 - NITFS Standards
 - DCGS Standards
 - JITC Testing
 - Hyperspectral Compression
 - NASA J2K



Review of Agenda

- The majority of the afternoon was focused on the implementation of the JPEG 2000 profile
 - Several aspects of the profile
 - Interactions with NITFS
 - Lessons learned
 - Processing procedures
- Only one vendor with a product
 - Aware Incorporated



Work Accomplished since CS1

- JPEG 2000 Standards
 - Part 4 Compliance testing has become an ISO standard
 - Part 6 Compound documents has become an ISO standard
 - Part 9 Interactive Protocols has become a CD
- JPEG 2000 Profile
 - Advanced from Working Draft 1.1 to final Draft 1.8
 - Reviewed and approved by NTB and Airgroup 4
 - Expected to go to SC 24 for Technical Review and then submission for approval as a BIIF profile
 - Delays in working out the ambiguity of support data versus the compression scalability (resolution)



Work Accomplished since CS1

- JPEG 2000 Compliance Testing
 - JITC has release a version of the compliance testing procedures for review
 - Developed several test images for internal and external evaluations
 - Distributed example test imagery to several vendors working to become compliant to JPEG 2000 (NITFS 2.1)
- IEC Evaluated large image viewing
 - Progression order issues dependent on the image size



JPEG 2000 Standard and Profiles

JPEG 2000

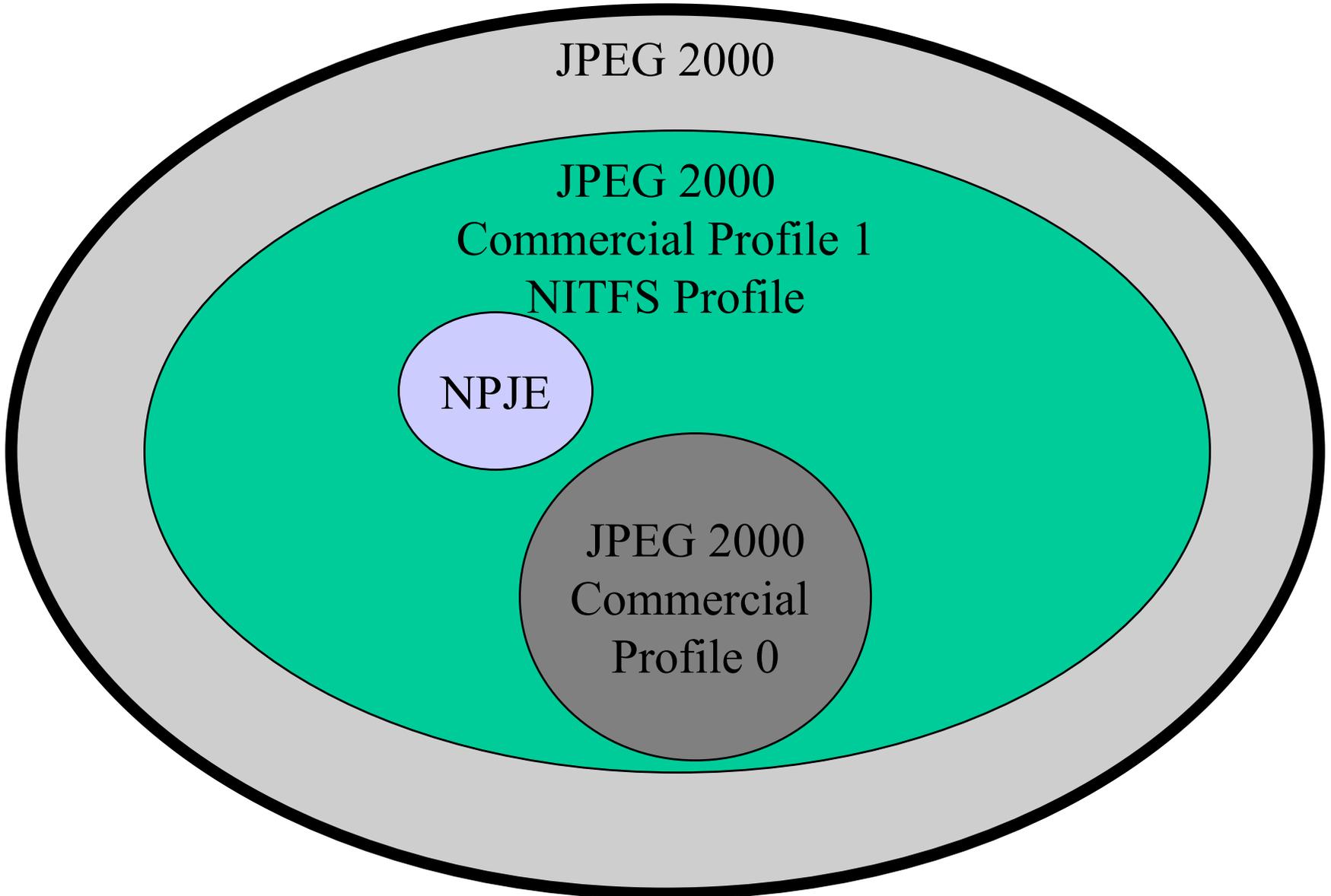
JPEG 2000

Commercial Profile 1

NITFS Profile

NPJE

JPEG 2000
Commercial
Profile 0





Work Accomplished since CS1

- DCGS
 - Preliminary migration plan has been developed
 - Mapping of current systems being developed
 - Example software has been developed that is compliant to Part 4
- Major Programs
 - Programs evaluating JPEG 2000 support
- Commercial system support
 - Several commercial NITFS systems are expected to support JPEG 2000



Work Accomplished since CS1

- Commercial Support of JPEG 2000
 - Last year only Aware now several companies will be presenting at the symposium
 - Several commercial products based on JPEG 2000
 - Demonstration of working versions of JPIP
 - The first digital camera that support JPEG 2000
 - The first internet product supporting JPEG 2000
 - The most common image processing software supports JPEG 2000
 - Adobe PhotoShop
 - Commercial applications based on the technology



Commercial Software, IP, and Silicon (Google Search not Inclusive)

JPEG 2000 Software



DSPG@UVic
Digital Signal Processing Group

Kakadu

JPEG 2000 Firmware



SYNOPSYS®



JPEG 2000 Silicon





Commercial Products Supporting JPEG 2000 (Google Search not Inclusive)



QuickTime



PEGASUS IMAGING CORPORATION



EyeSpy Pictures That Fly.



Non-Native software

