



## **SSDN Update - NHS - HE Forum 070607**

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**7th June 2007**  
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# Technical work



**SSDN Interconnect -  
current progress**

**Glow - the current  
state of play**

**One example application  
which could interact with  
the NHS Sector**



# SSDN Interconnect

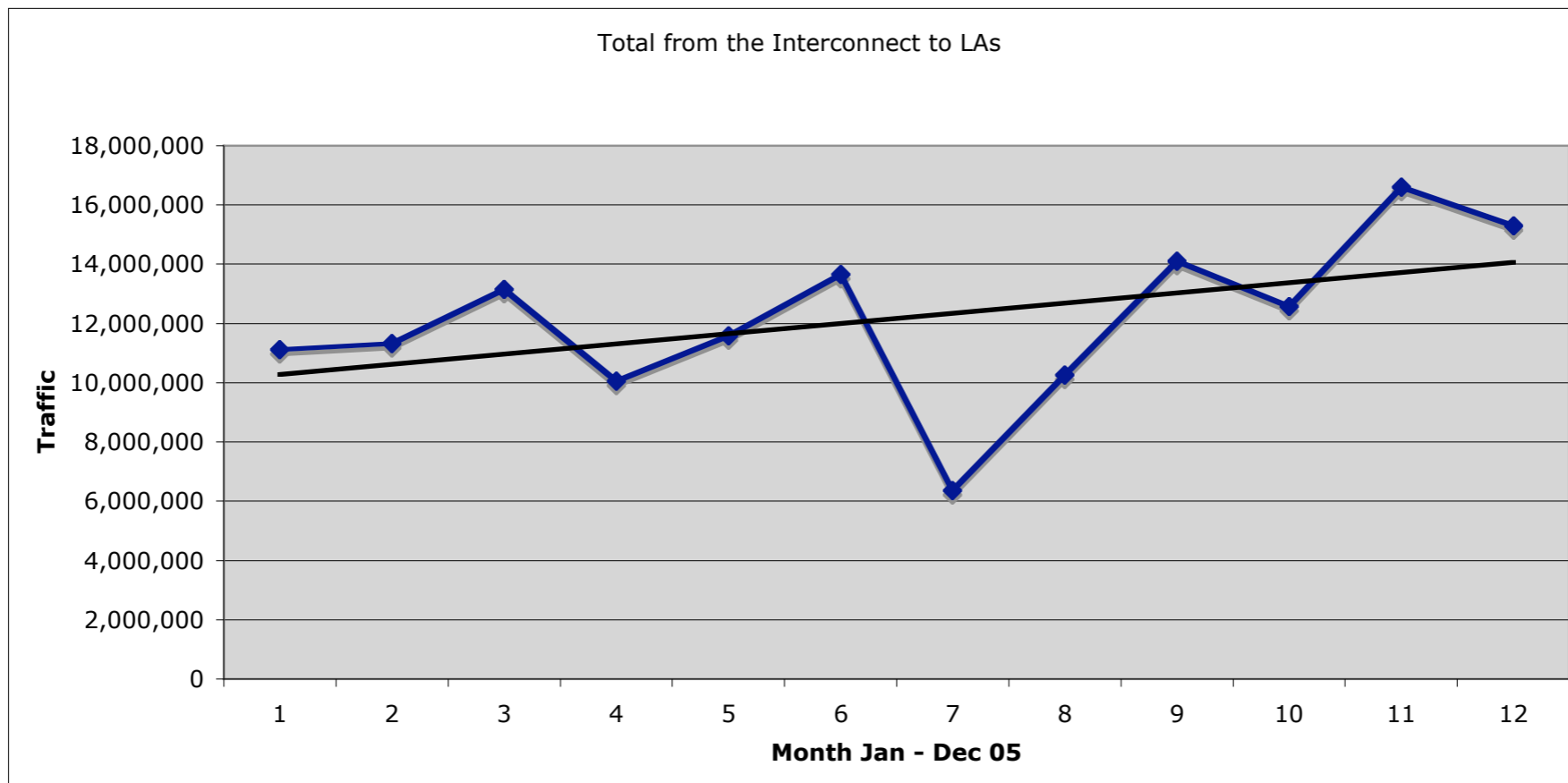
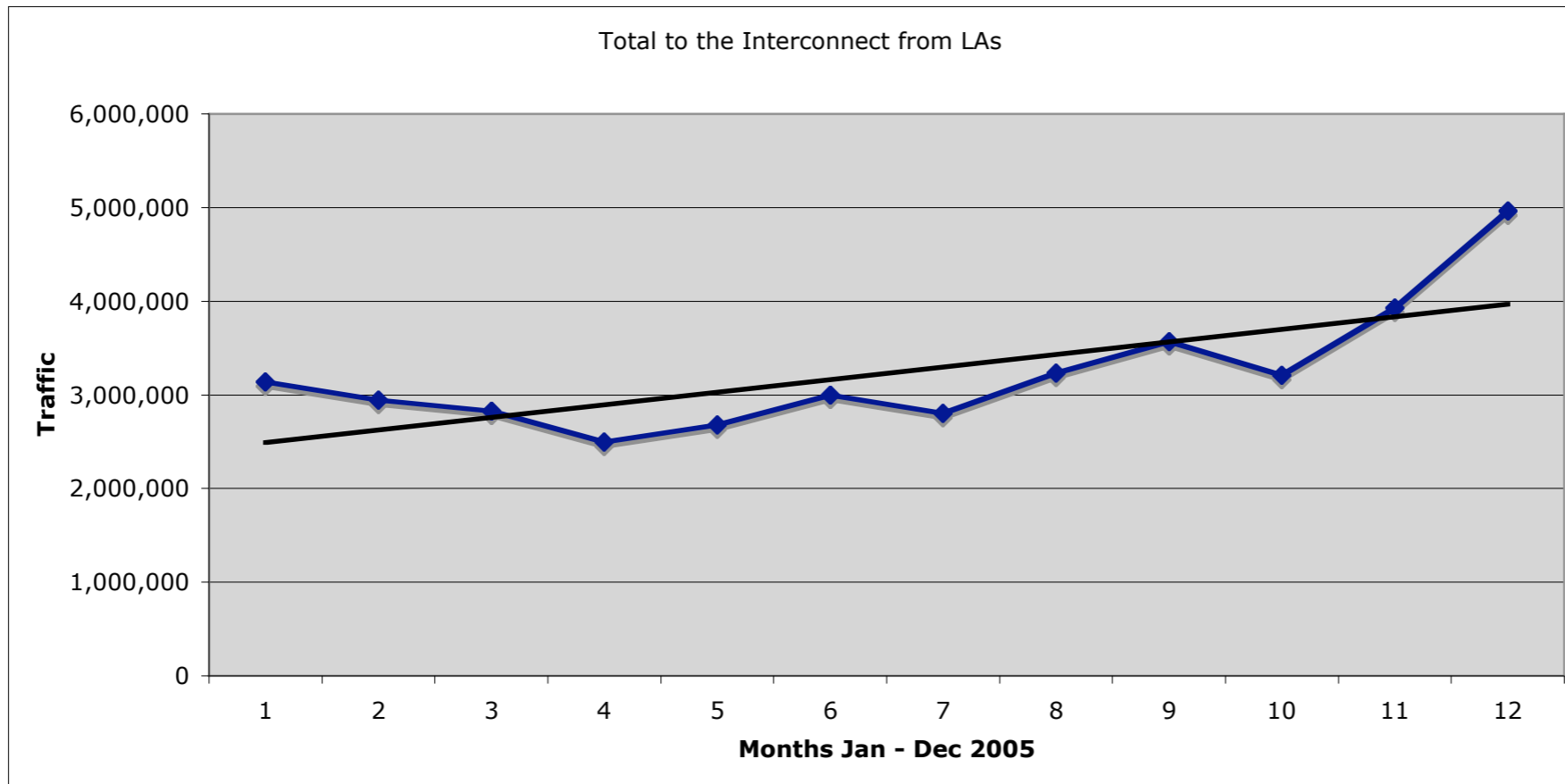
**2003, Initial 3 year contract with  
UKERNA**

**Extended for additional year**

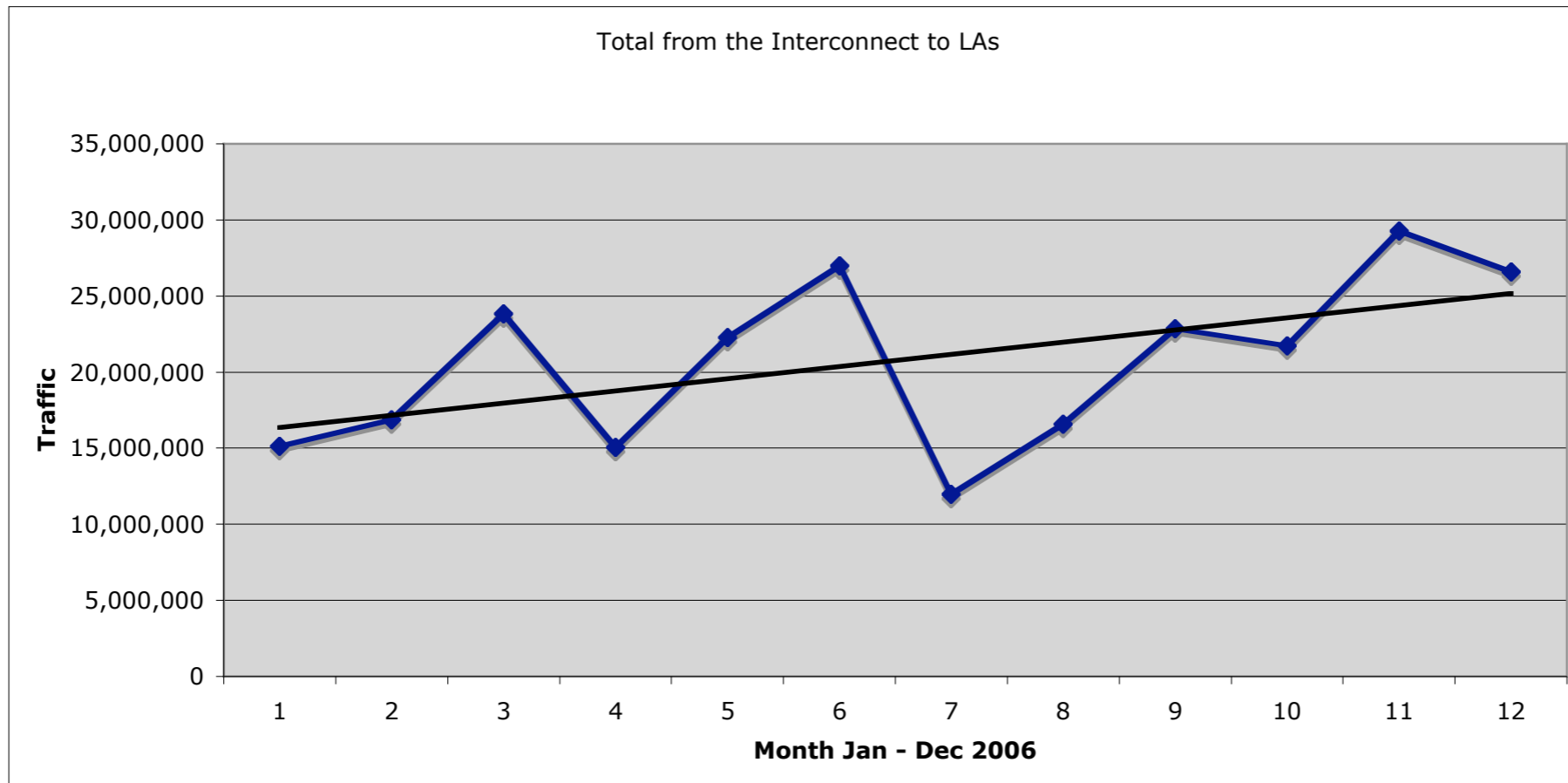
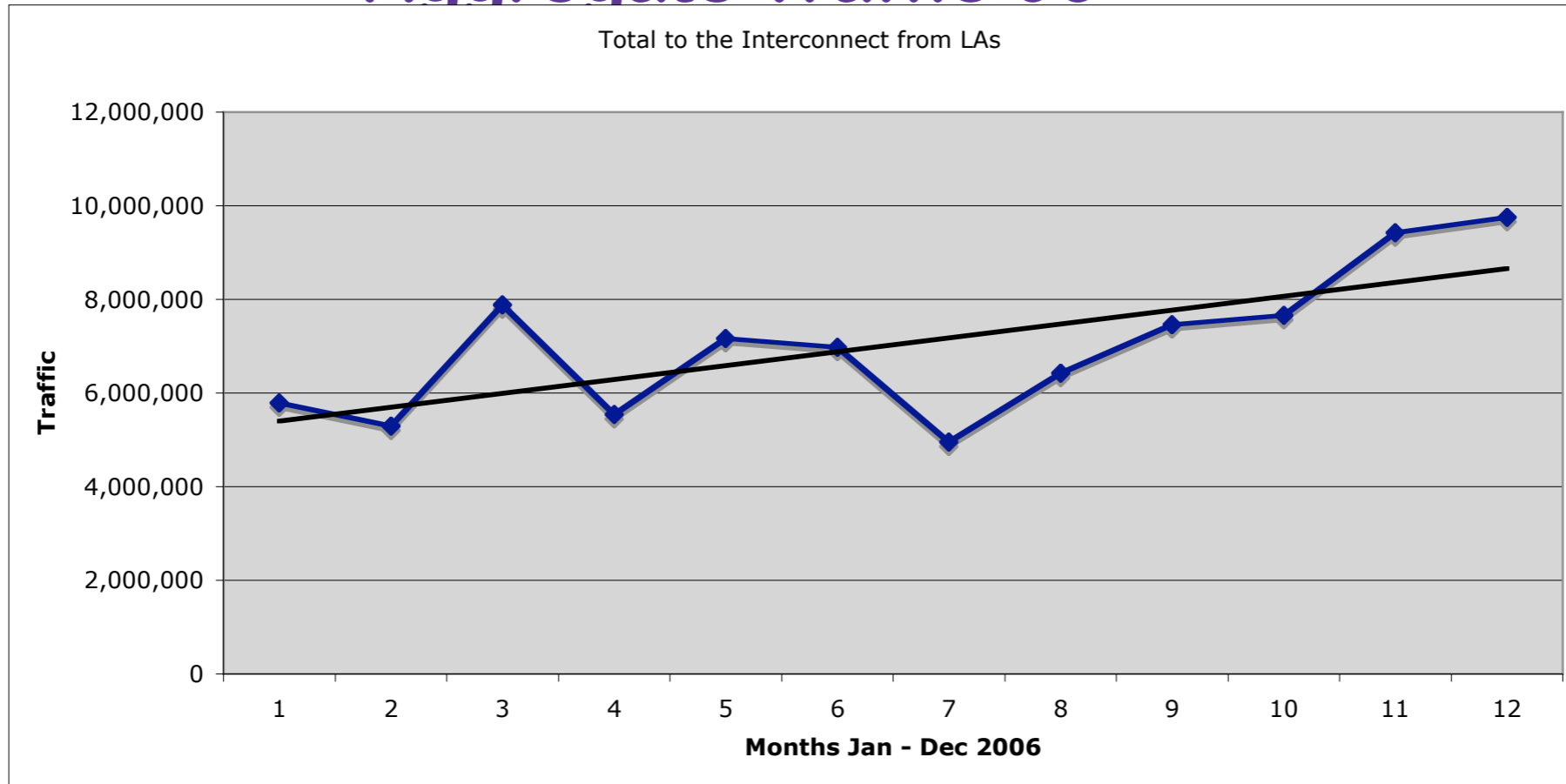
**Now being extended again till  
end January 2008**

**Used by 100% of Local  
Authorities and National  
Agencies**

# Aggregate Traffic 05



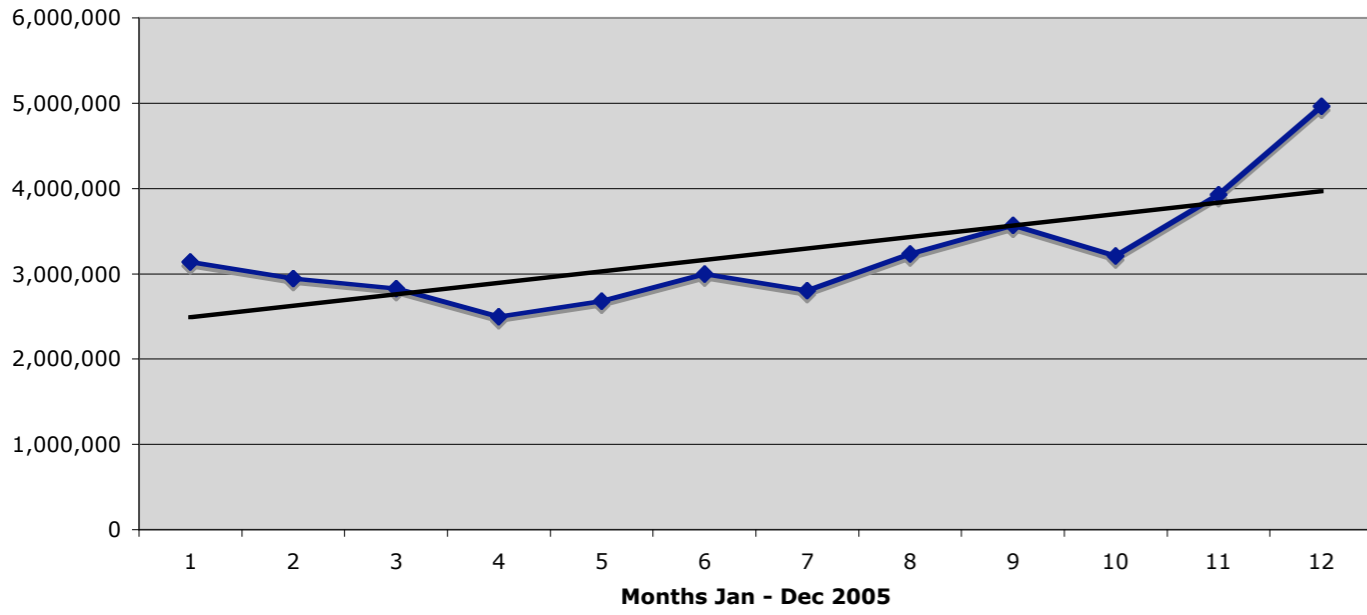
# Aggregate Traffic 06



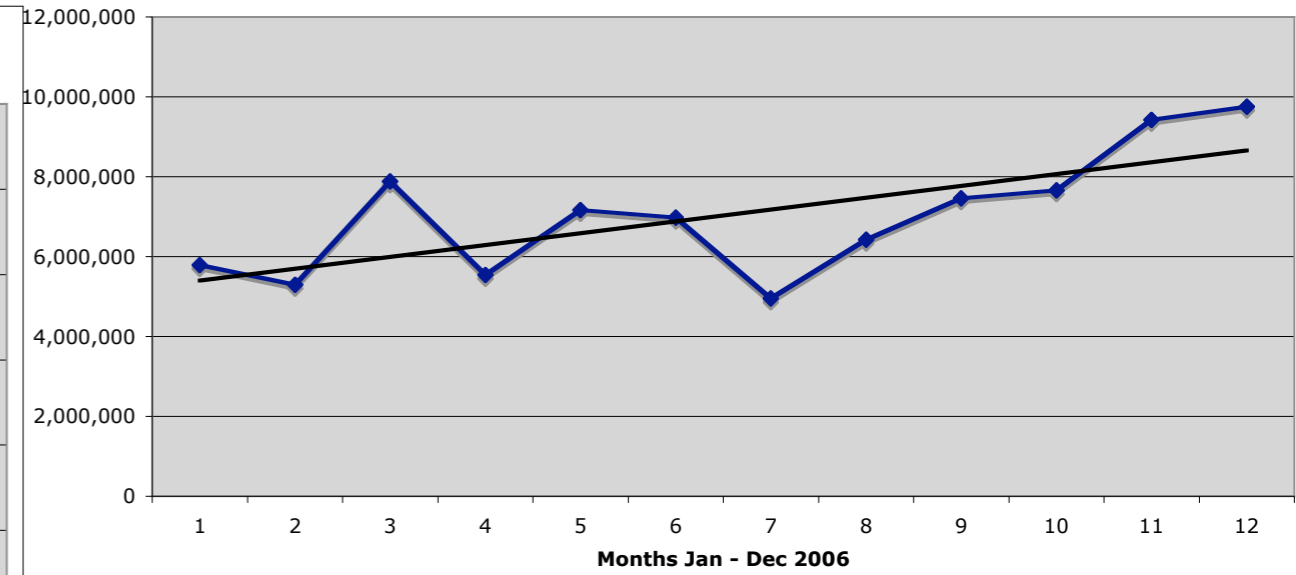
# Aggregate Traffic 05/06



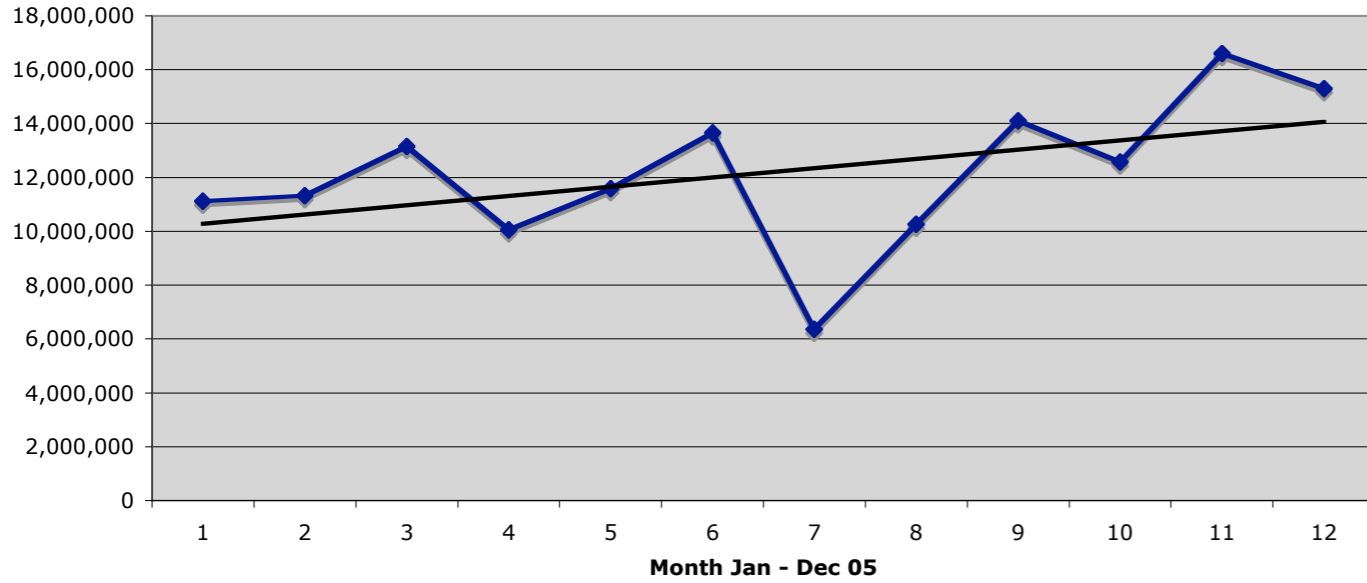
Total to the Interconnect from LAs



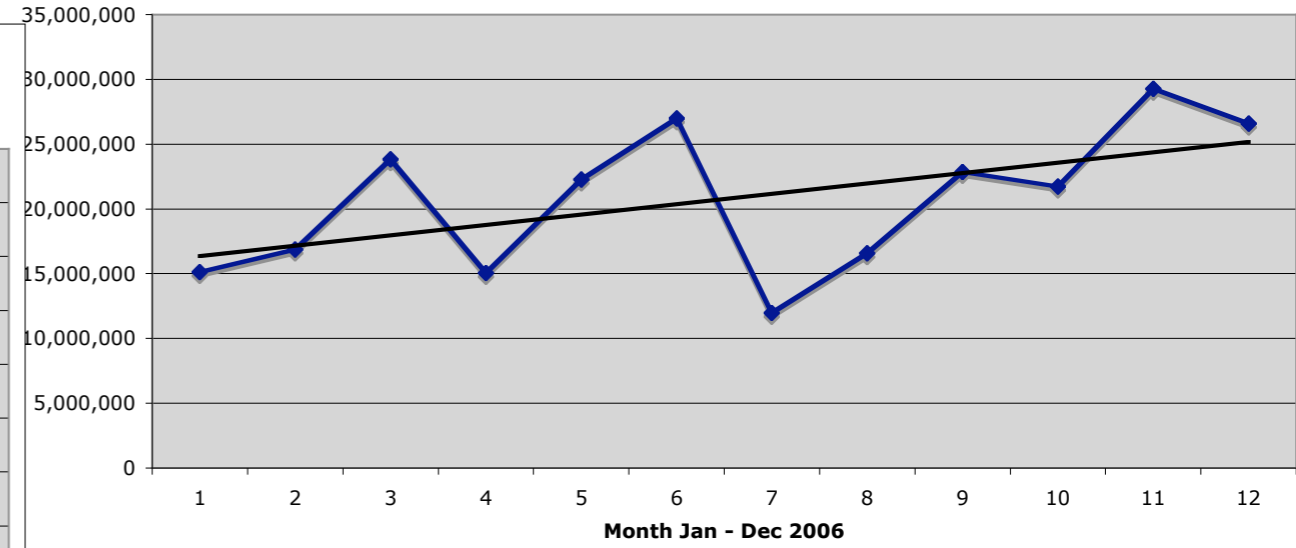
Total to the Interconnect from LAs



Total from the Interconnect to LAs



Total from the Interconnect to LAs



# Development of the Current Interconnect



## Initial Connections

- 32 - Local Authorities
- 2 - SQA
- 2 - LTS
- 1 - SEEMIS

## Added Connections

- 2 - Glow Data Centre
- 2 - Improvement Services  
Data Centre
- 1 - LTS CoLocation  
Facility

## Current Total

42 Connections

## Additional LAR Ports

For either Corporate access or  
Improvement Service Traffic

# Interconnect - V2



## Current Activities

- New Educational Developments division and Procurement Division considering options
  - Cannot repeat current contract
  - Possible Official Journal for European Union (OJEU) procurement process
  - Grant Aid option between Scottish Executive and the Joint Information Systems Committee (JISC)



# Interconnect - V2



## National Education Network (NEN)

- England/DfES now has contract through Grant Aid arrangement for NEN service package
- More than just connectivity
- Includes other services such as DNS, Janet VC booking Service, Content Access Registry + More
- English RBC's are now represented on the JISC Committee for Networking (JCN).
- JANET no longer the preserve of the particle physicist community



# Interconnect - V2



## What will it be like?

- LA's have been surveyed - following needs identified
- Improved Resilience (how?)
- 24/7 cover (how?)
- More scalable bandwidth provision (how?)
- Can the JANET Metropolitan Area Networks (MAN's) assist
- Consider the needs of projects like Improvement Services?

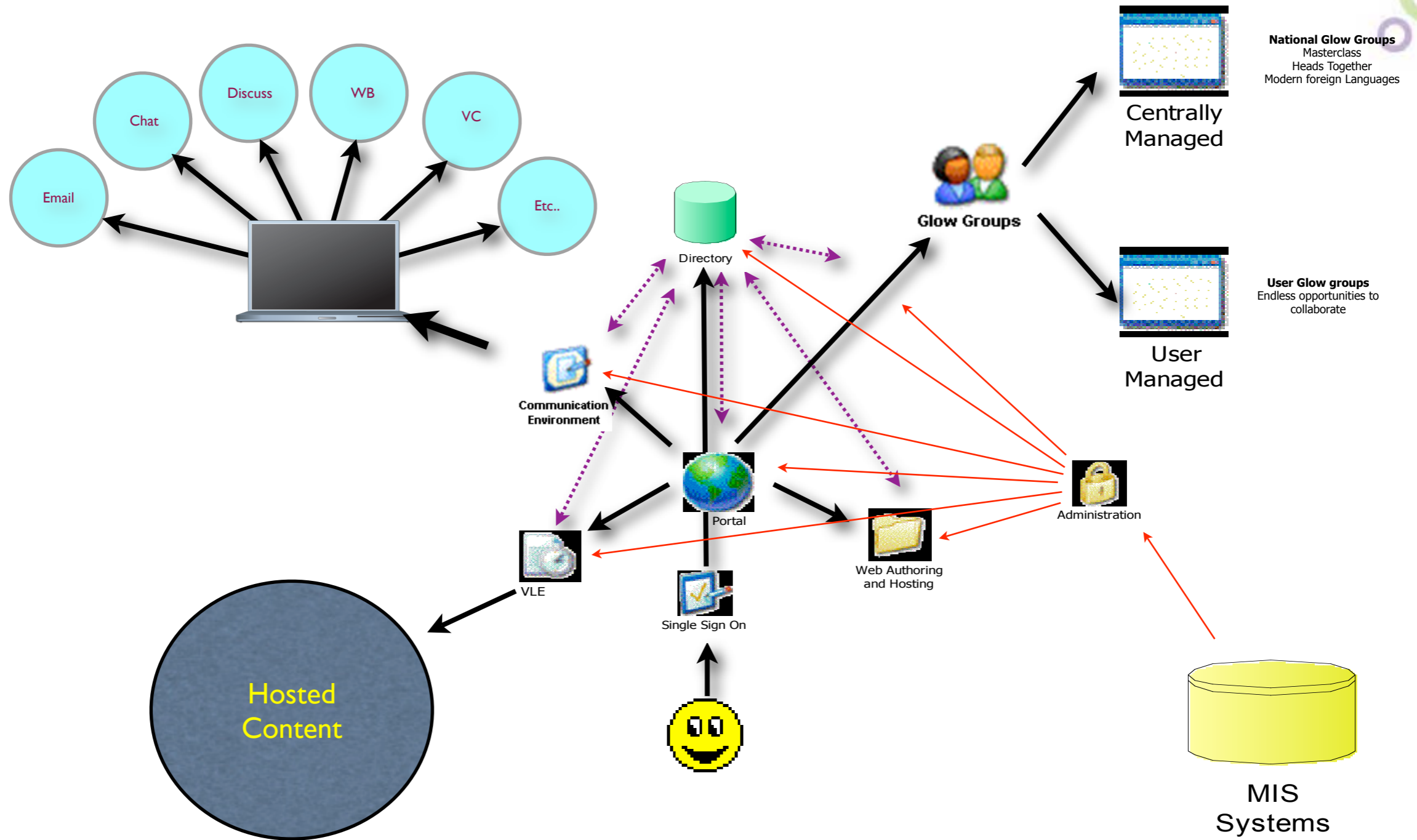
# Interconnect - V2



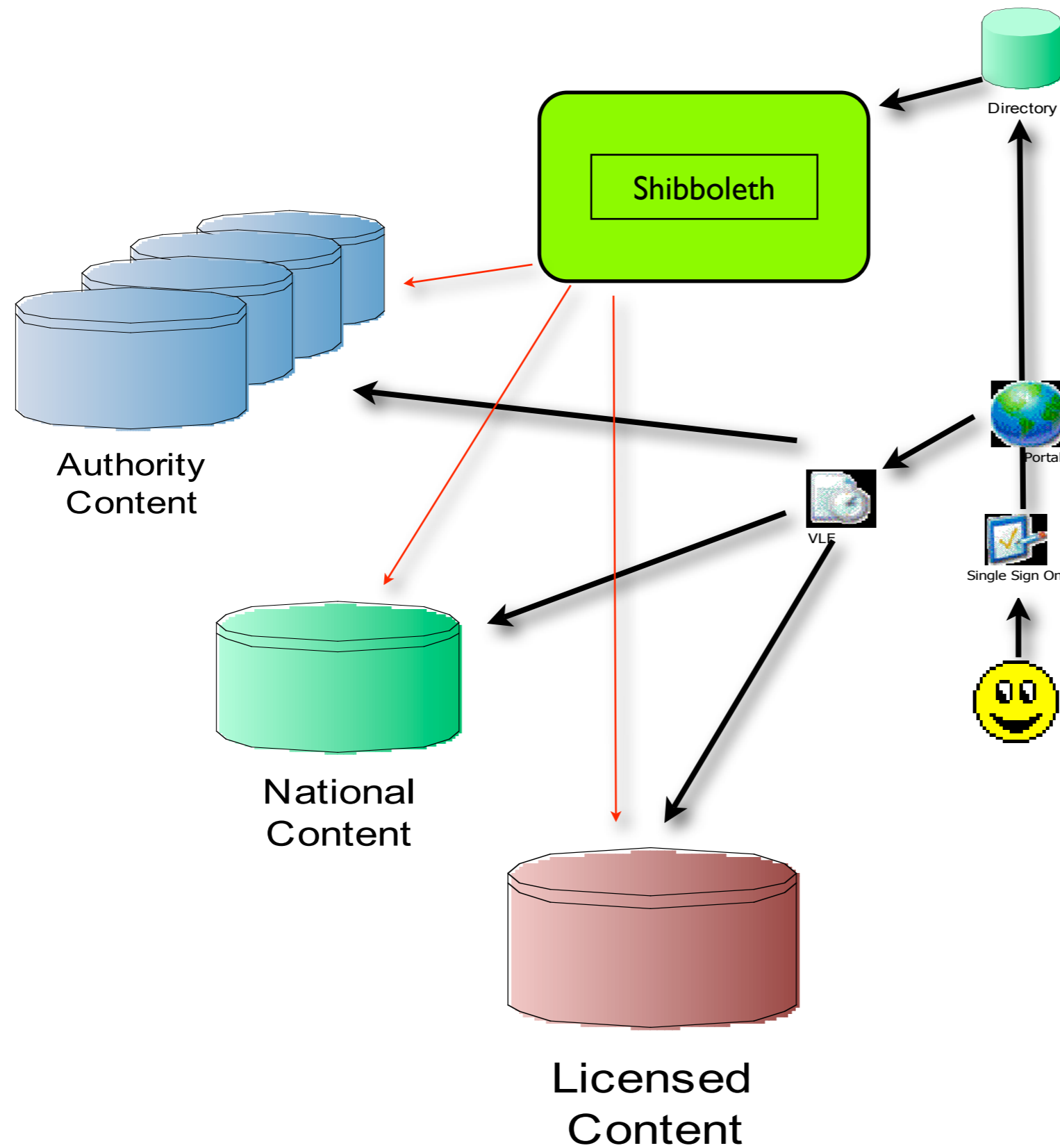
## Current Activity

- Discussion with Scottish Executive about way forward
- Possible partner working with Improvement Services
- Aim to get new provision in place by end January 2008
- Recognize that this is key infrastructure for supporting Glow
- Acknowledge diversified use of the Interconnect
- Will have to come back to LAs when actual design and procurement work starts in earnest.

# Glow - Internal



# Glow and External Content



# Glow - Progress with Pilots



March 06

## Phase 0 (complete)

- 28 of 32 LAs
- DX only

June 06

## Portal Only Pilot (complete)

- No directory or authentication service
- 3 LAs
- first use by pupils, teachers and administrators

October 06

## Phase 1 ( complete )

- 8 LAs and 600 Mentors
- Portal Plus Authentication and Glow Groups

March - May 07

## Phase 2 (complete)

- 13 LAs and 600 Mentors
- Collaborative - Chat, Glow Meet, Glow Groups, SFT, Video Streaming and Web Hosting

# Glow - Progress with Pilots



**June 07**

## **Phase 3 (current)**

- LA's including pupils and Mentors
- Automatic provisioning of users
- Glow Learn
- Presence (Live Communications Server)
- Instant Messaging (for staff only)

## **Still to come - before September 07**

- UK Access Federation
- Glow Meet - JVCS integration

# Glow - Pilot Problems



- **Firewall Configurations**
- **Bandwidth - school connections**
  - **2Mbps ADSL - 5 - 8 concurrent portal sessions**
  - **aside from Pathfinder Local Authorities, 49% of Scotland schools on 2Mbps or less.**



# Glow - Full Service



**Formal Launch of production service  
at the Scottish Learning Festival - 19th  
September 2007**

# Glow Meet and H.323/H.320



## Facilities of Glow Meet

- Desktop Video/Audio Conferencing
- Shared White board
- Cross Platform Application Sharing
- Localized chat tool
- H.323 Gateway - for connecting external Video/Audio only end points - via JVCS booking service.



# Glow Meet and H.323/H.320



## Adding H.323/H320 into a Glow Meet Room

- The owner of the Glow Meet room can invite a guest participant
- External end points can only be connected via JVCS
- Glow room needs to be registered on JVCS as a H.323 end point with a E.164 number

# Glow Meet and H.323/H.320



## Invitation

Include the following text in an e-mail to the people you wish to invite.

This is a link to enter the e-meeting room "NewGold3":  
<URL:http://mvc.glow.ltscotland.org.uk:8000/launch.jsp?sid=29>

## E164

The e-meeting room is assigned the following E164 number for calling into this session.

E164	GK
00440233237766	212.219.202.181

## Dial out

[View Active Calls](#)

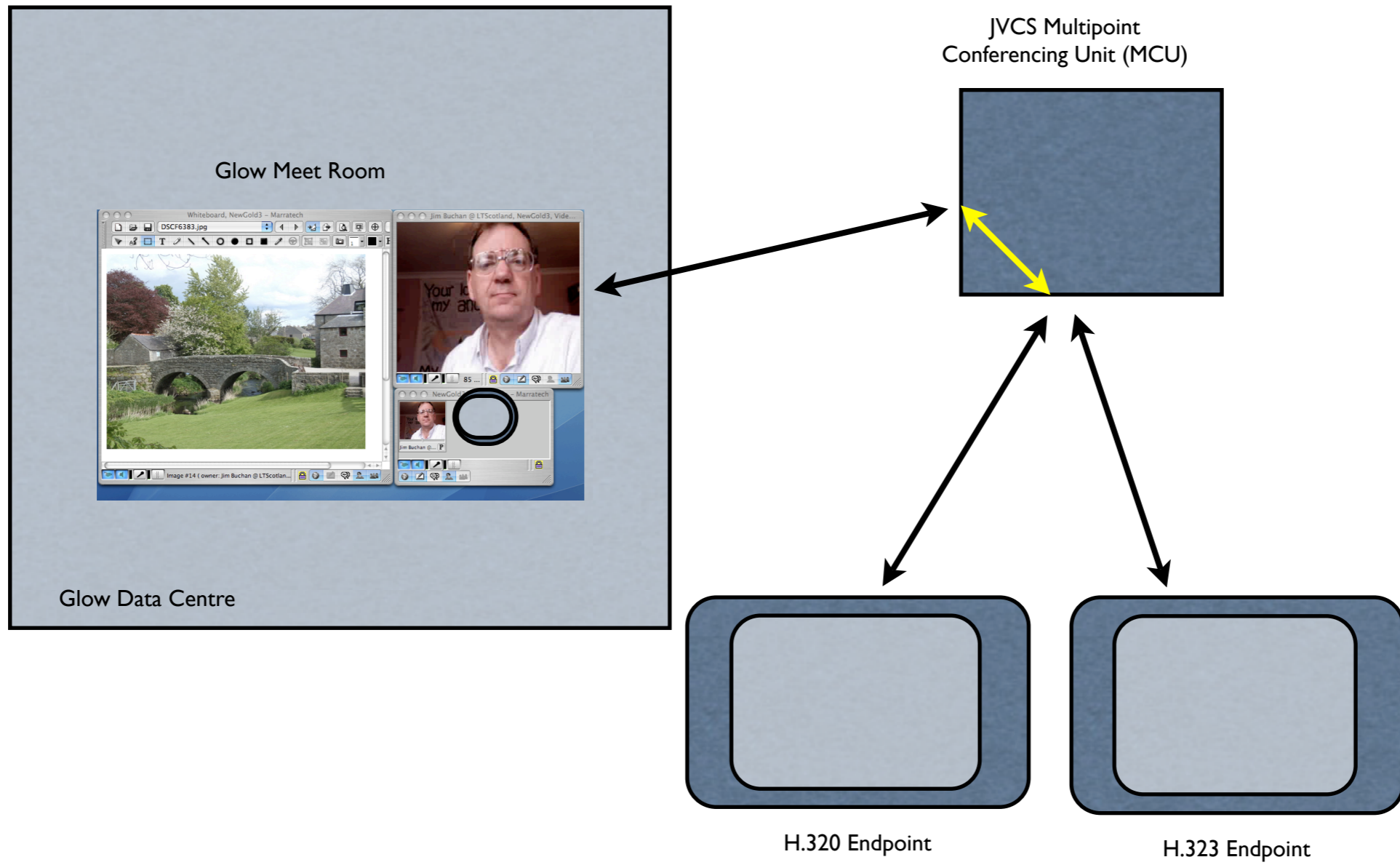
Place a call to a landline, mobile or IP telephone, or a video conferencing device, from within the telephone number, SIP address or H.323 address and choose the appropriate line.

Phone number

Line  [Show line descriptions](#)



# Glow Meet and H.323/H.320



# Glow Meet and H.323/H.320



## Glow Group Owner

- Sets up the Glow Meet room
- Sets up the JVCS multipoint booking
- The room owner is responsible for external (none Glow Authenticated) participants
- Existing Local Authority/School H.320 and H.323 end points are considered to be external and must be registered with JVCS to achieve this.
- E.164 numbers need to be allocated see <http://www.ja.net/school/vc> for details.

# CDI and Pre-positioning



- **Placing Broadband assets on school CE's**
- **Recent/Current work - Virtual Work Experience, Mothership, Espresso, Clip Bank, Highland Podcasts**
- **Benefits - less congestion on upstream links**
- **It is likely that there will be more**
- **Need for additional disc capacity on school CE's**



# Schools - Bandwidth



- Limited bandwidth was identified to be a source of concern during the Phase 1 pilot
- ADSL (2Mbps - 20:1 ratio) - only 5 - 8 concurrent portal sessions were possible
- Tests were done and the situation has been monitored during Phase 2.
- Where current limits exist it is essential to manage expectations to provide an acceptable user experience.
- LA local infrastructure stats have been collected and analyzed - considerable percentage of school are on 2Mbps and less

# LA Infrastructure Knowledge Base



- **System will be Web Accessible, similar to the Becta one**
- **LA's will own their own records and can update them as necessary**
- **System will provide ongoing analysis about school connectivity**
- **LA staff can see how their provisions compare to the 'national' picture**
- **Scottish Executive can have access to the summary data for planning purposes.**
- **Product at early Beta stage - will look for LAs to test the product soon.**



# Questions?



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