MASSACHUSETTS INSTITUTE OF TECHNOLOGY

HAYSTACK OBSERVATORY

WESTFORD. MASSACHUSETTS 01886

Telephone: 978-692-4764 *Fax:* 781-981-0590

24 June 2005

TO: Distribution

FROM: Alan Whitney

SUBJECT: 16 May 2005 e-VLBI telecon summary

Attendees:

Bill Fink, Paul Lang, Bill Wildes – GSFC

Tom Lehman – ISI-E

Jerry Sobieski, Chris Tracy – MAX

Terry Gibbons, Russ Roberge – Lincoln Lab

Kevin Dudevoir, Hans Hinteregger, Chet, Ruszczyk, Jason SooHoo, Mike Titus, Alan Whitney – Haystack Observatory

This telecon is one of an ongoing series of telecons to prepare for 10 gigabit/sec e-VLBI demonstrations between NASA GSFC and MIT Haystack Observatory using a combination of network facilities including all or part of Glownet, Bossnet, ISI-E, SuperNet, Max and GSFC/HECN.

ACTION ITEMS ARE HIGHLIGHTED IN RED.

Haystack

Kevin reported Haystack is in final stages of re-locating all switches into the Network Distribution Room – pretty much done.

Lincoln Lab

No changes.

Ray Express at LL

Chris reported that initial diagnosis of problem in Ray Express was fan controller, but now doesn't seem to be the case. Still working on it.

DRAGON and EGAE

Chris reported getting DRAGON/HOPI network interactions defined and organized. Currently not good connectivity Haystack-to-GSFC, but should get settled in next few weeks.

Next step is to re-arrange configuration at Eckington where Bossnet ties into DRAGON. Will also re-establish the high-speed connection between Haystack and GSFC. Tom requests temporary swap of Haystack M10 router GigE card (with CCC technology) with one from DRAGON that does have CCC. This was approved.

After next round of configurations, Haystack should have web interface to request a dedicated setup/teardown of Layer 2 circuits between GSFC and Haystack, for example. Also will be able to connect to Abilene, etc.

GSFC

Paul reported no changes. Should be ready to go as soon as links are ready across DRAGON.

Network diagrams

Alan has updated the e-VLBI network diagrams with the new configurations at Haystack, but detailed configuration of DRAGON/MAX is not yet available. DRAGON folks will make such a diagram available as soon as they know details of their configuration. Even hand-drawn diagrams are acceptable.

Superglide workstation

Tom believes 'superglide' workstation is sitting powered-off at LL. Will leave it there for time being until clear it is not needed.

<u>Raptors</u>

Chris has been testing Raptors at MAX. Raptor is sending two new updated units to replace current units. Preliminary testing puts the Raptor RAS format through the Movaz units succeeded (did 1Gig iperf test), but some concerns about stability. One of current Raptor boxes will no longer boot.

10Gig from DRAGON to Haystack

Haystack has received a proposal from Bob Yates of Raptor to upgrade the DRAGON-to-Haystack link to 10Gig. ATDNet has done 10Gig through Bossnet (but only using forward-error-correction), but there is concern whether Glownet can support 10Gig. Movaz transponders are good to 70-80km without dispersion compensation, but will need compensation for longer runs. Would be nice to use single wavelength all the way from Haystack from DRAGON, but not clear this is possible.

Jerry indicated that the Cisco 1500 is actually made by a German company, ADVA, and that ADVA might have 10Gig-compatible components available, even though Cisco does not.

EGAE

Chet reported he is coming up to speed on EGAE – coordinating with DRAGON, extending EGAE to VSI-E, and what other features can be added for adaptiveness. Plan is for Chet to visit DRAGON folks for a couple of days to coordinate plans.

Bossnet schedule

Tom reported that the Bossnet calendar is back up and operational. Everyone should try to use this.

NyAlesund connection

NASA brings data from Spitzbergen Island at 79 deg N, west of Norway at OC-3 to NYC. NASA would also like to use this link for e-VLBI, but project still has quite a bit of work to do to make the e-VLBI application active. Haystack is working with NASA.

Next telecon

Next telecon is scheduled for Monday, 6 June 2005 at 2pm EST.

cc: Steve Bernstein, LL

Jim Calvin, LL

Rick Larkin, LL

Lorraine Prior, LL

Peter Schulz, LL

Leslie Weiner, LL

Herbert Durbeck,

GSFC

Bill Fink, GSFC

Lee Foster, GSFC

Pat Gary, GSFC

Andy Germain, GSFC

Chuck Kodak, GSFC

Kevin Kranacs, GSFC

Paul Lang, GSFC

Aruna Muppalla,

GSFC

Mary Shugrue,

GSFC/ADNET

Bill Wildes, GSFC

Steve Bailey, GSFC

Dan Magorian, UMCP

Tom Lehman, ISI-E

Jerry Sobieski, MAX

Chris Tracy, MAX

Guy Almes, Internet2

Charles Yun, Internet2

Richard Crowley,

Haystack

Kevin Dudevoir,

Haystack

Hans Hinteregger,

Haystack

Arthur Niell, Haystack

Joe Salah, Haystack