

BCN ADVISORY COUNCIL
April 27, 2006

The following questions were asked by BCN Advisory Council Members and responses provided by the Department of Administration, Division of Enterprise Technology:

1. Does the contract require *Multicast support throughout the BCN*? If so, when will this be in place?

The BCN does support multicast throughout the BCN. At BCN's Layer 2 sites, the BCN automatically passes multicast traffic. This functionality will be activated for Layer 3 sites within a customer's VRF when an application need exists. To date, DOA is not aware of any customer application requests for multicast to be activated at Layer 3 sites.

2. Does the contract require either *Layer 2 or layer 3 Internet transport use /support*? Are you aware of any services that can't be supported due this situation, such as OSPF? Are you aware of any added work that customers will be responsible for due to a lack of layer 2 support?

The contract did not require Layer 2 connections at all customer premise sites. The contract requires Ethernet handoffs for all vendor managed services; therefore, the vendor may provision each site as either Layer 2 or Layer 3. In some areas of the contract, AT&T described how service would be provided differently if the connection was Layer 2 vs. Layer 3 (eg; 9.1.15)

All services provided by WBAA are available statewide, and we are not aware of any services that cannot be supported at Layer 3 sites. BCN is required to support OSPF, and WBAA stated that it would transit over BCN in the following section:

6.6.11 The state requires support for BGP, OSPF and IS-IS when delivering traffic to an alternate ISP.

WBAA has read and will comply. The BadgerNet Converged Network will serve as a transport network using MPLS as the underlying technology. For Internet service, the routers supporting the backbone network will not participate in routing protocols directly with end sites but rather will simply act as transport for the IP traffic between the end sites. BGP, OSPF, and IS-IS traffic is IP traffic and will transit over the BCN.

WBAA did not plan on participating in OSPF at the customer site; however, DOA and WBAA have requested WiscNet's participation in testing such a configuration. We look forward to cooperatively working together to

develop final configurations for OSPF functionality, because we understand this functionality is desired by WiscNet.

3. Does the contract require *access to the BCN Web Portal* and if so, by when? What is the status of the BCN Web Portal?

From the Badgernet Solicitation Response:

Section 8 of the BCN Solicitation requires the vendor to provide a shared common database for DOA, the end customer, and the prime contractor. The BCN Web Portal has been in production since October. Most functionality of the web portal has been delivered, but WBAA continues to enhance the tool upon mutual agreement.

8.1.1 A web based service order application must be provided by the prime contractor prior to the conversion of the network.

The WBAA has read and will comply. The WBAA will work with the State and customize a web portal for multiple applications including service order submission. The web portal is based off of an existing web portal application and is being customized to be specific to the BCN application. The State of Wisconsin's web portal will be customized, tested, and operational before WBAA begins converting sites to the new BadgerNet Converged Network. The web portal will be used by WBAA and the State of Wisconsin to access and share information during network migration and beyond. Customers currently have access to the portal and can view information for their sites.

4. Does the contract require that AT&T provide any or all *ISPs read-access to BCN routers*? If so, by when, and is this being done?

The contract does not require AT&T to provide any ISP with read-access to BCN routers.

9.1.17 UW network engineers desire read-only access to the BadgerNet converged network core routers.

The WBAA has read and will comply. Restricted, read-only access can be provided to BCN core routers. This will provide for command line interface access. Through this read-only access, the State and UW will be able to view interface status and statistics, routing table information (including multicast state), and certain hardware information such as CPU and memory utilization. Access to information that may be considered proprietary will not be provided, this includes, but is not limited to, router configuration. The security and availability of the network will always take priority and the WBAA will

reserve the right to, at any time, remove access previously granted to the tools or systems providing the BCN service to ensure the highest availability of the BCN.

5. What are the *SLA's in the contract*?

The SLAs in the contract are attached in a file titled “Final Attachment C – SLAs”. Attachment C details the SLAs in the contract. Associated remedies will be identified when the conversion is completed.

6. Are there performance guarantees or is there language related to measurements such as up time, latency, packet loss (.999 vs .0999%), response time?

The SLAs address network availability, service availability, and response times. The contract requires latency and resolution specifications for managed video service as follows:

6.7.14 The H.264 video solution must have less than 225 milliseconds of latency from end-to-end. That is, the time taken to encode, transport and decode the video stream can be no more than 225 ms. Lower latency is more desirable.

6.7.16 Screen resolution for the H.264 codec solution must support SIF (352x288) 4SIF (704 x 480) and PC screen resolutions of SVGA (800 x 600) and XGA (1024 x 768).

6.7.17 The H.264 codec must be able to support 30 frames per second.

7. Does the contract differentiate between deployment or development and production mode? If so, how is production mode defined and what are the differences?

The contract defines the conversion time period as commencing on the date of AT&T’s contract signature and ending when the last customer site has been converted. The major difference is that SLAs become effective post-conversion.

8. *What are the contract provisions for transitioning to a successor network or contract?*

This topic is addressed in Section 13.17 of the BCN Solicitation as follows:

13.17 Transition of Services

Upon expiration or any earlier termination of the Services or any portion of the Services under this Agreement, prime contractor shall continue to provide the State of Wisconsin the services in accordance with the direction of the state during the applicable transition period. In addition, Prime contractor shall take all steps requested by the state, including, without limitation, providing service

design documents to assure the efficient transfer of Services to the state and another service provider. Prime contractor will cooperate with the state's efforts to transition to another service provider.

The WBAA has read and will comply.

9. Are there contract provisions for ICS to bridge managed video services?

The contract does not require ICS to perform bridging services; however, it does require AT&T to provide the connectivity between ICS and the BCN managed video network. Below is the contractual reference from 6.8.2 of the BCN Solicitation:

This MCU capability requires interconnectivity to the University of Wisconsin's Instructional Communications Systems (ICS) at 702 Langdon Street, Madison, Wisconsin. There are existing bridge resources that ICS has offered to BadgerNet. The state requires a 20 Mbps circuit provisioned for managed video service terminating at ICS. Codecs at the ICS end are not required as the circuit will terminate directly into the ICS MCU. The cost of the circuit will be paid for by the state allowing BadgerNet users to connect to the state side of the ICS MCU without charge. Off-net customers can contact ICS to arrange for a port on the Off-Net side of the MCU. The cost associated with the Off-Net portion of the service will be billed by ICS to the owner of the event (either the On-Net or the Off-Net customer).

DOA is responsible for establishing policies for the use of the BCN scheduling system and MCUs. DOA is currently working directly with ICS to review the policies and ICS' use of the BCN MCUs.

10. *What are the extension provisions/costs if the current BCN contract has to be provided past the end date of the contract?*

The State may renew the BCN contract, at its sole discretion, for up to five (5) additional twelve (12) month periods with all the same requirements, terms, conditions, and pricing. Of course, DOA always attempts to renegotiate contract extensions with improved conditions and pricing.

11. If there are capacity constraints (hypothetically the gateways/mcu's), how will those be resolved and who develops that guidance? To sketch a scenario, if there are more requests than available sessions for a gateway, would precedence go in order of request or managed vs. unmanaged video? My example pertains to videoconferencing, but I'm interested more broadly in resource allocation protocol on the facility.

There is not a single response to this question; however, the State of Wisconsin was very careful to include most upgrades as a vendor requirement of providing a managed service. For example, if the core or

aggregation network require additional capacity, AT&T is responsible for providing the upgrade at no additional cost to the State of Wisconsin. If hardware or software changes are required to provide the specified services, AT&T is required to provide the upgrades at no additional cost to the State of Wisconsin. The State of Wisconsin required specific MCU port capacity in the contract; therefore, any increased MCU capacity would need to be negotiated between AT&T and DOA as a contract modification.

12. What specific provisions exist to discuss adding or modifying services to accommodate emerging customer needs over the life of the contract?

The BCN Solicitation (8.5.9, 8.5.10, and 8.5.11) requires AT&T to conduct an annual technology audit with DOA to determine if changes are desired. Additionally, these contract sections require AT&T to use commercially reasonable efforts to accommodate any additional features, functions, or equipment configurations requested by the State of Wisconsin.

8.5.9 The state requires a technology audit on an annual basis to determine if changes are required.

WBAA has read and will comply. We envision working collaboratively with the State of Wisconsin to continually evaluate your current and future needs, technology options, and network statistics to ensure the BadgerNet Converged Network provides the necessary platform for Wisconsin's educational and government entities. More frequent review sessions would be used to analyze network conditions and discuss projected bandwidth requirements. Annual audits would be beneficial for strategic review of technologies and how they could be used to help the State of Wisconsin meet future requirements.

8.5.10 The state requires that the Prime use commercially reasonable efforts to support any additional features or functions that the state may request.

WBAA has read and will comply. The WBAA will use reasonable efforts to support any additional features and functions that are requested by the State.

8.5.11 The Prime will use commercially reasonable efforts to support any additional equipment configurations that the state may request.

The WBAA has read and will comply. The WBAA will use reasonable efforts to support additional equipment configurations requested by the State.

13. *Does the contract specify how problem issues should be channeled, or what escalation procedures are, or is that something that DOA determines?*

The BCN contract specifies that the State of Wisconsin may escalate an issue at any time for any reason within AT&T's organization. AT&T is

required to provide DOA with their current escalation procedures and management organization chart, including contact names and numbers, as often as changes occur, but minimally at least quarterly. DOA determines escalation procedures for all end users of the BadgerNet Converged Network.

Section 8.3 Repair Service in the Final Solicitation covers the details of problem resolution and escalation.

14. Does the contract specify what *customer (DOA, WBAA, etc) roles* are and how they are *defined*?

DOA needs additional clarification in order to answer this question.