



# WorldScreen

Layered Compression Technologies for  
Digital Cinematography  
and Cross Media Conversion

An Overview by  
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A Research Project in the 6th  
Framework of the European  
Community



## Overview

- Acronym: Worldscreen
- Aim: Optimised workflows for movie presentation from acquisition to end user exhibition based on layered compression technologies
- Partners: 8 + 2 associated
- Budget: 5,986 Mio. €
- Duration: 09/2004 – 04/2007

## Consortium

### Full Partner:

- Fraunhofer IIS (Leader), HHI
- Flying Eye
- Kodak
- Snell & Wilcox
- MOG
- T-Systems GEI
- Digilab 2000
- Salzgeber (European Docuzone)

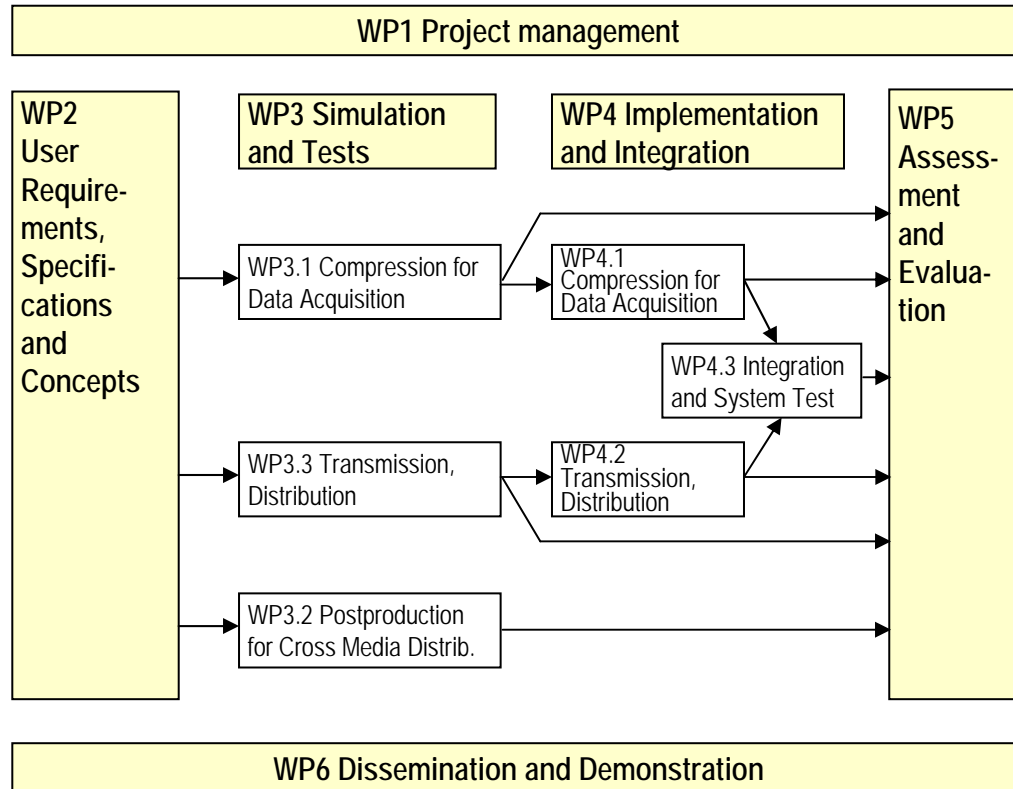
### Associated Partner:

- ARRI
- Warner Bros

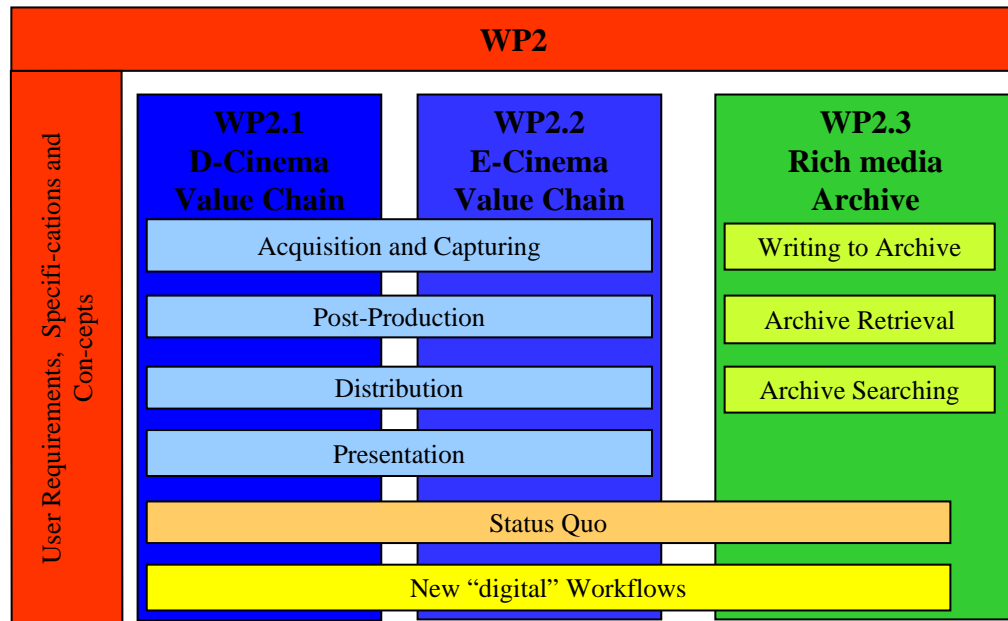
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## Workpackages



## Requirements, Specifications



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## Goals 1

- Comparison of image coding technologies with respect to D-Cinema requirements
- Implementation of layered coding scheme algorithms as simulation and real-time prototype (encoder and decoder)
- Integration of the encoder into a field recorder for providing a portable storage solution for future digital cinema cameras
- Test of transcoding from sublayers for legacy formats (HDTV, DVD, Windows Media etc.)
- Distribution system allowing on-the-fly conversion into different formats (4k, 2k)

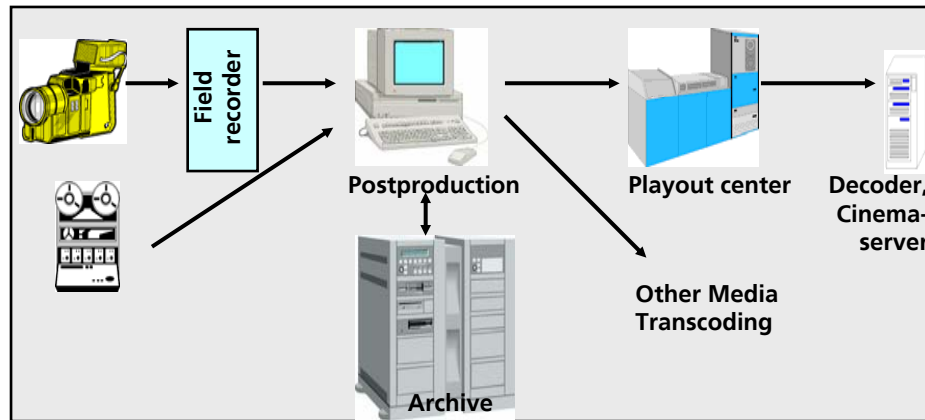
## Goals 2

- Test of efficiency improvement in the postproduction by using sublayers
- Assessment of the codecs using a high-end D-Cinema grade projector in a typical cinema environment
- Tests on Layered Archive Format, removing the need to keep archival copies of content in many formats
- Contribution to standardisation bodies, e.g. ISO (JPEG, MPEG), SMPTE (DC28, MXF) in order to extend standards for D-Cinema applications

## Work in Standardisation etc.

- EDCF  
(Snell&Wilcox, IIS, Kodak, Warner Bros., T-Systems)
- SMPTE  
(MOG, Snell&Wilcox, Kodak, Warner Bros.)
- ISO SC29 WG1 (JPEG)  
(IIS, Digilab, Kodak)
- ISO SC29 WG11 (MPEG)  
(IIS, HHI, Snell&Wilcox)
- DCI (Digital Cinema Initiative)  
(Warner Bros.)
- MXF (MPEG PRO), AAF  
(MOG, Snell&Wilcox)

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**The End**

**We thank you for your  
attention.**

**[www.worldscreen.org](http://www.worldscreen.org)**