

# THE FUTURE MEDIA INTERNET: DELIVERY AND SUPPORT OF VERY HIGH QUALITY MEDIA SERVICES

Dimitra Simeonidou

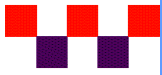
High Performance Networks Group (<http://hpn.essex.ac.uk/>)

School of Computer Science and Electronics Engineering

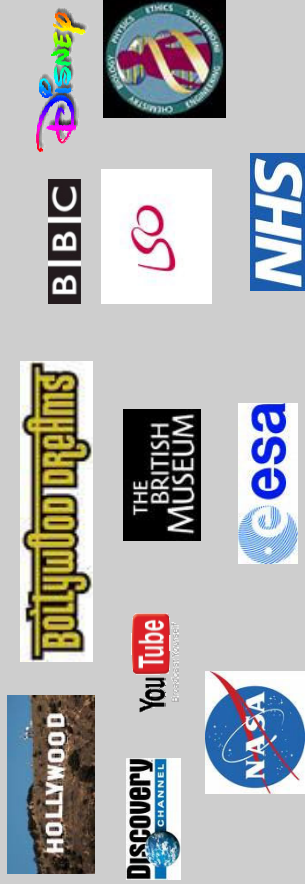
University of Essex

UK

[dsimeo@essex.ac.uk](mailto:dsimeo@essex.ac.uk)



## Content Owners and Communities:



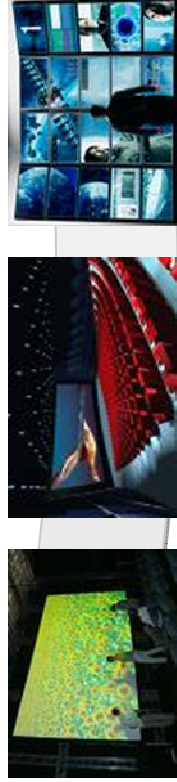
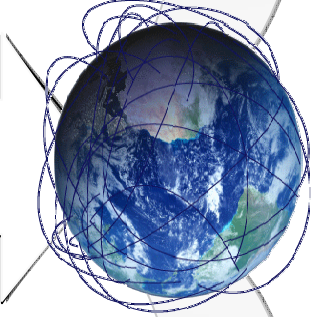
## Networks and Computing Providers:



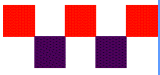
Dynamic, High Capacity Network Services for High End (Multimedia) Applications

Distributed Computing

**ADVANCED MEDIA SERVICES:**  
High quality, real time, distributed interactive...



## Large Scale Connected Infrastructure for Media Delivery and Support



- n The **Networked Media Laboratory (NML)** with advanced media acquisition and presentation facilities (4K, 3D, 8K) combined with an extensive network connectivity facility.
- n Created for very high quality networked media, supporting a variety of high performance applications .



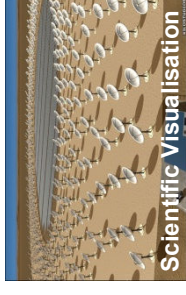
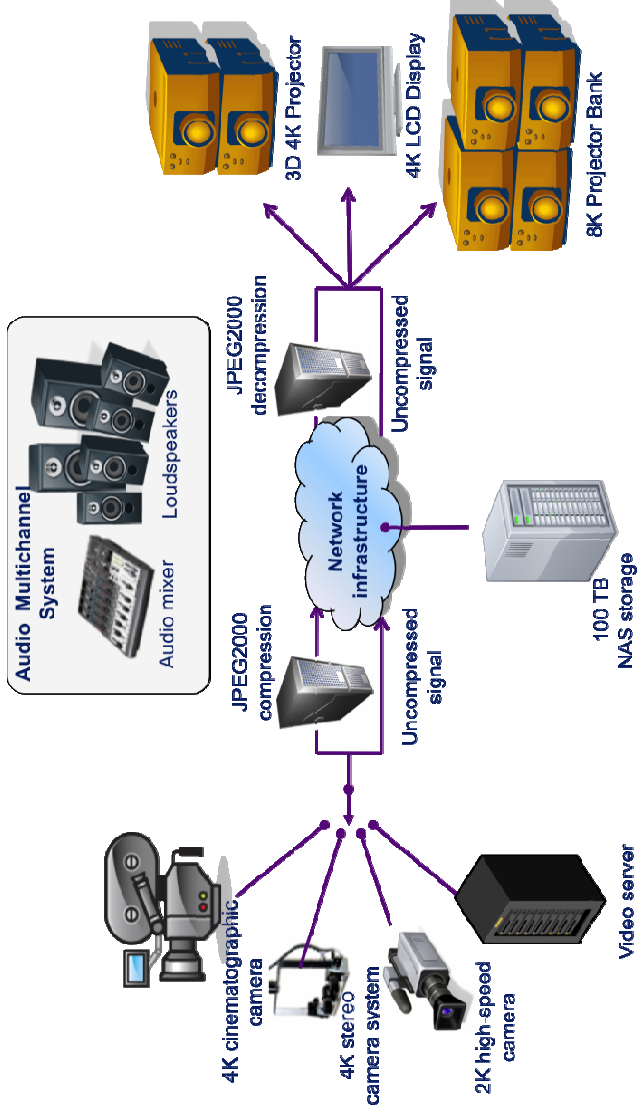
Education/  
Remote Learning



Digital  
Cinema



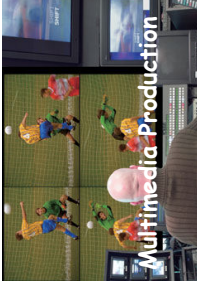
Healthcare/  
Medical



Scientific  
Visualisation



Virtual  
Presence



Multimedia  
Production

### Media acquisition

- 2K,4K, 3D U/HD Cameras

### Processing

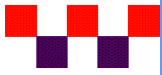
- JPEG2000 codec (for 4K)
- Local Cluster

### Presentation

- Back Projection (4K, 8K,3D)
- 4K LCD monitors

### Storage and Distribution

- 100 TB storage
- Access to supercomputers



- Our Labs are connected through dedicated research networks with key research facilities worldwide :
- Dark fibre network connectivity to various key locations in the UK
- To numerous research facilities across UK and European with 10 and 1 Gbps connectivity
- Our connectivity also extends to multiple research institutions across Europe, North America, Asia and Japan with high speed links via GEANT and GLIF

