



# CSTA extensions for Phase II over Phase I

## Services for Computer Supported Telecommunications Applications (CSTA)

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CSTA Phase II extends CSTA Phase I capabilities in several theme areas. Key additions and changes from CSTA Phase I include the following:

- Input/Output (I/O) Services have been added. These allow establishment, utilization and control of data paths for the transfer of audio, video, textual and other data-media between CSTA objects. New I/O Services include Start Data Path, Stop Data Path, several types of send data Services and other Services as well. These services provide a mechanism for collection of DTMF-encoded signals entered by humans or automatic devices.
- Special Resource Functions (in addition to Switching and Computing Functions available in CSTA Phase I) have been added to the CSTA model. This Function subsumes devices offering specialized capabilities such as speech recording and playback. Voice Units, now supported in CSTA Phase II, represent a particular embodiment of such devices.
- Voice Unit Services have been added. These allow control of basic voice unit functions including message recording and playback, text-to-speech synthesis, message saving and concatenation. Events and cause codes to support these have been added.
- Several new, independent (i.e. do not fall into I/O or Voice Unit Services groups) services. These

Services include Associate Data, Send DTMF Tones, Single Step Transfer and Call Park. These additions reflect response to emerging technologies and practical experience gained with CSTA Phase I.

- Enhancements have been made to Agent State and Call State models as well as underlying CSTA Models. These changes ensure compatibility with new CSTA Services (e.g. I/O Services) and with other evolving international standards. A Voice Unit state model has been added to complement the new Voice Unit Services and Event Reports.
- For existing (CSTA Phase I) Services and Event Reports, new parameters have been added, some parameters have been deleted and the definitions of others have been enhanced and/or clarified. These changes also reflect practical experience, accommodation of the new models.
- Version and capability negotiation functionality have been included in CSTA Phase II via the ASCE mechanism.
- Increased support for ISDN has been added. Enhancements include recognition and use of Device Profiles, Device Classes and sub-addressing in appropriate Service and Event parameters.

Although a goal in developing CSTA Phase II has been backwards compatibility with CSTA Phase I, this has not been achieved completely. Incompatibility has resulted from addition of parameters to support new capabilities in existing Services, changes in the optionality of certain parameters to reflect the needs of newer technologies that require these parameters for their effective utilization, and clarification of the operation of certain Services, particularly in respect to new Call State and Agent State models.