

Video Teleconferencing Service (VTS)

The EIS Video Teleconferencing Service (VTS) enables participants at different locations to experience face-to-face meetings without the time and expense associated with travel to a meeting location. The service can be used for video conferencing, distance learning, remote testimony and other virtual collaboration. Participants can instantly share documents and applications, and attendees without video capability can participate via an optional audio conference add-on.

VTS requires an underlying data service such as Circuit Switched Data Service (CSDS), Internet Protocol Service (IPS), Private Line Service (PLS), Virtual Private Network Service (VPNS), or other transport services that delivers connectivity for VTS applications.

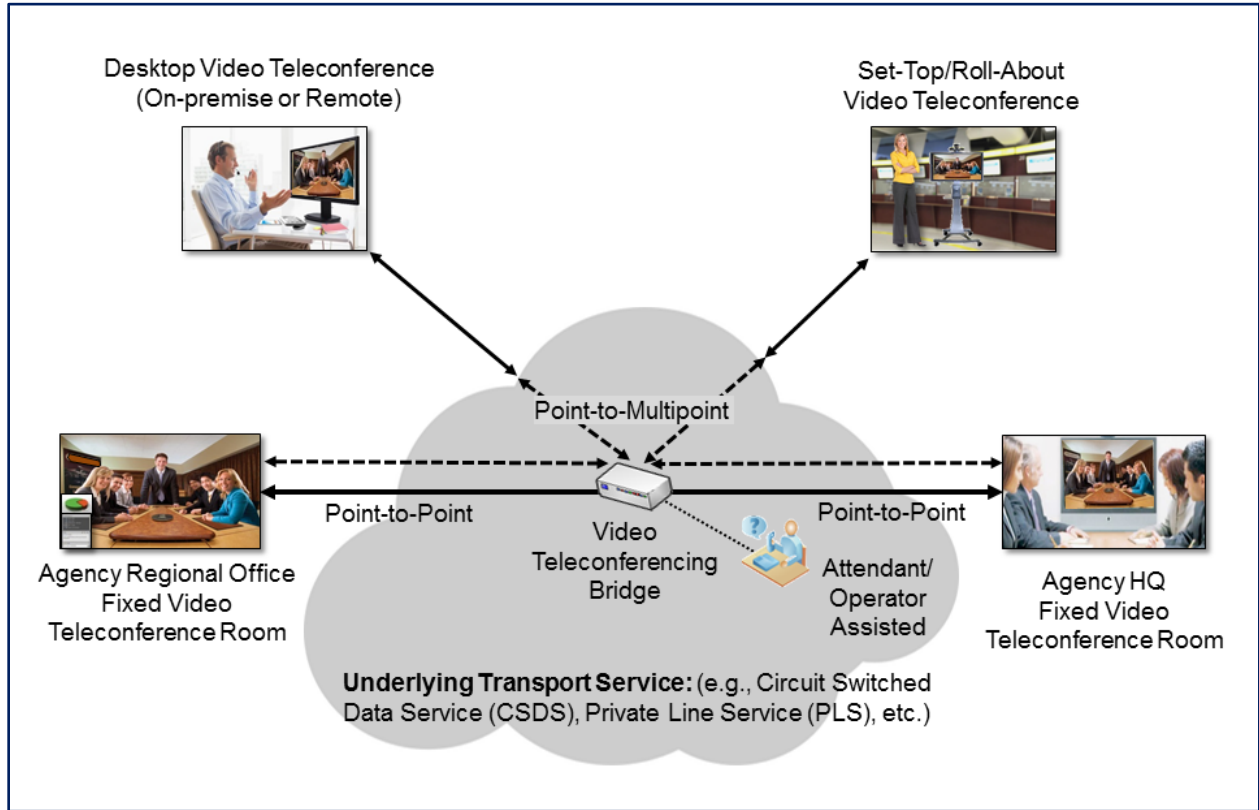
In order to ensure network compatibility, VTS provides appropriate adapters and gateways for coding conversion, video format conversion, rate adaptation, and protocol conversion. Underlying data services may have to be configured to support VTS prioritization and throughput.

Category: Managed Services

Complementary Services Needed: In order to use VTS, the agency would need Access Arrangements, which could be provided by one of the following EIS services or equivalent: Circuit Switched Data Service (CSDS), Ethernet Transport Service (ETS), Internet Protocol Service (IPS), Optical Wavelength Service (OWS), Private Line Service (PLS), Synchronous Optical Network Service (SONETS), or Virtual Private Network Service (VPNS).

Definitions: Please see EIS contract [Section J.12 Glossary of Terms](#) for clarification of technical terms and acronyms.

Figure 1—Video Teleconferencing Service



1. Why an Agency Might Select this Service

- Gives agency personnel the ability to experience face-to-face meetings without the time and expense of traveling to a meeting location.
- Provides an inexpensive means to improve collaboration among agency personnel who work in different locations throughout the U.S. or the world.
- VTS provides a virtual means to broadcast a conference or other event to multiple locations.

NOTE: Agencies considering this service may also want to compare this service with Audio Conferencing Service (ACS) and Web Conferencing Service (WCS).

2. Examples of How VTS Could be Used

All three variations of VTS help an agency reduce or eliminate the time and transportation costs associated with personnel traveling to a conference or meeting location.

- **Desktop video conferencing:** Desktop conferencing enables agency personnel to experience face-to-face meetings from the convenience of their desktops. An agency could use this service to provide specific individuals, e.g., investigators, with video conferencing capability. This function includes the ability to share information from one's PC during the meeting. The conference can be held with or without a reservation.
- **Fixed Room Location video conferencing:** An agency could use this fixed room service to broadcast conferences to one or more remote locations
- **Portable Roll-about Video Conferencing:** Instead of having a dedicated video conferencing room, an agency could use this portable solution to enable personnel to participate in a video conference in any room with an active data jack.

3. Key Technical Specifications

NOTE: This portion of the service guide has been abridged due to space considerations. For full technical details on VTS, please refer to EIS contract [Section C.2.8.8 Video Teleconferencing Service](#).

Table 1—VTS Technical Capabilities

Capability	Description
Simulation of In-person Meetings	Allow participants at different physical locations to simulate in-person meetings and conduct interactive dialogue using point-to-point and point-to-multi-point video teleconferencing arrangements.
Video/Audio Modes	Supports two-way video, one-way video with interactive voice, and/or the instant sharing of various types of documents/data files among VTS participants as part of the video teleconferencing session.
Document Sharing	Supports document sharing (data conferencing) which enables conference participants to interactively view, edit, and share or transfer data files and documents.
Audio Conference Add-on	Provides an audio conference add-on capability to support non-video conference participants in a VTS call.
Teleconferencing Bridge	Provides teleconferencing bridge capabilities.
Dial Modes	Supports the following modes of operation: <ul style="list-style-type: none"> a) Dial-Out mode: A centralized arrangement where the conference bridge operator initiates a call and dials each participant b) Meet Me (Dial-In) mode: Each participant is responsible for individually initiating a call and dialing into the conference bridge. c) Mixed Dial mode: Support a combination of both dial-out and meet me (dial-in) callers
Operator Assistance	Provides the capability for VTS users to request operator assistance to resolve technical issues.
Audio/Video Synchronization	Maintains synchronization between the audio and video signals.
Reservationless Conferences	Allows users to establish a point-to-point VTS on demand without a reservation. Point-to-point VTS includes full-duplex video, audio, and ancillary data transmission between participating locations.

Capability	Description
Multi-point Conferences	Provides VTS multi-point arrangements in conjunction with the contractor's VTS reservation system. The multi-point arrangement has the capability of simultaneously providing VTS to users of a different EIS contractor's network and to users of public or other private networks. During a multi-point conference, the addition of a party to the conference, or the deletion of a party from the conference is indicated by a tone or by a verbal or visual announcement.
Reservations	Provides access to a secure central reservation system to permit authorized VTS users to schedule multi-point video teleconferences.
Video Format Conversion	Provide a video format conversion capability that permits operation between the following: <ul style="list-style-type: none"> a) CODECs which operate in the NTSC video format and CODECs which operate in the Phase Alternation by Line (PAL) video format. b) CODECs which operate in the NTSC video format and CODECs which operate in the Système Electronique Couleur Avec Memoire (SECAM) video format.
Firewall Compatibility	Traverses and successfully interoperates with agency firewalls and security layers. The contractor will verify with the agency that the agency firewall is compatible with this service.
VTS Reporting	Provides VTS reports in accordance with the task order (TO).

Table 2—VTS Features

Feature	Description
Attended Service	Provides call monitoring, roll call, and coordination for a VTS conference.
Verification	Provides pre-testing, registration, and verification that agency-owned equipment operates correctly with the contractor's VTS.
Coding Conversion (Transcoding)	<p>a) Provides transcoding that is compliant with FTR 1080 formats.</p> <p>b) *Provides a coding conversion capability that permits operation between CODECs, all of which use the National Television Standards Committee (NTSC) video format, but none of which support the FTR 1080 standard and none of which use the same encoding/decoding algorithm(s). At a minimum, the service supports the following compression algorithms as needed by the agency: SG3/SG4, CTX, and CTX+.</p> <p>c) *Provides a coding conversion capability that permits operation between CODECs, all of which use the NTSC video format, in which one or more of the CODECs support the FTR 1080 and in which one or more of the CODECs do not support the FTR 1080. At a minimum, the service supports the following compression algorithms as needed by the agency: SG3/SG4, CTX, and CTX+.</p> <p>*NOTE: May not be available from all contractors.</p>
Rate Adaptation NOTE: May not be available from all contractors.	Provides a data rate adaptation capability to ensure that all VTS locations participating in a video teleconference can interconnect with each other at dissimilar data rates.
Security – CUI NOTE: May not be available from all contractors.	Provides transparent and secure VTS communications paths to support Controlled Unclassified Information CUI video communications. The security capabilities are described in the FTR 1080 recommendation.
Security NOTE: May not be available from all contractors.	Classified: Provides transparent and secure VTS communications paths, and supports video information that is categorized as classified (National Security agency type 1 encryption) video communications. The security capabilities are described in the FTR 1080 recommendation

4. Pricing Basics for VTS

Please visit the [EIS Resources Listing](#) and locate the [Basic EIS Pricing Concepts Guide](#) to gain an understanding of EIS pricing fundamentals.

4.1 Access Arrangements

Appropriate access arrangements must be selected for each endpoint. Please visit the [EIS Resources Listing](#) and locate the [Access Arrangements Guide](#) for more detailed information.

4.2 Service Related Equipment (SRE)

- SRE must be chosen based on equipment required at each location. NOTE: SRE uses catalog-based pricing.
- Request that contractor provide pricing for any SRE that would be required, in addition to the agency's existing infrastructure, to deliver the service.
- Please visit the [EIS Resources Listing](#) and locate the [Service Related Equipment Service Guide](#) for more detailed information.

4.3 VTS Price Components

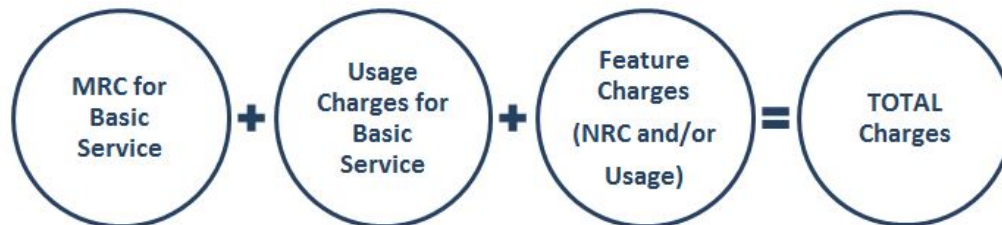
The price structure for VTS consists of the components shown in *Table 3* below.

Table 3—VTS Pricing Components

Component	Charging Unit
Basic Service: Monthly Recurring Charge (MRC)	Dedicated VTS port
Basic Service: Usage	Minute per port
Feature Charges: Non Recurring Charge (NRC)	Per Site Verification Per Conference (for Rate Adaptation)
Feature Charges: Usage	Per Minute—for Attended Service Per Minute—for Security / CUI Minute per port—for Coding Conversion (Transcoding)

Figure 2 below shows how the pricing components in Table 3 are combined to produce the total cost for the service.

Figure 2—This figure shows how the various pricing components in Table 3 would be combined to calculate the total VTS charges. NOTE: One or more of these components may not be needed to price a particular service package.



The charges for the different components in Figure 2 are calculated using details provided in the pricing tables in EIS contract [Section B.2.8.8 Video Teleconferencing Service](#). (Please visit the [EIS Resources Listing](#) and locate the [Basic EIS Pricing Concepts Guide](#) for instructions on using the pricing tables to compute the cost of a service.)

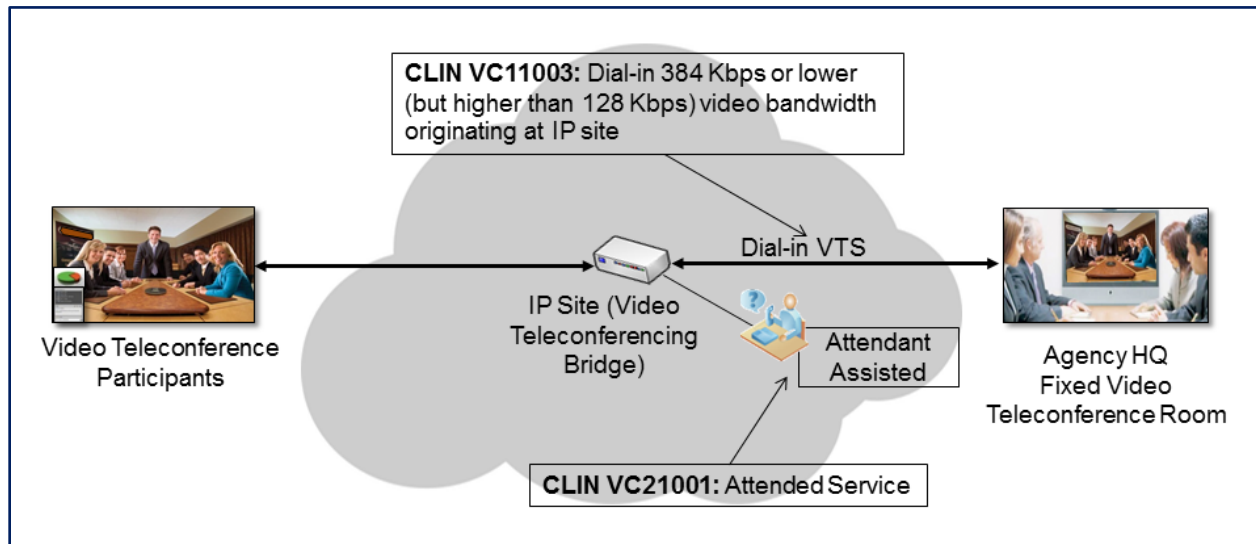
NOTE:

1. Conferences canceled prior to scheduled start time are not billable.
2. After the scheduled start time, all reserved ports and features are billed for the entire reserved duration whether actually used or not.
3. A contractor may offer a custom variation of the service to meet an agency's unique requirements. Such a customization would be identified with a Task Order Unique CLIN (TUC), and would include charges that would have to be added to the components in Figure 2 to determine the total cost of the service.

4.4 VTS Pricing Examples

Example 1—Dial-in VTS originating at an IP site; 384 kbps; Attended Service

Figure 3—Video Teleconferencing Service Pricing Example



Service CLINs

- Choose CLIN VC11003, “Dial-in 384 Kbps or lower (but higher than 128 Kbps) video bandwidth originating at IP site”
- Choose CLIN VC21001, “Attended Service”

Notice that both of the above CLINs are billed as per-minute per-port usage charges. One port is required for each location participating in the video conference. In this example, there are two VTS locations—and two ports—participating in the video conference, each port billing at the billed rate per minute.

These charges are in addition to any applicable charges for the underlying access and transport service used for video teleconferencing.

Service Related Equipment

Request that contractor provide SRE pricing based on equipment that would be needed to deliver the service in addition to agency’s existing infrastructure.

Service Related Labor

Request that contractor propose appropriate labor CLINs and hours mix needed to deliver the service.

5. References and Other Sources of Information

- For more technical details and information on VTS, please refer to EIS contract [Section C.2.8.8](#); for pricing details, [Section B.2.8.8](#).
- For more information on service-related items, please see:
 - EIS contract [Section B.2.10 Service Related Equipment](#)
 - EIS contract [Section B.2.11 Service Related Labor](#)
- Please refer to a contractor's individual EIS contract for specifics on the contractor's VTS offerings.
- For additional EIS information and tools, visit the [EIS Resources Listing](#).
- For guidance on transitioning to EIS, please visit [EIS Transition Training](#) where you'll find several brief video training modules.