

Video Conferencing

Challenge to NRENs

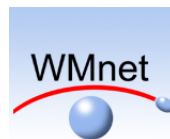
Simon White
Technical Manager
WMnet

Aims

- UK Position - What is WMnet?
- RBCs & UKERNA
- Technical VC
- Pedagogical VC
- Schools vs. HE
- Challenges
- Case Studies

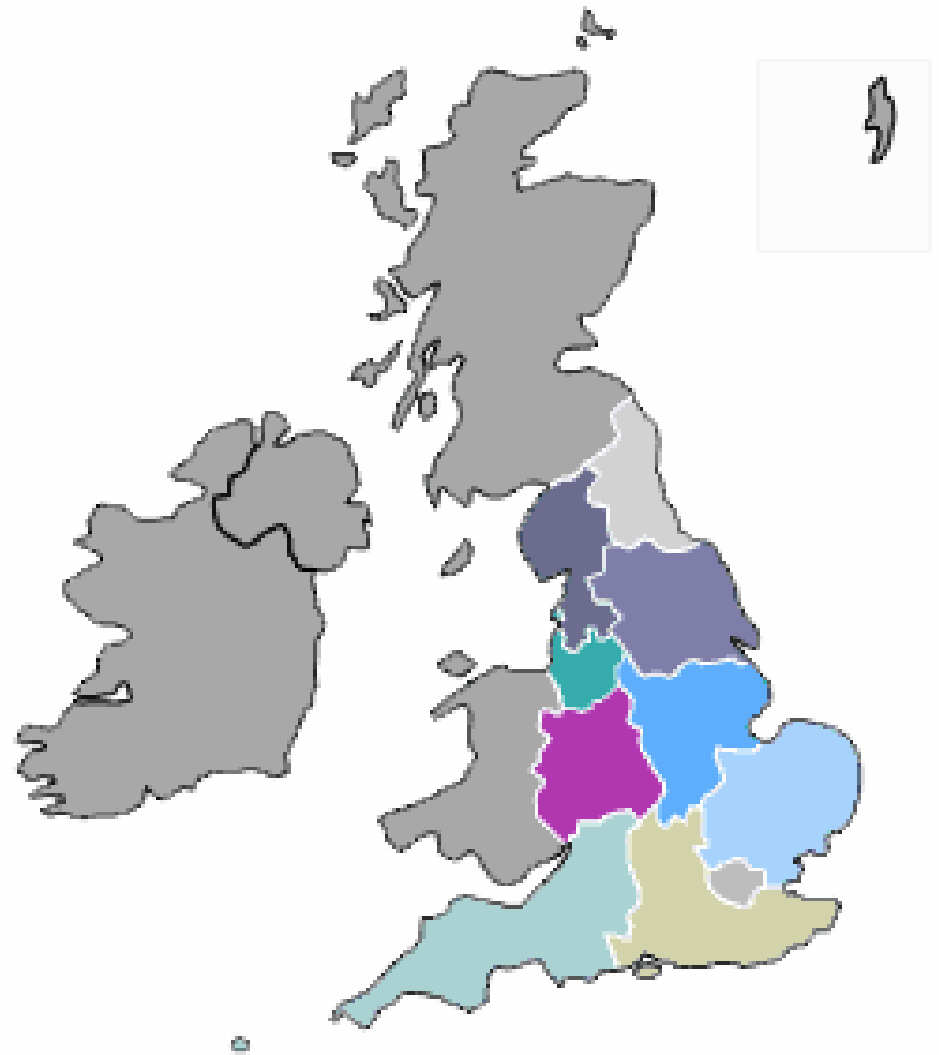


England

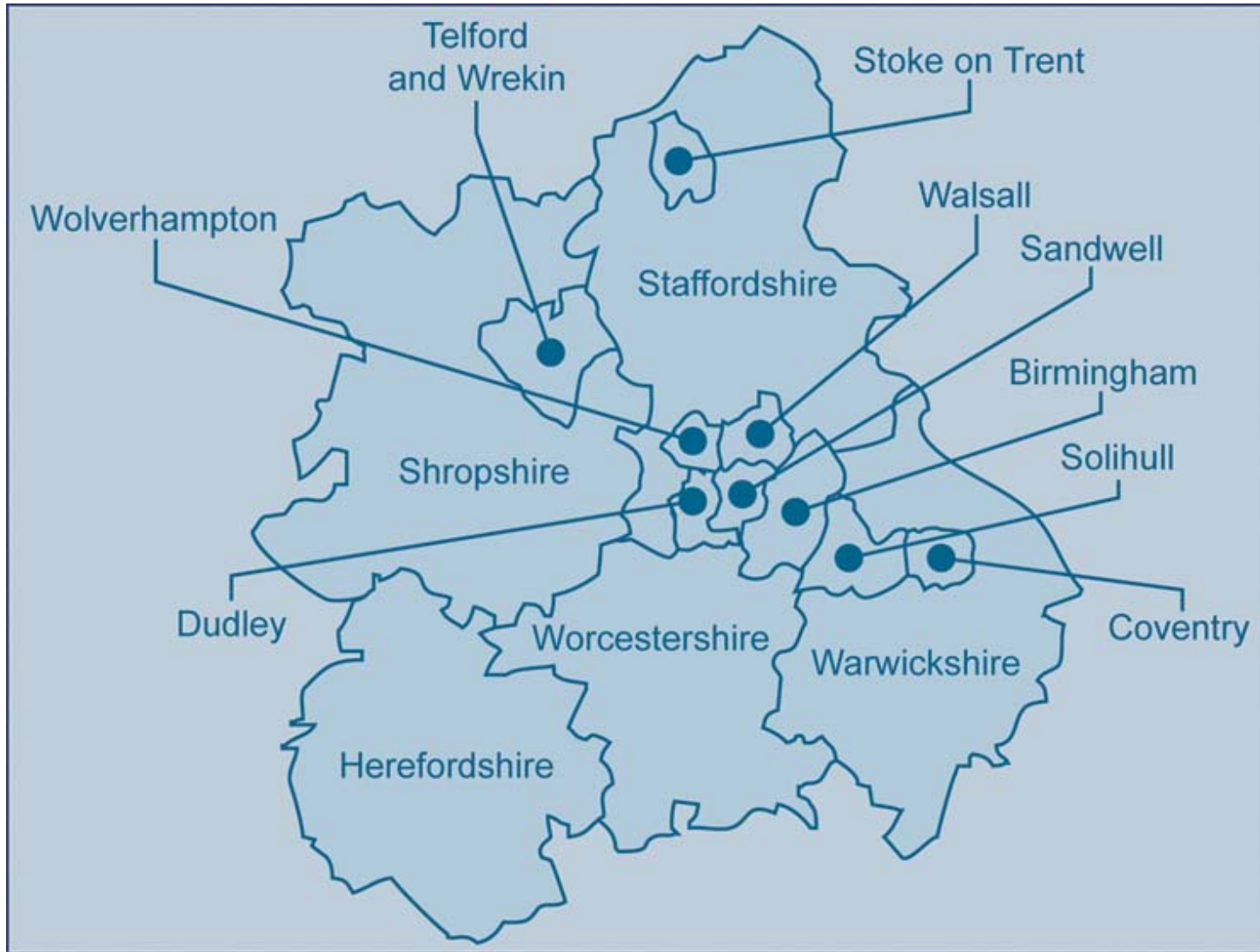


RBCs

- 10 RBCs, 23000 schools
- “Bottom up” link together using the NREN
- Taking some NREN services



WMnet Members



Network of Networks

- 14 Local Authorities, 2000 Schools
- **Does** offer advice and guidance
- **Does** run curriculum projects
- **Does** represent the region and manage information
- **Does not** own or operate infrastructure
- **Does not** sell services to schools
- **Does not** replace Local Authorities



National Education Network



Funding

- Upwards of £200m has been spent
- **All** schools will, by 2006 have broadband connections (2Mbps or 10Mbps)
- Schools connect to a Local Authority or Regional Broadband Consortium



Why Broadband?

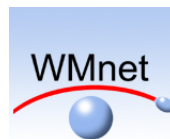
- Rich Media Content to support Teaching & Learning
- New Opportunities for Communication & Collaboration
- Fast Internet Access



Network Characteristics

School Broadband	Home Broadband
2Mbps or faster	512kbps or faster
Dedicated connection	Shared with other local users
Private, managed network	Public, unmanaged network
Quality of Service	No Quality of Service
Premium Quality	Value Quality
Provided by community, for community	Provided by commercial sector, for profit
Designed for services such as VC	Designed for web browsing

Support: VC Technical



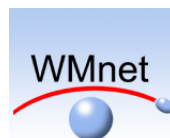
Issues

- Need source of **EXPERT ADVICE**
 - Edge of each network
 - Buying endpoints from devolved budgets
- Common standards **REQUIRED** for interoperability
 - IP vs ISDN
 - H323 vs CTM



Opportunities

- Shared MCU(s)
- Shared Gateway
- Common Booking Service
- VTAS



Support: VC Pedagogy



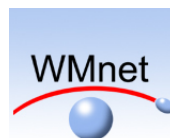
Issues

- Need sources of **BEST PRACTICE**
 - Video Conferencing in the Curriculum Book
http://www.becta.org.uk/leas/display.cfm?section=3_14
 - Video Conferencing in the Classroom Project
<http://www.becta.org.uk/research/research.cfm?section=1&id=3503>
 - **PEER** examples
 - Building evidence based from practitioners



Opportunities

- Finding partners
 - Schools
 - Museums
- Demonstration Events
 - etwinning
 - Webcasts
- Training Materials
 - Building confidence



Looking Around



Schools vs. HE

- Fewer technical resources
- More numerous
- Not informed consumers
- Inconsistent support
- Classrooms not studios
- Services must be age-aware
 - MCU Policies



Quality Assurance

- Using a Network of Networks
- QA test with a “neutral third party” assures compatibility
- JVCS QA test offered to all schools
- Other NRENs do the same?



Challenges

- Cascading/integrated booking system
 - Between MCUs
- Links to AAI
- “Dating Agency”
- Procurement
 - “Slow Burn” rather than “Big Bang”



Video Case Studies

- Teacher Training
- Beyond Pathe
- e-Missions
- National Archive
- London Live



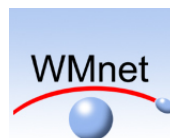
Teacher Training

- Remote lesson observation using VC
- Sharing an experience with a large group
- Issue: Easier to get the small schools working than the large research university

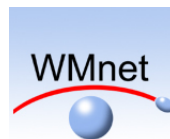


Beyond Pathe

- Supporting applications of the Pathe Archive
- Classroom projects plus special event webcasts



Beyond Pathe



e-Missions

e-Mission: OPERATION MONTSERRAT

A GIANT AWAKENS
A MONSTER APPROACHES.
THOUSANDS OF LIVES DEPEND ON YOU!

WELCOME

e-Mission: Operation Montserrat is based on a real historical event. The volcano on the normally tranquil island of Montserrat has come to life. As flaming pebbles and lava begin their devastation, emergency response teams learn a hurricane is approaching. Using real-time hurricane and seismic data, teams of student specialists assist Mission Control in saving the residents from certain destruction. The UK e-Mission project is funded by Planet Science and will be available to all UK schools from August 2004.

MISSION BRIEFING

HOW TO APPLY

T-MINUS 3 WEEKS

T-MINUS 2 WEEKS

T-MINUS 1 WEEK

MISSION PREP

MISSION

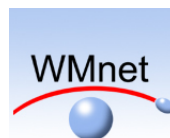
POST-MISSION

The UK e-Mission is a product of Wheeling Jesuit University, WV, USA, and [The National Space Centre](#), Leicester. For more information on the Planet Science funded pilot project please contact e-mission@spacecentre.co.uk.

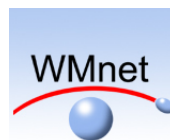


London Live

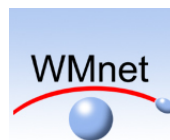
- 100 schools on one day
- Short features by schools and special guests including museums and politicians



London Live



The National Archives

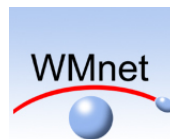


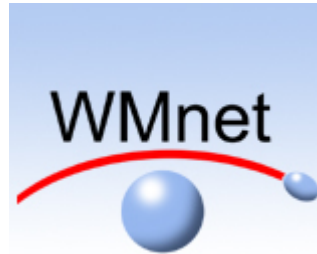
The National Archives

- Video conference with actors portraying historical roles
- Supported by Teachers pack and class materials



Any Questions?





Video Conferencing

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