

1.5.5 Web Conferencing Services (WCS) [C.2.8.3]

Agencies can meet their need for secure, feature-rich web conferencing service (WCS) through AT&T's Web Meeting. WCS enables Agencies to share applications and data with remote participants in real-time. Web conferences can engage several participants or several hundred, while web broadcasts can reach thousands. Service enhancements will enable Agencies to tailor Web Meeting to meet specific needs as well as preferences.

1.5.5.1 Technical Approach to Management and Applications Service Delivery [L.34.1.5.1]

1.5.5.1.a Approach to Service Delivery

(a) Analyze the service requirements specified in this solicitation and describe the approaches to service delivery for each service.

AT&T's Web Meeting provides the convenience of the Internet, but incorporates multilayered security to protect Government data and ensure that Agency sessions are protected from hackers and other unauthorized individuals. Together with audio conferencing or video conferencing,

"By partnering with leading players in the web conferencing industry, AT&T has established itself as a full-service conferencing solutions provider – enabling it to meet virtually any communication need of its users. ... AT&T continues to set its sights on the future by investing in its IP infrastructure and the integration of its services."

--Frost & Sullivan U.S. Audio *Conferencing* Services Markets

WCS provides participants with a means to share files and work collaboratively. Agencies will have access to all required capabilities and features, but can selectively enable or disable specific elements, such as video or chat.

Web Meeting will enable the Government to increase the productivity of employees, contractors, and industry partners. The service levels and scalability possible with Web Meeting will allow Agencies to expand participation well





beyond the RFP requirement for Figure 1.5.5.1-1 depicts the fundamental elements of web conferencing.

Figure 1.5.5.1-1: Web Conferencing Fundamentals. Agencies can use web conferencing as a stand-alone application or in conjunction with audio conferencing or video conferencing.

AT&T will meet WCS requirements with an approach that provides the Government with service that is feature-rich, reliable, and easily tailored for unique Agency needs. **Table 1.5.5.1-1** outlines key elements of our service delivery approach.

| SERVICE DELIVERY APPROACH | DESCRIPTION |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Global Service | Web-based service: • Availability: • Standard Internet browser • No additional hardware or software |
| Standards Support | Compliance with applicable American National Standards Institute (ANSI), Telcordia, Internet Engineering Task Force (IETF), and International Telecommunications Union (ITU) standards. |
| Registration and Reservation | Reserved or reservationless service: Online registration system for either type of service Customized welcome screen Reservation methods: Internet Reservation System Toll-free call Host and participant authentication: Meeting number Access codes |



| SERVICE DELIVERY APPROACH | DESCRIPTION | |
|---------------------------|-----------------------------------------------------------------------------------------------------------|--|
| Internet | Point-to-point and multi-point WCS: | |
| | Interactive collaboration for as many as 200 participants: | |
| | Real-time editing of PowerPoint, Word, and other applications | |
| | Real-time annotation of documents using the Universal Communications Format (ucf) | |
| | Broadcast for several thousand attendees | |
| | Live audio conference in parallel with web conference | |
| Security | Built-in security: | |
| | Multilayered approach to security | |
| | Browser plug-in | |
| | Internet Security News Network (ISN): | |
| | Streaming web video broadcast, 24x7 | |
| | Latest information about Internet security threats | |
| | Available in 2006 to Agencies and other customers | |
| WCS Support | Features that facilitate participation: | |
| | installation at first use | |
| | Online annotation | |
| | Real-time editing | |

Table 1.5.5.1-1: WCS Service Delivery. Agencies will receive broader and more flexible WCS from a full-service vendor. These enhancements will enable the Government to reach more individuals and securely collaborate with them.

AT&T's Web Meeting is a service that uses three types of servers: web server, meeting manager, and a scalable number of collaboration servers to process WCS session activities. When a Web Meeting expands beyond its original bounds, more collaboration servers are added to the pool to provide dynamic scalability and prevent service interruption.

AT&T's WCS implementation operates in a stand-alone mode or in conjunction with audio or video conferences. Agencies can use WCS to disseminate information and provide cost-effective solutions for education and training; the playback function enables participation by individuals unable to attend live WCS sessions.

1.5.5.1.b Benefits to Technical Approach

(b) Describe the expected benefits of the offeror's technical approach, to include how the services offered will facilitate Federal Enterprise Architecture objectives (see http://www.whitehouse.gov/omb/egov/a-1-fea.html).

As a full-service vendor, AT&T offers a compliant WCS that is feature-rich, secure, and easy to use. Because Agencies can immediately establish



reserved and reservationless WCS sessions, they will achieve service continuity when migrating from FTS2001 to Networx. **Table 1.5.5.1-2** highlights the benefits to the Government, including facilitation of the Federal Enterprise Architecture (FEA), made possible by AT&T's approach to meeting and exceeding WCS requirements.

| SERVICE DELIVERY APPROACH | BENEFITS | FEA FACILITATION |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Global Service | Available worldwide High quality Reliability | Support for multiple lines of business (LoBs) Facilitates inter- |
| Standards Support | Facilitates interaction with wide range of computers and networks | government collaborationAudio and data sharing in |
| Registration and Reservation | Flexibility: Greater numbers of simultaneous participants Host control of participants, privileges and access Ease of use | real time Adherence to Technical Reference Model (TRM) Horizontal and vertical support for multiple LoBs |
| Internet | More responsive service: Faster conference setup Automated invitations Scalability Flexibility | Data sharing in keeping with Data Reference Model (DRM) |
| Security | Security Reliability | |
| WCS Support | Collaboration in real-time No additional equipment or software required Ease of use | |

Table 1.5.5.1-2: WCS Approach. Agencies will have access to worldwide web conferencing that is feature-rich, reliable, and easy to use.

AT&T's Web Meeting adheres to categories of the TRM. Service access delivery is one aspect of the technical standards associated with collaborative information. This refers to external access, exchange, and delivery of capabilities and components for peer-to-peer interaction. Through shared presentation and data resources, this service allows Agencies to increase cross-agency and inter-government collaboration, which is a principal goal of the FEA Program Management Office.

WCS is a horizontal and vertical capability that supports multiple LoB and subfunctions defined by the Business Reference Model (BRM). By translating documents such as PowerPoint slides or Excel spreadsheets into the



Universal Communications Format, participants can electronically annotate the document much as they would a whiteboard presentation in a physical setting. This feature also contributes to cross-agency collaboration, as defined in the Service Component Reference Model (SRM).

The service also uses industry standards, based on a common DRM taxonomy for information sharing. This enables presenters in a Web Meeting to make documents available in their native format and update them with real-time input from meeting participants.

1.5.5.1.c Major Issue to Service Delivery

(c) Describe the problems that could be encountered in meeting individual service requirements, and propose solutions to any foreseen problems.

As a full-service provider and recognized leader in web conferencing, AT&T has anticipated potential risks and taken steps to eliminate or mitigate them.

Table 1.5.5.1-3 lists the leading risks that face any WCS provider and our risk mitigation approach.

| Risk | DESCRIPTION | MITIGATION |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Program | Users unfamiliar with Internet New users of Web Meeting | Intuitive features and controls familiar to Internet or PC users Detailed frequently asked questions (FAQs) and step-by-step help at website (https://www.webmeeting.att.com) Unlimited training on request |
| Network | Increased need for: More WCS sessions Greater numbers of participants Sudden surge in use: Response to crisis or disaster Agency restrictions on travel | Web servers for Internet service Meeting manager servers for application support Collaboration servers to increase support for unplanned increases in participation Scale-up of collaboration servers is automatic and transparent to host and participants. |
| Implementation | Need for service at all times Need for reliable service | 99.99+% availability in 2004 Available 24x7 wherever there is Internet service Plug-in self-installs at first use |



| RISK Security | DESCRIPTION Unauthorized access to Web Meeting Loss or compromise of Agency data Viruses, worms, and other Internet security threats | MITIGATION • Five layers of security built into Web Meeting: • Application Security Layer • User Interface Security Layer • Architecture Security Layer • Firewall Compatibility Security Layer • SSL Encryption • Reference: Section 1.5.5.3.b, Attributes and Values of Service Enhancements • Internet Security News Network (ISN) available from AT&T in 2006 |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Table 1.5.5.1-3: Potential WCS Problems. AT&T has built security and scalability into Web Meeting and the network that supports the service.

The security of each WCS session benefits from the extensive measures taken by AT&T to promote network security. These efforts are described in Section 1.3.1, Approach to Ensure Infrastructure Security, and in other sections of this volume.

"Security experts at AT&T are about to take a page from CNN's playbook. Within the next year they will begin delivering a video streaming service that will carry Internet security news 24 hours a day, seven days a week....

"ISN [Internet Security News Network] is part of a larger research and development effort within AT&T to build new ways of protecting networks from attack. Called the 'Cyber Security Defense Initiative,' the effort has produced a number of technologies that the company is using to strengthen its TCP/IP network.

"Later this month, another Cyber Security technology called Cloaking will go live, making it much more difficult for attackers to hit AT&T's Internet backbone."

-- IDG News Service

1.5.5.2 Satisfaction of Management and Applications Performance Requirements [L.34.1.5.2]

1.5.5.2.a Service Quality and Performance

(a) Describe the quality of the services with respect to the performance metrics specified in Section C.2 Technical Requirements for each service.

AT&T will maintain its leadership in web conferencing by providing the Government with the service levels depicted in **Table 1.5.5.2-1**.





| KEY PERFORMANCE INDICATOR (KPI) | SERVICE LEVEL | PERFORMANCE STANDARD (THRESHOLD) | PROPOSED SERVICE QUALITY LEVEL |
|---------------------------------|------------------|----------------------------------|--------------------------------|
| Availability | Routine | 99.7% | |
| Time to Restore | Without Dispatch | 4 hr | |
| | With Dispatch | 8 hr | |

Table 1.5.5.2-1: WCS Performance Metrics. Agencies will receive service that meets or exceeds the requirements for two of the WCS KPIs.

1.5.5.2.b Approach to Monitoring and Measuring Performance

(b) Describe the approach for monitoring and measuring the Key Performance Indicators (KPIs) and Acceptable Quality Levels (AQLs) that will ensure the services delivered are meeting the performance requirements. AT&T continuously monitors service levels for web conferencing and makes performance data available to customers. **Table 1.5.5.2-2** outlines how AT&T will monitor and measure KPIs for WCS.

| KEY PERFORMANCE INDICATOR (KPI) | AT&T TeleConference Services Production Maintenance Organization (PMO) measures availability worldwide by calculating uptime of Web Meeting resources. The PMO: Gathers service statistics from the web conference service system logs and trouble tickets Loads statistics into analysis systems Calculates grade of service, based on time to restore (TTR) minutes as a percentage of total minutes in a given month | |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Availability | | |
| | Agencies will have access to this data through monthly reports | |
| TTR | PMO derives this calculation from: Time to restore reported through Web Conference Services Ticketing System: Trouble ticket establishes date and time of outage. Period of the outage ends at date and time AT&T PMO verifies that service has been restored. Time to restore is calculated as (Time ticket closed – Time Ticket Open). Time to restore report to Government, based on root cause analysis TTR calculations, as well as individual WCS tickets, are reported to Government. | |

Table 1.5.5.2-2: Monitoring and Measuring WCS Performance. AT&T closely tracks WCS performance metrics and provides analyses and reports to the Government.

AT&T's performance on these AQLs will be captured by the processes described above and made available to designated Agency staff through email, accompanied by spreadsheet and graphic displays.

The PMO uses availability and several internal metrics for sufficient WCS capacity. Per Section 1.5.5.4.4, AT&T expands its web conferencing capacity when usage approaches 70 percent to provide for growth and surges in demand.



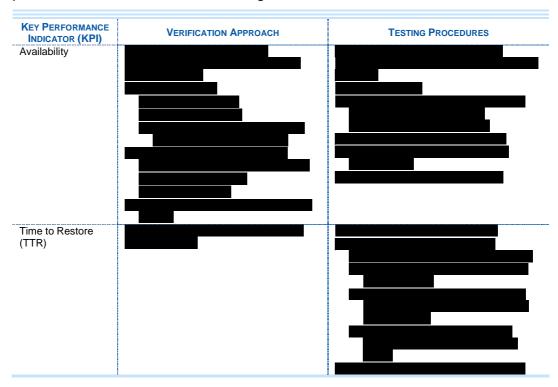


1.5.5.2.c Approach to Perform Service Delivery Verification

(c) Describe the offeror's approach to perform verification of individual services delivered under the contract, in particular the testing procedures to verify acceptable performance and Key Performance Indicator (KPI)/Acceptable Quality Level (AQL) compliance.

The first time WCS is provided through the Networx contract, AT&T will verify performance against each KPI to certify that service performance complies with the AQL. The AT&T TeleConference Services Production Maintenance Organization (PMO) monitors audio and web conferencing services 24x7 and regularly conducts proactive testing. The PMO verifies data conference access at regular intervals and after every production restoration and change.

The PMO and extended technical support team will remotely access key infrastructure elements to verify normal operation. Onsite technicians will be dispatched to the sites of web conferencing clusters, teleconference bridges, and support systems. **Table 1.5.5.2-3** summarizes the verification and testing procedures for the web conferencing KPIs.







| KEY PERFORMANCE INDICATOR (KPI) | VERIFICATION APPROACH | TESTING PROCEDURES |
|------------------------------------|-----------------------|--------------------|
| | | |

Table 1.5.5.2-3: Service Delivery Verification. KPIs are closely monitored through a comprehensive verification and testing process that certifies service performance with respect to WCS AQLs.

The service verification process is described in greater detail in Section 1.3.2.d, Approach to Perform Service Delivery Verification.

1.5.5.2.d Performance Level Improvements

(d) If the offeror proposes to exceed the Acceptable Quality Levels (AQLs) in the Key Performance Indicators (KPIs) required by the RFP, describe the performance improvements.

The Government will benefit from contractors that adhere to higher standards of performance.

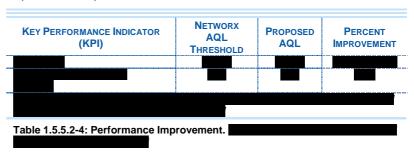


Table 1.5.5.2-4 specifies the higher standards that AT&T proposes for WCS.

AT&T will provide the Government with superior WCS quality and reliability.

1.5.5.2.e Approach and Benefits for Additional Performance Metrics

(e) Describe the benefits of, and measurement approach for any additional performance metrics proposed.

The KPIs defined by the Government for WCS will provide a comprehensive assessment for service verification and performance monitoring. Therefore, AT&T does not propose additional KPIs.

1.5.5.3 Satisfaction of Management and Applications Service Specifications [L.34.1.5.3]

Because AT&T devotes substantial resources to web conferencing, Agencies that select AT&T to transition from FTS2001 will gain immediate



service continuity. The high quality and reliability of AT&T's Web Meeting will allow the Government to tailor its use of WCS to achieve effectiveness as well as economy.

1.5.5.3.a Service Requirements Description

(a) Provide a technical description of how the service requirements (e.g., capabilities, features, interfaces) are satisfied. WCS adds a visual dimension to audio conferences, presenting documents, diagrams, and illustrations. Used with or without audio conferencing, WCS sessions provide two modes of service: presentation and collaboration.

1.5.5.3.a.1 Technical Capabilities and Features

AT&T will meet all WCS requirements. The variety of technical capabilities and features, seamlessly integrated, will enable AT&T to exceed the Government's expectations for this service. **Table 1.5.5.3-1** presents capabilities and features of AT&T's Web Meeting.

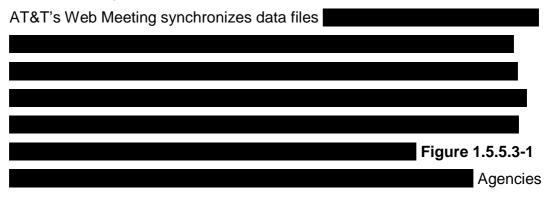
| SERVICE REQUIREMENTS | DESCRIPTION | BENEFITS TO AGENCY |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Animation | Presenters can insert and display animation in PowerPoint presentations. | Agencies will gain substantia benefits from Web Meeting: |
| Application sharing | Hosts can share control of a presentation with attendees. | High quality |
| Attendee count | Attendees are alphabetized and counted in the participants' window of the host's computer. | Reliability Security |
| Chat | Attendees can send an instant message (IM) to the entire audience or specific participants. | Worldwide availability Flexibility |
| Desktop sharing | Participants can share applications residing on their PC. | Fase of use |
| Document sharing | Hosts can enable attendees to annotate (but not edit) a document. | No additional equipment |
| Entry and exit tones | Host can enable tones to sound when an attendee enters or exits the meeting or sends an IM. | or software required Collaboration in real time |
| File transfer | Participants can upload or download data files. | Highly responsive service |
| Live edits | If authorized, attendees can edit or add pages to an existing presentation in a Web Meeting. | Scalability. |
| Streaming audio and video support | The service can embed and display Flash and other streaming audio or video. | |
| Operator support desktop trouble-shooting | Support personnel can access a participant's PC (with the owner's approval) to analyze and resolve problems with support applications. | |
| Polling and voting | Hosts can create online survey, tabulate results, and share them with participants. | |
| Record and playback | Hosts can record audio conferences and Web Meetings on their computer for subsequent playback. | |
| Video | One-way streaming video lets attendees see the host, presenter, or document under discussion. | |





| SERVICE REQUIREMENTS | DESCRIPTION | BENEFITS TO AGENCY |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Web touring | Presenters can take attendees on a tour of various websites and provide commentary through an audio conference or streaming audio. | |
| Whiteboard | Presenters and authorized attendees can collaborate with an electronic easel to record meeting notes, construct charts, or produce sketches. | |

Table 1.5.5.3-1: WCS Features and Benefits. Conference hosts can broadcast to thousands of WCS attendees or work collaboratively with smaller numbers.



can provide streaming audio or video presentations that are synchronized with data files that reside on local as well as remote computers.

Presentation mode is designed for the host who wants complete control of a one-to-many conference. Presentations on the host's PC can be viewed on the Internet by attendees across the globe. In addition, hosts can navigate the Internet and share websites with attendees in their visual presentation.

Collaborative mode allows the host and attendees to work together on documents, enabling annotations and on-the-spot revisions. Agencies can use these services with or without a reservation.





Figure 1.5.5.3-1: Synchronized Streaming and Media Files. Presenters can draw on many resources for shared content during AT&T Web Meetings.

1.5.5.3.b Attributes and Value of Service Enhancements

| (b) If the offeror proposes to exceed the specified service requirements (e.g., capabilities, features, interfaces), describe the attributes and value of the proposed service enhancements. |
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| Table 1.5.5.3-2 highlights AT&T's multilayered approach to |
| WCS security. |



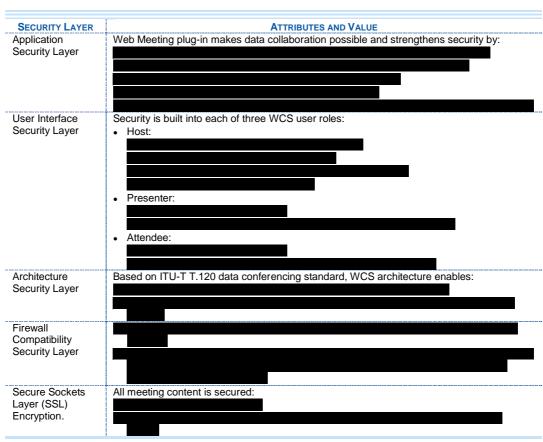


Table 1.5.5.3-2: Multi-layered WCS Security. In addition to network security, AT&T builds security into Web Meeting to safeguard Agency information and data exchanged by participants.

1.5.5.3.c Service Delivery Network Modifications

(c) Describe any modifications required to the network for delivery of the services. Assess the risk implications of these modifications.

Agencies will receive a low-risk solution through AT&T's ability to offer WCS upon contract award with no modifications to our network or operational support systems.

1.5.5.3.d Management and Applications Services Experience

(d) Describe the offeror's experience (including major subcontractors) with delivering the mandatory Management and Applications Services described in Section C.2 Technical Requirements.

"We use it [teleconferencing] to conduct meetings for as many as 100 people. Participants typically download a presentation or view it on the Internet to follow along with the speaker using AT&T TeleConference Service. It's much more effective than just reading the presentation."

> --Bryan Garcia Chief Technologist





AT&T has been providing audio conferencing and web conferencing for customers who demand high quality and broad geographic reach.

"Web conferencing reduces the time and travel costs associated with onsite training and conveniently deepens customers' ability to use the productivity tools we provide. AT&T does an outstanding job of providing us with the kind of reliable, scalable Web conferencing services that make it possible for us to provide our customers with unsurpassed service."

--Philip Polimeno

Director, Corporate Technology Group

Table 1.5.5.3-3 describes three Web Meeting customers that make creative use of the service. For competitive reasons, they are not identified by name. However, their experience is relevant to prospective Networx users.







Table 1.5.5.3-3: WCS Customer Experience. Web Meeting has enabled customers to increase productivity, save time, and reduce travel costs.

The lead time, logistics, and costs of face-to-face meetings will continue to motivate Agencies and businesses to greater use of web and audio conferencing. To make the most productive use of WCS, the Government must have a full-service provider that offers reliable, secure, and flexible service. Improved collaboration with colleagues, travel reductions, and cost savings will provide substantial benefits to Agencies that select Web Meeting.

1.5.5.3.e Approach to Network Infrastructure Management

(e) For Managed Network Services (MNS), describe the approach, process, and considerations for managing a network infrastructure (e.g., FRS, ATMS, IPS, IP-VPNs, CPE) supporting approximately 2000 users, at 25 locations across the United States. Based on the offeror's experience with similar projects, provide a discussion of how the offeror would investigate the requirements, design the solution, implement the plan, and deliver service that meets the Agency's performance requirements.

This requirement is addressed in Section 1.5.6.3.e, MNS.

1.5.5.4 Narrative Responses

Web Meeting will allow the Government to tailor its use of WCS to achieve both effectiveness and economy. Agencies can go beyond the basic requirements and select options that will allow them to "AT&T Teleconferencing Services is one of the world's largest providers of conferencing services. ... AT&T's web conferencing volume has doubled over the last year."

--Wainhouse Research Rich Media Conferencing – 2004 Volume 3, Audio, Video, & Web Conferencing Services

tailor the service to meet specific needs as well as preferences. Because Agencies can immediately establish reserved and reservationless service, they will achieve service continuity when migrating from FTS2001 to Networx.



1.5.5.4.1 Customized Welcome Screen [C.2.8.3.1.4 (2)(b)]

The following Web Conferencing Service capabilities are mandatory:

- 2. The contractor shall provide the following minimum capabilities:
- b. The contractor shall provide customized greeting (or message) screen

The welcome screen

for Networx users

will incorporate

Agency logos and

other elements.

Agencies can also

use the screen to

convey additional

information

concerning

scheduled WCS

sessions and other

Figure 1.5.5.4-1: Customized GSA Welcome Screen.

activities of interest to participants. The sample screen in Figure 1.5.5.4-1

1.5.5.4.2 Browser Compatibility [C.2.8.3.1.4 (4)]

The following Web Conferencing Service capabilities are mandatory:

4. The contractor's WCS shall be compatible with commercially available Internet web browser software packages.

AT&T's Web Meeting is compatible with recent and current versions of:

As updated versions of

this software or new browsers come into general use, we will make any adaptations necessary to provide compatibility.

1.5.5.4.3 Plug-Ins [C.2.8.3.1.4 (5)]

The following Web Conferencing Service capabilities are mandatory:

5. If required, the contractor shall provide the appropriate "plug ins" in order to deliver WCS to the subscriber.





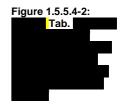
| The first time an individual attempts to use the service, AT&T's Web Meeting |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offers to install the plug-in for WCS sessions. |
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| 1.5.5.4.4 Maximum Conferencing Capacity [C.2.8.3.1.4 (14)] |
| The following Web Conferencing Service capabilities are mandatory: 14. The contractor shall state the maximum available conferencing capacity (e.g. both the number of simultaneous web conferencing participants and conferences) for WCS. |
| For a collaborative meeting, the Agency |
| presentation-only meetings, To remain |
| ahead of demand, AT&T expands its conferencing capacity |
| While the maximum number of |
| simultaneous WCS sessions is necessarily finite, our capacity augmentation |
| effectively mitigates insufficient capacity as a limiting factor. |
| 1.5.5.4.5 Firewall Compatibility [C.2.8.3.1.4 (15)] |
| The following Web Conferencing Service capabilities are mandatory: 15. The contractor shall verify with the Agency that the Agency firewall is compatible with this service. |
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| |
| 1.5.5.4.6 Surveys [C.2.8.3.1.4 (28)] |
| The following Web Conferencing Service capabilities are mandatory: 28. The contractor shall provide the capability to present a survey to all or a random percentage of participants to gather feedback and/or capture customer satisfaction data. |
| Polling and surveys are built into AT&T Web Meeting. |
| |

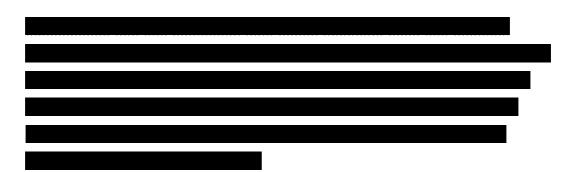




as shown in Figure

1.5.5.4-2.





1.5.5.5 Stipulated Responses

AT&T takes neither deviation nor exception to the stipulated requirements.