MediaManagement:1 Service

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1 Overview and Scope

This service definition is compliant with the UPnP Device Architecture version 1.0. It defines a service type referred to herein as the *MediaManagement* service.

1.1 Introduction

The *MediaManagement* service enables the feature to set-up a media session on a Telephony Client (TC), under the control of a Telephony Control Point (TelCP). This service provides the following functions:

- Set up a media session to send and/or receive media streams between a TC and a TS. To set up a media session, The *MediaManagement* service provides an interface for a TelCP to negotiate the media capabilities (e.g., codec types, IP address, port number etc.) between a TC and a TS. This ensures a TelCP to select a common set of the media capabilities to be used to send and/or receive media streams between a TS and a TC. After the media session is established, the TC starts sending and/or receiving media streams based on the media chapabilities negotiated between the TC and the TS.

- The mechanism to modify the media capabilities of an existing media session. For instance, if a media session is created for sending and receiving an audio media stream, it is possible to modify the media session for sending and receiving a video media stream.

- The mechanism to terminate a media session.

1.2 Notation

- In this document, features are described as Required, Recommended, or Optional as follows:

  The key words "MUST," "MUST NOT," "REQUIRED," "SHALL," "SHALL NOT," "SHOULD," "SHOULD NOT," "RECOMMENDED," "MAY," and "OPTIONAL" in this specification are to be interpreted as described in [RFC 2119].

  In addition, the following keywords are used in this specification:

  PROHIBITED – The definition or behavior is an absolute prohibition of this specification. Opposite of REQUIRED.

  CONDITIONALLY REQUIRED – The definition or behavior depends on a condition. If the specified condition is met, then the definition or behavior is REQUIRED, otherwise it is PROHIBITED.

  CONDITIONALLY OPTIONAL – The definition or behavior depends on a condition. If the specified condition is met, then the definition or behavior is OPTIONAL, otherwise it is PROHIBITED.

  These keywords are thus capitalized when used to unambiguously specify requirements over protocol and application features and behavior that affect the interoperability and security of implementations. When these words are not capitalized, they are meant in their natural-language sense.

- Strings that are to be taken literally are enclosed in "double quotes".

- Words that are emphasized are printed in *italic*.

- Keywords that are defined by the UPnP Working Committee are printed using the *forum* character style.

- Keywords that are defined by the UPnP Device Architecture are printed using the **arch** character style.

- A double colon delimiter, "::", signifies a hierarchical parent-child (parent::child) relationship between the two objects separated by the double colon. This delimiter is used in multiple contexts, for example: Service::Action(), Action()::Argument, parentProperty::childProperty.

1.2.1 Data Types

This specification uses data type definitions from two different sources. The UPnP Device Architecture defined data types are used to define state variable and action argument data types [DEVICE]. The XML Schema namespace is used to define property data types [XML SCHEMA-2].

For UPnP Device Architecture defined Boolean data types, it is strongly RECOMMENDED to use the value "**0**" for false, and the value "**1**" for true. The values "**true**", "**yes**", "**false**", or "**no**" MAY also be used but are NOT RECOMMENDED. The values "**yes**" and "**no**" are deprecated and MUST NOT be sent out by devices but MUST be accepted on input.

For XML Schema defined Boolean data types, it is strongly RECOMMENDED to use the value "*0*" for false, and the value "*1*" for true. The values "*true*", "*yes*", "*false*", or "*no*" MAY also be used but are NOT RECOMMENDED. The values "*yes*" and "*no*" are deprecated and MUST NOT be sent out by devices but MUST be accepted on input.

1.3 Vendor-defined Extensions

Whenever vendors create additional vendor-defined state variables, actions or properties, their assigned names and XML representation MUST follow the naming conventions and XML rules as specified in [DEVICE], Section 2.5, "Description: Non-standard vendor extensions".

1.4 References

1.4.1 Normative References

This section lists the normative references used in this specification and includes the tag inside square brackets that is used for each such reference:

[DEVICE] – UPnP Device Architecture, version 1.0, UPnP Forum, June 13, 2000.
Available at: http://www.upnp.org/specs/architecture/UPnP-DeviceArchitecture-v1.0-20000613.htm.
Latest version available at: http://www.upnp.org/specs/arch/UPnP-arch-DeviceArchitecture-v1.0.pdf.

[ISO 8601] – Data elements and interchange formats – Information interchange -- Representation of dates and times, International Standards Organization, December 21, 2000.
Available at: ISO 8601:2000.

[RFC 2119] – IETF RFC 2119, Key words for use in RFCs to Indicate Requirement Levels, S. Bradner, 1997.
Available at: http://www.faqs.org/rfcs/rfc2119.html.

[RFC 3339] – IETF RFC 3339, Date and Time on the Internet: Timestamps, G. Klyne, Clearswift Corporation, C. Newman, Sun Microsystems, July 2002.
Available at: http://www.ietf.org/rfc/rfc3339.txt.

[RFC4566] – IETF RFC 4566, SDP: Session Description Protocol, M. Handley, UCL, V. Jacobson, Packet Design, C. Perkins, University of Glasgow, July 2006.
Available at: http://www.ietf.org/rfc/rfc4566.txt.

[XML] – Extensible Markup Language (XML) 1.0 (Third Edition), François Yergeau, Tim Bray, Jean Paoli, C. M. Sperberg-McQueen, Eve Maler, eds., W3C Recommendation, February 4, 2004.
Available at: http://www.w3.org/TR/2004/REC-xml-20040204.

[XML SCHEMA-2] – XML Schema Part 2: Data Types, Second Edition, Paul V. Biron, Ashok Malhotra, W3C Recommendation, 28 October 2004.
Available at: http://www.w3.org/TR/2004/REC-xmlschema-2-20041028.

[CaMS] – *CallManagement:1*, UPnP Forum, March 22, 2011.
Available at: http://www.upnp.org/specs/phone/UPnP-CallManagement-v1-Service-20110322.pdf.

Latest version available at: http://www.upnp.org/specs/phone/UPnP-CallManagement-v1-Service.pdf.

1.4.2 Informative References

This section lists the informative references that are provided as information in helping understand this specificatio:

[PHONEARCH] – TelephonyArchitecture:1, UPnP Forum, March 22, 2011
Available at: http://www.upnp.org/specs/phone/UPnP-phone-TelephonyArchitecture-v1-20110322.pdf.
Latest version available at: http://www.upnp.org/specs/phone/UPnP-phone-TelephonyArchitecture-v1.pdf.

2   Service Modeling Definitions (Normative)

2.1   Service Type

The following service type identifies a service that is compliant with this specification:

        urn:schemas-upnp-org:service:*MediaManagement:1*

MediaManagemnt service is used herein to refer to this service type.

2.2   Terms and Abbreviations

2.2.1   Abbreviations

Table 2-1:   Abbreviations

Abbreviation	Description
ID	Identifier
SDP	Session Description Protocol
TC	Telephony Client
TelCP	Telephony Control Point
TS	Telephony Server

2.2.2   Terms

2.2.2.1   Media Stream

A Media Stream is a flow of media (e.g., audio, video, and data etc.) which is sent and/or received between two parties.

2.2.2.2   Media Session

A Media Session is a series of interactions for flow of media among the parties.

2.2.2.3   Media Session ID

A Media Session ID uniquely identifies the Media Session.

Figure 1 shows the relationship among Media Streams, Media Session and Media Session ID. A Media Session can include multiple Media Streams.
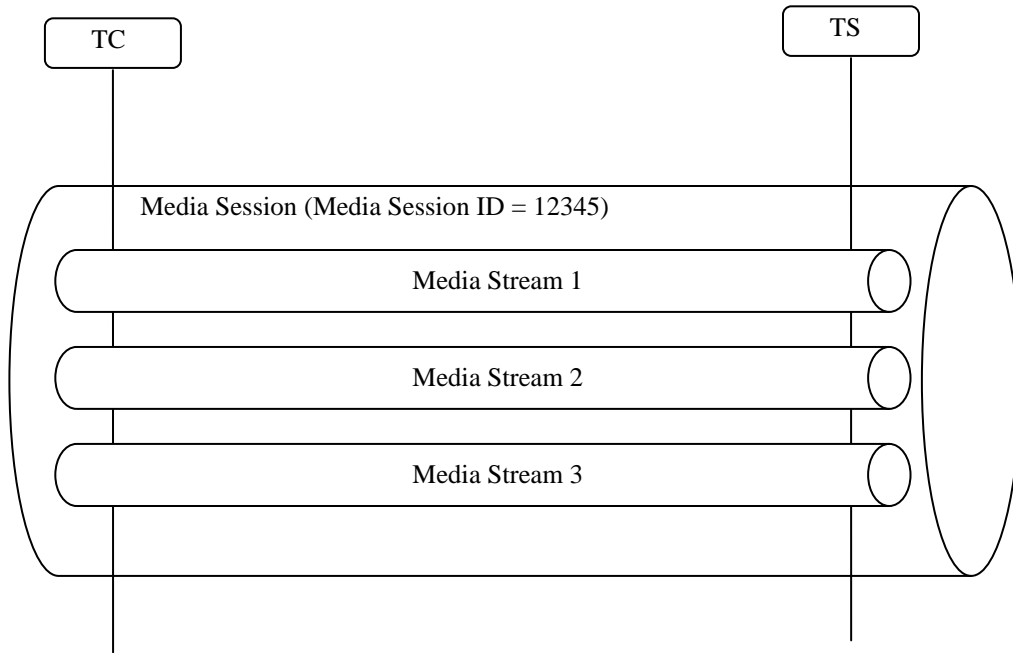
Figure 1: Relationship among Media Stream, Media Session and Media Session ID

2.2.2.4 Media Capability

The Media Capabilities define a set of Media Streams which are sent and/or received in a Media Session. The Media Capabilities include codec types, codec parameters, IP addresses, and port numbers etc. SDP[RFC4566] defines one of the methods to describe Media Capabilities.

2.3 *MediaManagement* Service Architecture

The *MediaManagement* service provides the feature to set-up Media Session on a Telephony Client (TC), under the control of a Telephony Control Point (TelCP).

The architecture for the *MediaManagement* service is shown in the following figure.
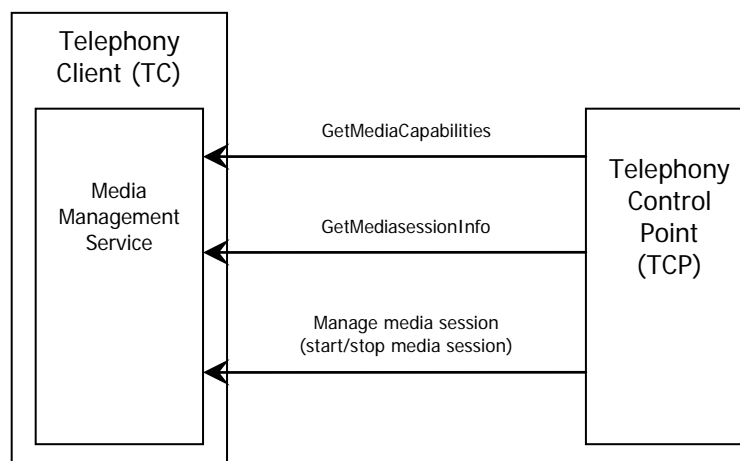
Figure 2: Architecture of the *MediaManagement* Service

2.4 State Variables

Note: For first-time reader, it may be more insightful to read the theory of operations first and then the action definitions before reading the state variable definitions.

2.4.1 State Variable Overview

Table 2-2: State Variables

Variable Name	R/O[1]	Data Type	Reference
MediaSessionInfo	*R*	**string** (XML fragment)	See Section 2.4.2
A_ARG_TYPE_MediaSessionID	*R*	**string**	See Section 2.4.3
A_ARG_TYPE_MediaCapabilityInfo	*R*	**string**(XML fragment)	See Section 2.4.4
A_ARG_TYPE_MediaSessionInfoList	*R*	**string** (XML fragment)	See Section 2.4.5

[1] *R* = REQUIRED, *O* = OPTIONAL, *CR* = CONDITIONALLY REQUIRED, *CO* = CONDITIONALLY OPTIONAL, *X* = Non-standard, add *-D* when deprecated (e.g., *R-D*, *O-D*).

2.4.2 *MediaSessionInfo*

This evented state variable notifies information about an existing Media Session. It contains Media Session ID, Media Session status, Media Capability format, and Media Capabilities etc. This state variable is evented when status of the Media Session changes.

2.4.2.1 XML Schema Definition

This is a string containing an XML fragment. The XML fragment in this argument MUST validate against the XML schema for *MediaSessionInfo* in the XML namespace "urn:schemas-upnp-org:phone:mms" which is located at "http://www.upnp.org/schemas/phone/mms-v1.xsd".

2.4.2.2 Description of fields in the *MediaSessionInfo* structure

```xml
<?xml version="1.0" encoding="utf-8"?>
<mms:mediaSessionInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
   http://www.upnp.org/schemas/phone/mms-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:mms="urn:schemas-upnp-org:phone:mms">
   <mediaSessionID>unique Media Session ID</mediaSessionID>
   <mediaSessionStatus reason="reason why status is changed">
     status of Media Session
   </mediaSessionStatus>
   <mediaCapability format="format of Media Capability">
     Media capability
   </mediaCapability>
</mms:mediaSessionInfo>
```

`<xml>`
> REQUIRED. Case sensitive.

`<mediaSessionInfo>`
> REQUIRED. MUST include a namespace declaration for the *MediaManagement* service Schema ("urn:schemas-upnp-org:phone:mms"). It MAY have the following elements:

`<mediaSessionID>`
> REQUIRED. xsd:string, Indicates the ID of the Media Session which is unique in the *MediaManagement* service.

`<mediaSessionStatus>`
> REQUIRED. xsd:string, Indicates the status of the Media Session and can have the following values as described in the Table 2-3. And this element has an attribute which name is "reason".

Table 2-3:   Allowed values for mediaSessionStatus

Value	Description
"*Started*"	Indicates the status of the Media Session when Media Streams are being sent and/or received in the Media Session.
"*Stopped*"	Indicates the status of the Media Session when the Media Sreams stop flowing in the Media Session.

reason
> OPTIONAL. xsd:string, Indicates the reason why status of a Media Session is changed. The following table shows the allowed values of this attribute and the corresponding status of Media Session:

Table 2-4:   Allowed values for reason and the corresponding status of Media Session

Value	Media Session Status	Description
"*Modified*"	"*Started*"	Indicates the status of the Media Session after the invocation of the *ModifyMediaSession()* action succeeds and Media Streams are being sent and/or received in the Media Session according to the new Media Capabilities.

Value	Media Session Status	Description
"*ModifyFailed*"	"*Started*"	Indicates the status of the Media Session after the invocation of the *ModifyMediaSession()* action succeeds and the *MediaManagement* service fails to negotiate the Media Capabilities with the WAN side. In this case, Media Streams are being sent and/or received without changing their Media Capabilities.
"*Error*"	"*Stopped*"	Indicates the status of the Media Session when the *MediaManagement* service can not send and/or receive a Media Stream.
TBD	*TBD*	*(Specified by UPnP vendors.)*

```
<mediaCapability>
```
    REQUIRED. Defines the selected Media Capabilities as specified by the "format" attribute.

        ```format```

        REQUIRED. xsd:string, Indicates the format of Media Capabilities. Allowed values of this attribute are as follows:

Table 2-5:   Allowed values for format

Value	Description
SDP	Media Capability is described by SDP[RFC4566].
TBD	*(Specified by UPnP vendors.)*

2.4.3 *A_ARG_TYPE_MediaSessionID*

This state variable uniquely indentifies a Media Session. The *MediaManagement* service assigns a unique ID for the Media Session when a TelCP invokes the *StartMediaSession()* action.

2.4.4 *A_ARG_TYPE_MediaCapabilityInfo*

This state variable defines an XML document that contains the Media Capabilities of a Media Session. This state variable is used as an input argument of the *StartMediaSession()* and *ModifyMediaSession()* actions.

2.4.4.1 XML Schema Definition

This is a string containing an XML fragment. The XML fragment in this argument MUST validate against the XML schema for *MediaCapabilityInfo* in the XML namespace "urn:schemas-upnp-org:phone:mms" which is located at "http://www.upnp.org/schemas/phone/mms-v1.xsd".

2.4.4.2 Description of fields in the *A_ARG_TYPE_MediaCapabilityInfo* structure

```
<?xml version="1.0" encoding="utf-8"?>
<mms:mediaCapabilityInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
   http://www.upnp.org/schemas/phone/mms-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:mms">
   <mediaCapability format="format of Media Capability">
```

```
      Media capability
   </mediaCapability>
</mms:mediaCapabilityInfo>
```

`<xml>`
> REQUIRED. Case sensitive.

`<mediaCapabilityInfo>`
> REQUIRED. MUST include a namespace declaration for the *MediaManagement* service Schema
> ("urn:schemas-upnp-org:phone:mms"). This namespace defines the following elements and attributes:

> `<mediaCapability>`
> > REQUIRED. Indicates the Media Capability of a Media Session using the format which is specified by the
> > "format" attribute.

> > `format`
> > REQUIRED. xsd:string, indicates the format of Media Capability. Values of this attribute are shown in Table
> > 2-5.

2.4.5   *A_ARG_TYPE_MediaSessionInfoList*

This state variable contains a list of ongoing Media Sessions and their information as defined in the
MediaSessionInfo structure.

2.4.5.1   XML Schema Definition

This is a string containing an XML fragment. The XML fragment in this argument MUST validate against
the XML schema for *MediaSessionInfoList* in the XML namespace "urn:schemas-upnp-
org:phone:mms" which is located at "http://www.upnp.org/schemas/phone/mms-v1.xsd".

2.4.5.2   Description of fields in the *A_ARG_TYPE_MediaSessionInfoList* structure

```
<?xml version="1.0" encoding="utf-8"?>
<mms:mediaSessionInfoList
   xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
   http://www.upnp.org/schemas/phone/mms-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:mms="urn:schemas-upnp-org:phone:mms">
   <mediaSessionInfo>
      <mediaSessionID>unique Media Session ID</mediaSessionID>
      <mediaSessionStatus reason="reason why status is changed">
         status of Media Session
      </mediaSessionStatus>
      <mediaCapability format="format of Media Capability">
         Media capability
      </mediaCapability>
   </mediaSessionInfo>
   <!-- Any other mediaSessionInfo (if any) go here.-->
</mms:mediaSessionInfo>
```

`<xml>`
> REQUIRED. Case sensitive.

`<mediaSessionInfoList>`
> REQUIRED. MUST include a namespace declaration for the *MediaManagement* service Schema
> ("urn:schemas-upnp-org:phone:mms"). Includes information about Media Sessions. This element
> includes one or more <MediaSessionInfo> elements as described in the *MediaSessionInfo* structure.

2.5 Eventing and Moderation

Table 2-6: Eventing and Moderation

Variable Name	Moderation		
	Evented	Moderated[1]	Criteria
MediaSessionInfo	*YES*	*NO*	

[1] *YES* = The state variable MUST be moderated with the criteria

2.5.1 Eventing of *MediaSessionInfo*

This state variable is evented when the status of the Media Session changes.

2.6 Actions

Table 2-7: Actions

Name	Device R/O[1]	Control Point R/O[2]
GetMediaCapabilities()	R	R
StartMediaSession()	R	R
StopMediaSession()	R	R
ModifyMediaSession()	O	O
GetMediaSessionInfo()	R	R

[1] For a device this column indicates whether the action MUST be implemented or not, where *R* = REQUIRED, *O* = OPTIONAL, *CR* = CONDITIONALLY REQUIRED, *CO* = CONDITIONALLY OPTIONAL, *X* = Non-standard, add *-D* when deprecated (e.g., *R-D*, *O-D*)..

[2] For a control pont this column indicates whether a control point MUST be capable of invoking this action, where *R* = REQUIRED, *O* = OPTIONAL, *CR* = CONDITIONALLY REQUIRED, *CO* = CONDITIONALLY OPTIONAL, *X* = Non-standard, add *-D* when deprecated (e.g., *R-D*, *O-D*)..

2.6.1 *GetMediaCapabilities()*

This action returns a set of Media Capabilities supported by the *MediaManagement* service. If the input argument *TSMediaCapabilityInfo* contains the empty string(""), this action returns all the Media Capabilities which the *MediaManagement* service supports. If the input argument *TSMediaCapabilityInfo* contains a valid value, this action returns the Media Capabilities supported by the *MediaManagement* service, which will be a subset of *TSMediaCapabilityInfo*.

2.6.1.1 Arguments

Table 2-8: Arguments for *GetMediaCapabilities()*

Argument	Direction	relatedStateVariable
TSMediaCapabilityInfo	*IN*	*A_ARG_TYPE_MediaCapabilityInfo*

Argument	Direction	relatedStateVariable
SupportedMediaCapabilityInfo	*OUT*	*A_ARG_TYPE_MediaCapabilityInfo*

2.6.1.2   Argument Descriptions

The input argument *TSMediaCapabilityInfo* contains either the empty string("") or the Media Capabilities that a TelCP wants to use for a Media Session. For instance, the input argument *TSMediaCapabilityInfo* can contain the output argument of the *CaMS::GetMediaCapabilities()* action.

The output argument *SupportedMediaCapabilityInfo* contains the Media Capabilities of the *MediaManagement* service. If the input argument *TSMediaCapabilityInfo* contains the empty string(""), this action returns all the Media Capabilities which the *MediaManagement* service supports. If the input argument *TSMediaCapabilityInfo* contains a valid value, this action returns the Media Capabilities supported by the *MediaManagement* service, which will be a subset of *TSMediaCapabilityInfo*.

2.6.1.3   Service Requirements

This service MUST return the Media Capabilities of the *MediaManagement* service regardless of its status.

2.6.1.4   Control Point Requirements When Calling The Action

None.

2.6.1.5   Dependency on Device State

None.

2.6.1.6   Effect on Device State

None.

2.6.1.7   Errors

Table 2-9:   Error Codes for *GetMediaCapabilities()*

ErrorCode	errorDescription	Description
400-499	TBD	See UPnP Device Architecture section on Control.
500-599	TBD	See UPnP Device Architecture section on Control.
600-699	TBD	See UPnP Device Architecture section on Control.

2.6.2   *StartMediaSession()*

This action allows a TelCP to create and start a Media Session. The Media Session is created using the Media Capabilities specified in the input argument *TSMediaCapabilityInfo*. If succeeds, the *MediaManagement* service assigns a unique ID for the newly created Media Session. The *MediaManagement* service returns the ID of the Media Session and the capabilities of the Media Session to be used in the output arguments *MediaSessionID* and *TCMediaCapabilityInfo* respectively. Once the Media Session is created, the *MediaManagement* service starts sending and/or receiving Media Streams.

2.6.2.1 Arguments

Table 2-10: Arguments for *StartMediaSession()*

Argument	Direction	relatedStateVariable
TSMediaCapabilityInfo	*IN*	*A_ARG_TYPE_MediaCapabilityInfo*
MediaSessionID	*OUT*	*A_ARG_TYPE_MediaSessionID*
TCMediaCapabilityInfo	*OUT*	*A_ARG_TYPE_MediaCapabilityInfo*

2.6.2.2 Argument Descriptions

The input argument *TSMediaCapabilityInfo* contains the Media Capabilities (e.g., codecs, port and IP address etc.) of the TS. The Media Capabilities in this argument MUST be a subset of the return value of the *GetMediaCapabilities()* action on the TS.

The output argument *MediaSessionID* is the return value of this action and uniquely identifies the Media Session. The *MediaManagement* service assigns a unique Media Session ID for every Media Session.

The output argument *TCMediaCapabilityInfo* contains the Media Capabilities (e.g., codecs, port and IP address etc.) to be used in the *MediaManagement* service for this specific Media Session.

2.6.2.3 Service Requirements

This service MUST analyze the input argument *TSMediaCapabilityInfo* whether this service can support the Media Capabilities. If this service supports the Media Capabilities, this action succeeds, otherwise fails. If succeeds, this service generates a unique Media Session ID for the Media Session and starts sending and/or receiving Media Streams based on both of *TSMediaCapabilityInfo* and *TCMediaCapabilityInfo*. Then this service events the *MediaSessionInfo* state variable which <mediaSessionStatus> element includes "*Started*".

2.6.2.4 Control Point Requirements When Calling The Action

Before calling this action, A TelCP MUST decide the Media Capabilities for a Media Session. In case that this service is used with the *CallManagement* service, a TelCP gets the Media Capabilities of this service and the *CallManagement* service and decide the Media Capabilities which are supported by both of this service and the *CallManagement* service. Then the *CallManagement* service exchanges the Media Capabilities between a caller and a callee and decide the Media Capabilities of a call. The decided Media Capabilities are contained in the <mediaCapability> element in the *CallInfo* state variable which <callStatus> element includes "*Connected*" or "*Modified*". Then a TelCP decides the Media Capabilities for setting to the *MediaManagement* service and invokes this action.

2.6.2.5 Dependency on Device State

None.

2.6.2.6 Effect on Device State

None.

2.6.2.7 Errors

Table 2-11: Error Codes for *StartMediaSession()*

ErrorCode	errorDescription	Description
400-499	TBD	See UPnP Device Architecture section on Control.
500-599	TBD	See UPnP Device Architecture section on Control.
606	Action not Authorized	The CP does not have privileges to invoke this action.
701	Invalid Media Capabilities	The specified Media Capabilities are invalid. (e.g., the *MediaManagement* service does not support the Media Capabilities.)
702	Busy	The *MediaManagement* service is already in use and no resource left.

2.6.3 *StopMediaSession()*

This action allows a TelCP to request to stop a Media Session specified by the input argument *TargetMediaSessionID*. When a TC receives this action, a TC stops sending and/or receiving Media Streams related to the input argument *TargetMediaSessionID* and a TC releases all the resources regarding to the input argument *TargetMediaSessionID*.

2.6.3.1 Arguments

Table 2-12: Arguments for *StopMediaSession()*

Argument	Direction	relatedStateVariable
TargetMediaSessionID	*IN*	*A_ARG_TYPE_MediaSessionID*

2.6.3.2 Argument Descriptions

The argument *TargetMediaSessionID* uniquely identifies the Media Session to be stopped.

2.6.3.3 Service Requirements

When this action is invoked, this service terminates the Media Session which Media Session ID is the same as the value of the argument *TargetMediaSessionID*. And this service changes the status of the Media Session to "*Stopped*" and notifies the *MediaSessionInfo* state variable.

2.6.3.4 Control Point Requirements When Calling The Action

None.

2.6.3.5 Dependency on Device State

None.

2.6.3.6 Effect on Device State

None.

2.6.3.7 Errors

Table 2-13: Error Codes for *StopMediaSession()*

ErrorCode	errorDescription	Description
400-499	TBD	See UPnP Device Architecture section on Control.
500-599	TBD	See UPnP Device Architecture section on Control.
606	Action not Authorized	The CP does not have privileges to invoke this action.
703	Invalid Media Session ID	The specified Media Session ID is invalid.

2.6.4 *ModifyMediaSession()*

This action allows a TelCP to modify the Media Capabilities of an existing Media Session. If this action succeeds, the Media Capabilities of the Media Session which Media Session ID is the same value of the input argument *TargetMediaSessionID* is change to the new Media Capabilities. To decide the new Media Capabilities, a TelCP offers this service the new Media Capabilities using the input argument *NewMediaCapabilityInfo* and this service decides the new Media Capabilities by comparing input argument *NewMediaCapabilityInfo* with the Media Capabilities supported by this service. The decided new Media Capabilities are returned by the output argument *TCMediaCapabilityInfo*.

2.6.4.1 Arguments

Table 2-14: Arguments for *ModifyMediaSession()*

Argument	Direction	relatedStateVariable
TargetMediaSessionID	*IN*	*A_ARG_TYPE_MediaSessionID*
NewMediaCapabilityInfo	*IN*	*A_ARG_TYPE_MediaCapabilityInfo*
TCMediaCapabilityInfo	*OUT*	*A_ARG_TYPE_MediaCapabilityInfo*

2.6.4.2 Argument Descriptions

The input argument *TargetMediaSessionID* uniquely identifies the Media Session to be modified the Media Capabilities.

The input argument *NewMediaCapabilityInfo* contains the new Media Capability information for the Media Session which Media Session ID is the same as the input argument *TargetMediaSessionID*.

The output argument *TCMediaCapabilityInfo* contains this service's Media Capability information based on the input argument *NewMediaCapabilityInfo*. If SDP[RFC4566] is used to describe the Media Capability information, basic information such as codec types is the same but IP addresses and port numbers are different between *NewMediaCapabilityInfo* and *TCMediaCapabilityInfo*. That is, *NewMediaCapabilityInfo* includes IP addresses and port numbers of destinations for sending Media Streams from a TC. *TCMediaCapabilityInfo* includes IP addresses and port numbers of a TC to receive Media Streams from the remote party.

2.6.4.3 Service Requirements

When this action succeeds, this service modifies existing Media Session's Media Capabilities. And this service starts sending and/or receiving the Media Streams using the new Media Capabilities. Then this

service events the *MediaSessionInfo* state variable which <mediaSessionStatus> element includes "*Startied*" and its reason attribute includes "*Modified*".

If this action fails, this service does not modify existing Media Session's Media Capabilities and keep sending and/or receiving Media Streams without changing Media Capabilities. Then this service events the *MediaSessionInfo* state variable which <mediaSessionStatus> element includes "*Started*" and its reason attribute includes "*ModifyFailed*".

2.6.4.4 Control Point Requirements When Calling The Action

 Before calling the action, a TelCP MUST get the remote party's Media Capabilities.

2.6.4.5 Dependency on Device State

None.

2.6.4.6 Effect on Device State

None.

2.6.4.7 Errors

Table 2-15:   Error Codes for *ModifyMediaSession()*

ErrorCode	errorDescription	Description
400-499	TBD	See UPnP Device Architecture section on Control.
500-599	TBD	See UPnP Device Architecture section on Control.
606	Action not Authorized	The CP does not have privileges to invoke this action.
701	Invalid Media Capability	The specified Media Capabilities are invalid. (e.g., the *MediaManagement* service does not support the Media Capabilities.)
703	Invalid Media Session ID	The specified Media Sessin ID is invalid.

2.6.5   *GetMediaSessionInfo()*

This action allows a TelCP to get information about existing Media Sessions.

This action provides two functions:

- · To get the information about all the existing Media Sessions.
- · To get the information about the Media Session specified by the input argument *TargetMediaSessionID*.

2.6.5.1 Arguments

Table 2-16:   Arguments for *GetMediaSessionInfo()*

Argument	Direction	relatedStateVariable
TargetMediaSessionID	*IN*	*A_ARG_TYPE_MediaSessionID*

Argument	Direction	relatedStateVariable
MediaSessionInfoList	*OUT*	*A_ARG_TYPE_MediaSessionInfoList*

2.6.5.2 Argument Descriptions

The input argument *TargetMediaSessionID* uniquely indentifies the Media Session which a TelCP gets Media Session information. When a TelCP gets the information about the all the existing Media Sessions, the value of this argument is set to the empty string("").

The output argument *MediaSessionInfo* contains information about Media Sessions. When *TargetMediaSessionID* contains the empty string(""), this argument contains information about all the existing Media Sessions. When *TargetMediaSessionID* has valid value, this argument contains information about the Media Session specified by *TargetMediaSessionID*.

2.6.5.3 Service Requirements

None

2.6.5.4 Control Point Requirements When Calling The Action

None

2.6.5.5 Dependency on Device State

None.

2.6.5.6 Effect on Device State

None.

2.6.5.7 Errors

Table 2-17: Error Codes for *GetMediaSessionInfo()*

ErrorCode	errorDescription	Description
400-499	TBD	See UPnP Device Architecture section on Control.
500-599	TBD	See UPnP Device Architecture section on Control.
600-699	TBD	See UPnP Device Architecture section on Control.
703	Invalid Media Session ID	The specified Media Session ID is invalid.

2.6.6 Error Code Summary

The following table lists error codes common to actions for this service type. If an action results in multiple errors, the most specific error should be returned.

Table 2-18: Error Code Summary

ErrorCode	errorDescription	Description
400-499	TBD	See UPnP Device Architecture section on Control.

ErrorCode	errorDescription	Description
500-599	TBD	See UPnP Device Architecture section on Control.
606	Action not Authorized	The CP does not have privileges to invoke this action.
700		Reserved for future extensions.
701	Invalid Media Capabilities	The specified Media Capabilities are invalid. (e.g., the *MediaManagement* service does not support the Media Capabilities.)
702	Busy	The *MediaManagement* service is already in use and no resource left.
703	Invalid Media Session ID	The specified Media Session ID is invalid.

Note: 800-899 Error Codes are not permitted for standard actions. See UPnP Device Architecture section on Control for more details.

2.7 Service Behavioral Model

2.7.1 State Diagrams

The state diagram of a Media Session is shown in Figure 3: State diagrams of the *MediaManagement* service.

1. When a TelCP invokes the *StartMediaSession()* action, a new Media Session is created and the status of the Media Session is set to as "*Started*". Then, the *MediaManagement* service starts sending and/or receiving Media Streams,

2. When a TelCP invokes the *StopMediaSession()* action, the status of the Media Session is set to as "*Stopped*" and the Media Session is deleted.

3. The *GetMediaCapabilities()* action and the *GetMediaSessionInfo()* action can be invoked without depending on the status of the Media Session.

4. The *ModifyMediaSession()* action can be invoked when the status of the Media Session is "*Started*". This action have no effect on the status of the Media Session.

StartMediaSession()

Started

StopMediaSession()
or
An error occurs in TC.

GetMediaCapabilities()
GetMediaSessionInfo()
ModifyMediaSession()

Stopped

GetMediaCapabilities()
GetMediaSessionInfo()
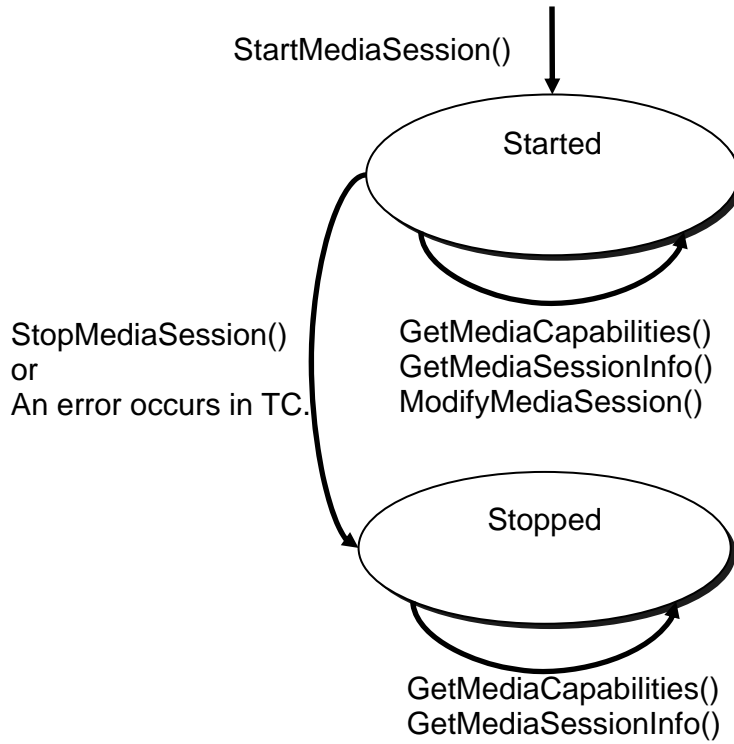
Figure 3: State diagrams of the _MediaManagement_ service

3   Theory of Operation (Informative)

3.1   Create an outgoing Call

The following sequence describes how to create an outgoing Call in the Non-Monopolization Mode.

1. The TelCP determines the Media Capabilities of the TS by invoking the *GetMediaCapabilities()* action.

2. The TelCP determines the Media Capabilities of the TC by invoking the *GetMediaCapabilities()* action.

3. The TelCP selects the set of appropriate Media Capabilities for the Call by matching the Media Capabilities of the TS and the TC.

4. The TelCP invokes the *StartCall()* action on the TS and the TS initiates the Call on the WAN side.

5. The TS sends the *CallInfo* state variable to the TelCP about the state of the Call("*Dialing*", "*Calling*" and "*Connected*"). The Call between the TS and the WAN side is established at this point.

6. The TelCP invokes the *StartMediaSession()* action on the TC after the TelCP receives the *CallInfo* state variable with the Call Status as "*Connected*". The TC starts sending and/or receiving the Media Streams.

7. The TC sends the *MediaSessionInfo* state variable to the TelCP with the status of the Media Session as "*Started*".

8. The TelCP invokes the *StartMediaTransfer()* action on the TS. The TS starts sending and/or receiving the Media Streams.

9. The TS sends the *CallInfo* state variable to the TelCP with the CallStatus as "*Talking*".

10. If the TelCP wants to disconnect the Call, the TelCP invokes the *StopCall()* action on the TS.

11. The TelCP then invokes the *StopMediaSession()* action on the TC.

12. The TS sends the *CallInfo* state variable to the TelCP with the CallStatus as "*Disconneted*" and the TC sends the *MediaSessionInfo* state variable to the TelCP with the status of the Media Session as "*Stopped*".

Figure 4: Flow basics for creating an outgoing Call

3.2 Accept an incoming Call

The following sequence describes how to accpet an incoming Call in the Non-Monopolization Mode.

1. When the TS receives an incoming Call on the WAN side, the TS sends the *CallInfo* state variable to the TelCP with the Call Status as "*Ringing*". The *CallInfo* state variable also includes the Media Capabilities of the Caller.

2. The TelCP determines the Media Capabilities of the TC by invoking the *GetMediaCapabilities()* action.

3. The TelCP selects the set of appropriate Media Capabilities for the Call by matching the Media Capabilities of the TS and the TC.

4. The TelCP invokes the *AcceptCall()* action on the TS and the TS accepts the Call on the WAN side.

5. After the Call between the TS and the WAN side is established, the TS sends the *CallInfo* state variable to the TelCP with the Call Status as "*Connected*".

6. The TelCP invokes the *StartMediaSession()* action on the TC after the TelCP receives the *CallInfo* state variable with the Call Status as "*Connected*". The TC starts sending and/or receiving the Media Streams.

7. The TC sends the *MediaSessionInfo* state variable to the TelCP with the status of the Media Session as "*Started*".

8. The TelCP invokes the *StartMediaTransfer()* action on the TS. The TS starts sending and/or receiving the Media Streams.

9. The TS sends the *CallInfo* state variable to the TelCP with the Call Status as "*Talking*".

10. If the TelCP wants to disconnect the Call, the TelCP invokes the *StopCall()* action on the TS.

11. The TelCP then invokes the *StopMediaSession()* action on the TC.

12. The TS sends the *CallInfo* state variable to the TelCP with the Call Status as "*Disconneted*" and the TC sends the *MediaSessionInfo* state variable to the TelCP with the status of the Media Session as "*Stopped*".

Figure 5: Flow basics for accpeting an incoming Call

3.3 Modify an ongoing Call

 The following sequence describes how to modify an ongoing Call from an audio to a video Call. In this sequence, the TC1 supports the audio capabilities and the TC2 supports the video capabilities. At first, the TelCP creates an audio Call with TC1. Then the TelCP modifies the Call from audio to a video Call by adding TC2.

1. The TelCP creates an audio Call with the TC1. The sequence is the same as the sequence shown in section 3.1.

2. The TelCP determines the Media Capabilities of the TS by invoking the *GetMediaCapabilities()* action.

3. The TelCP determines the Media Capabilities of the TC2 by invoking the *GetMediaCapabilities()* action.

4. The TelCP selects the set of appropriate Media Capabilities for the Call to change the Media Capabilities from an audio to a video Call by matching the Media Capabilities of the TS and the TC1 and TC2.

5. The TelCP invokes the *ModifyCall()* action on the TS and the TS modifies the Call on the WAN side.

6. The TS sends the *CallInfo* state variable to the TelCP about the state of the Call("*SendingModifyRequest*" and "*Modified*"). The Call between the TS and the WAN side is modified at this point.

7. The TelCP invokes the *StartMediaSession()* action on the TC2 after the TelCP receives the *CallInfo* state variable with the Call Status as "*Modified*". The TC2 starts sending and/or receiving the Media Streams.

8. The TC2 sends the *MediaSessionInfo* state variable to the TelCP with the status of the Media Session as "*Started*".

9. The TelCP invokes the *StartMediaTransfer()* action on the TS. The TS starts sending and/or receiving the Media Streams according to the modified Media Capabilities.

10. The TS sends the *CallInfo* state variable to the TelCP with the Call Status as "*Talking*".

11. If the TelCP wants to disconnect the Call, the TelCP invokes the *StopCall()* action on the TS.

12. The TelCP then invokes the *StopMediaSession()* action on the TC1 and TC2.

13. The TS sends the *CallInfo* state variable to the TelCP with the CallStatus as "*Disconneted*" and the TC1 and TC2 send the *MediaSessionInfo* state variable to the TelCP with the status of the Media Session as "*Stopped*".
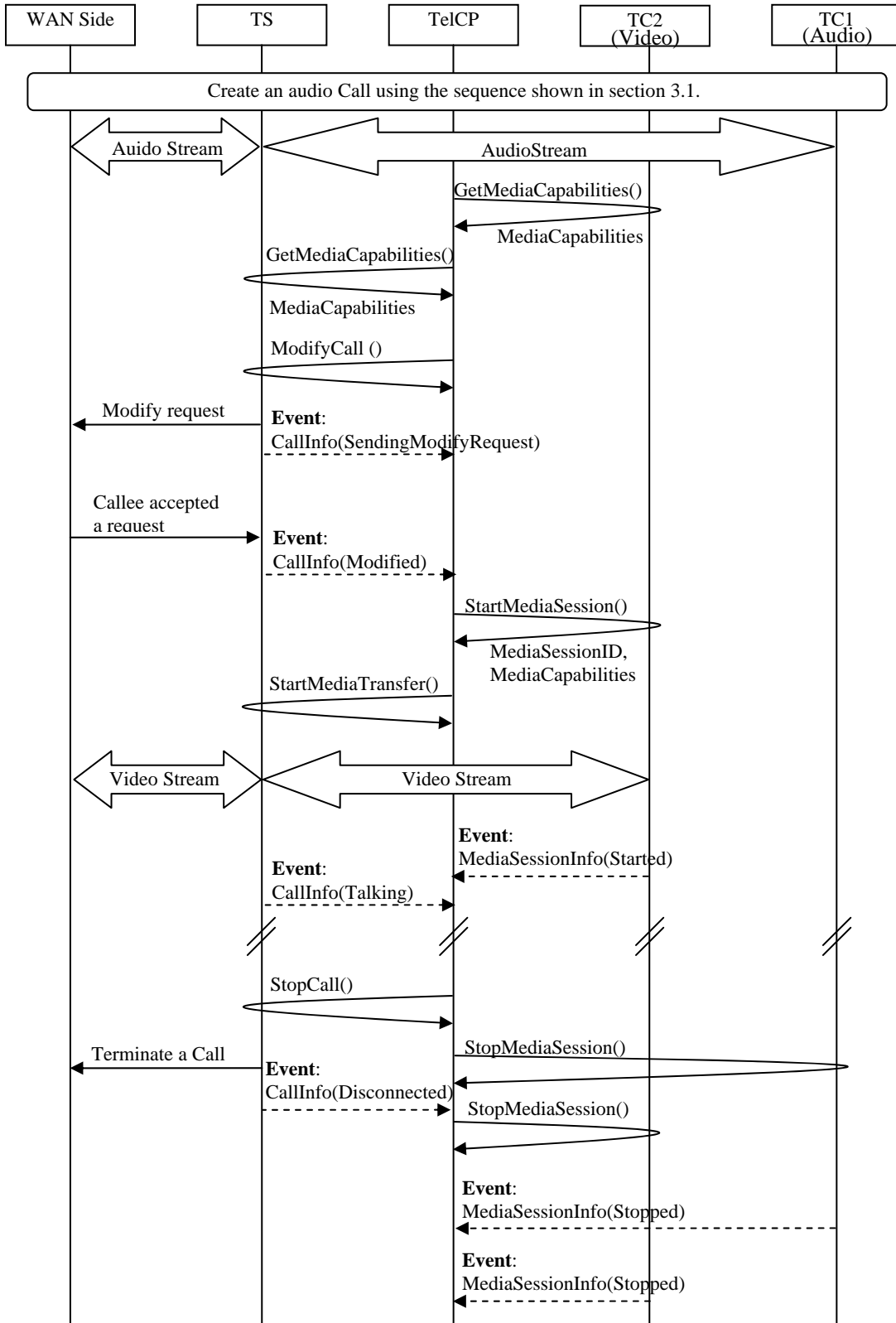
Figure 6: Flow basics for modifying an ongoing Call

4 XML Service Description

```xml
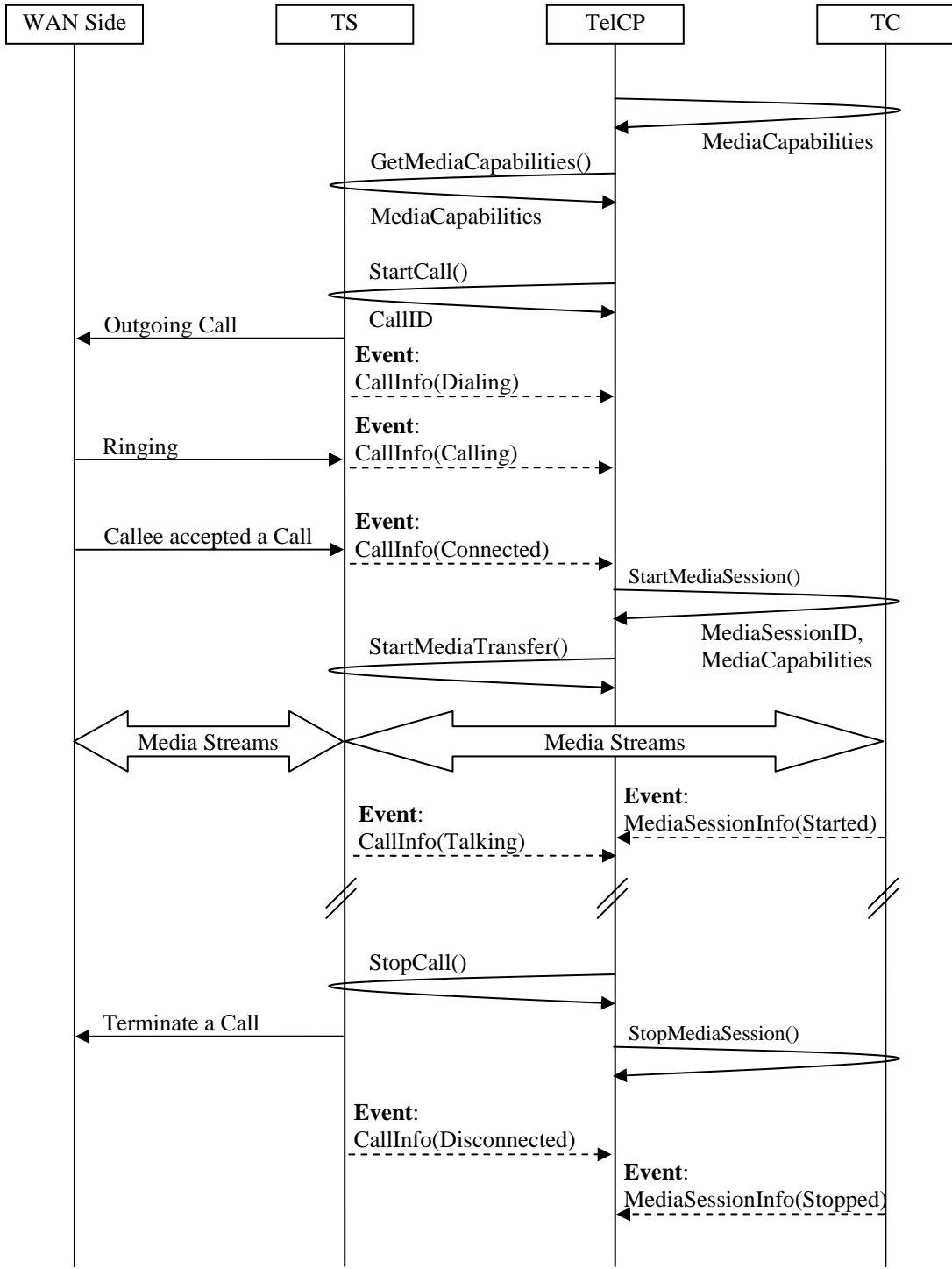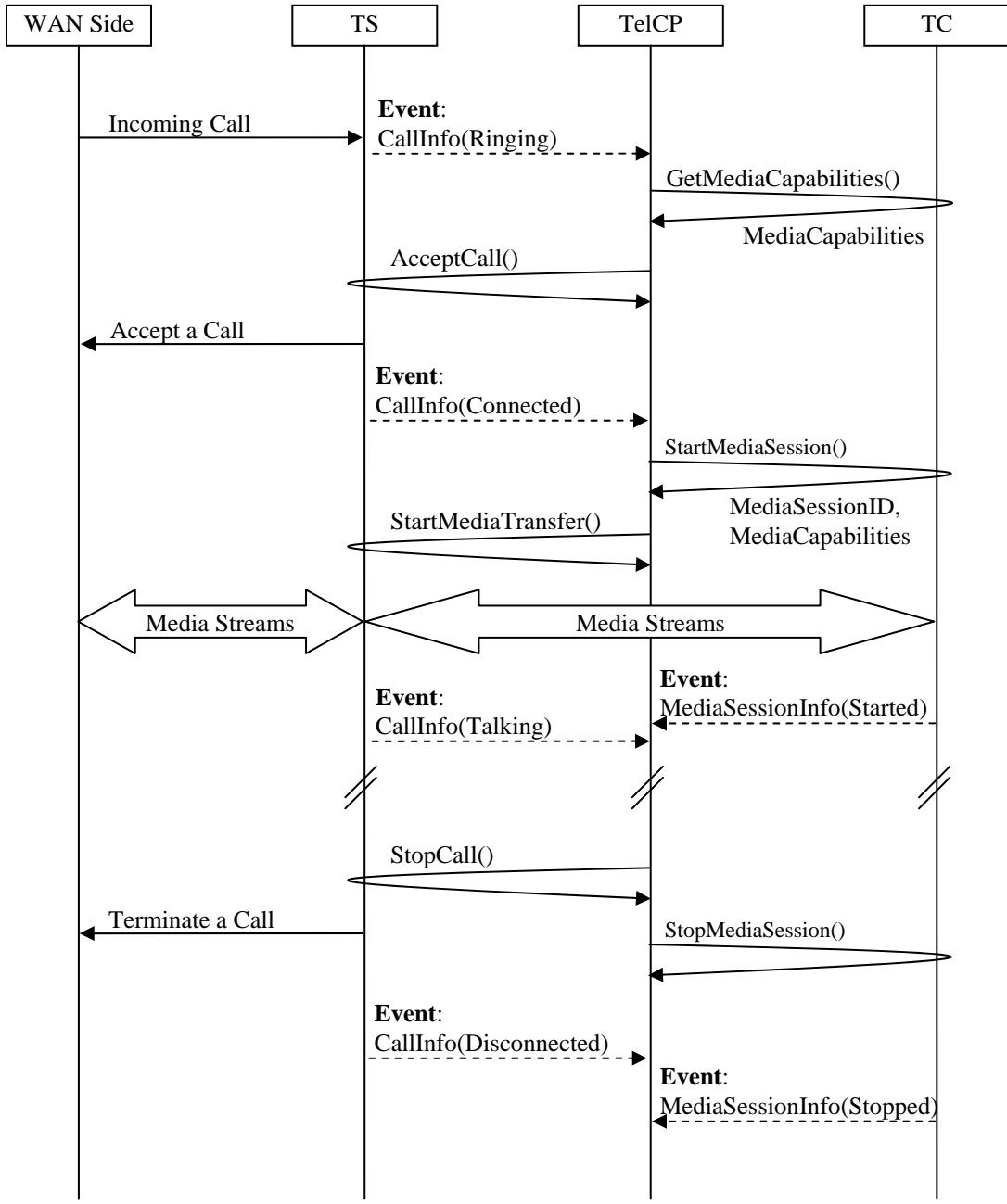<?xml version="1.0"?>
<scpd xmlns="urn:schemas-upnp-org:service-1-0">

    <specVersion>
        <major>1</major>
        <minor>0</minor>
    </specVersion>

    <actionList>

        <action>
            <name>GetMediaCapabilities</name>
            <argumentList>
                <argument>
                    <name>TSMediaCapabilityInfo</name>
                    <direction>in</direction>
                    <relatedStateVariable>
                        A_ARG_TYPE_MediaCapabilityInfo
                    </relatedStateVariable>
                </argument>
            </argumentList>
            <argumentList>
                <argument>
                    <name>SupportedMediaCapabilityInfo</name>
                    <direction>out</direction>
                    <relatedStateVariable>
                        A_ARG_TYPE_MediaCapabilityInfo
                    </relatedStateVariable>
                </argument>
            </argumentList>
        </action>

        <action>
            <name>GetMediaSessionInfo</name>
            <argumentList>
                <argument>
                    <name>TargetMediaSessionID</name>
                    <direction>in</direction>
                    <relatedStateVariable>
                        A_ARG_TYPE_MediaSessionID
                    </relatedStateVariable>
                </argument>
                <argument>
                    <name>MediaSessionInfoList</name>
                    <direction>out</direction>
                    <relatedStateVariable>
                        A_ARG_TYPE_MediaSessionInfoList
                    </relatedStateVariable>
                </argument>
            </argumentList>
        </action>

        <action>
            <name>ModifyMediaSession</name>
```

```xml
            <argumentList>
                <argument>
                    <name>TargetMediaSessionID</name>
                    <direction>in</direction>
                    <relatedStateVariable>
                        A_ARG_TYPE_MediaSessionID
                    </relatedStateVariable>
                </argument>
                <argument>
                    <name>NewMediaCapabilityInfo</name>
                    <direction>in</direction>
                    <relatedStateVariable>
                        A_ARG_TYPE_MediaCapabilityInfo
                    </relatedStateVariable>
                </argument>
                <argument>
                    <name>TCMediaCapabilityInfo</name>
                    <direction>out</direction>
                    <relatedStateVariable>
                        A_ARG_TYPE_MediaCapabilityInfo
                    </relatedStateVariable>
                </argument>
            </argumentList>
        </action>

        <action>
            <name>StartMediaSession</name>
            <argumentList>
                <argument>
                    <name>TSMediaCapabilityInfo</name>
                    <direction>in</direction>
                    <relatedStateVariable>
                        A_ARG_TYPE_MediaCapabilityInfo
                    </relatedStateVariable>
                </argument>
                <argument>
                    <name>MediaSessionID</name>
                    <direction>out</direction>
                    <relatedStateVariable>
                        A_ARG_TYPE_MediaSessionID
                    </relatedStateVariable>
                </argument>
                <argument>
                    <name>TCMediaCapabilityInfo</name>
                    <direction>out</direction>
                    <relatedStateVariable>
                        A_ARG_TYPE_MediaCapabilityInfo
                    </relatedStateVariable>
                </argument>
            </argumentList>
        </action>

        <action>
            <name>StopMediaSession</name>
            <argumentList>
                <argument>
```

```xml
                <name>TargetMediaSessionID</name>
                <direction>in</direction>
                <relatedStateVariable>
                    A_ARG_TYPE_MediaSessionID
                </relatedStateVariable>
            </argument>
        </argumentList>
    </action>

</actionList>

<serviceStateTable>

    <stateVariable sendEvents="yes">
        <name>MediaSessionInfo</name>
        <dataType>string</dataType>
    </stateVariable>

    <stateVariable sendEvents="no">
        <name>A_ARG_TYPE_MediaCapabilityInfo</name>
        <dataType>string</dataType>
    </stateVariable>

    <stateVariable sendEvents="no">
        <name>A_ARG_TYPE_MediaSessionID</name>
        <dataType>string</dataType>
    </stateVariable>

    <stateVariable sendEvents="no">
        <name>A_ARG_TYPE_MediaSessionInfoList</name>
        <dataType>string</dataType>
    </stateVariable>

</serviceStateTable>
</scpd>
```

Appendix A. XML Schema

This appendix provides the global XML Schema for syntactical validation of all the XML fragments used in the MediaManagement service.

```xml
<?xml version="1.0" encoding="utf-8"?>
<schema targetNamespace="urn:schemas-upnp-org:phone:mms" xmlns:mms="urn:schemas-upnp-
org:phone:mms" xmlns="http://www.w3.org/2001/XMLSchema" attributeFormDefault="qualified"
elementFormDefault="qualified">

 <simpleType name="mediaCapabilityFormatType">
 <restriction base="string">
  <enumeration value="SDP" />
 </restriction>
 </simpleType>

 <simpleType name="mediaSessionStatusValueType">
 <restriction base="string">
  <enumeration value="Started" />
  <enumeration value="Stopped" />
 </restriction>
 </simpleType>

 <simpleType name="mediaSessionStatusReasonType">
 <restriction base="string">
  <enumeration value="Modified" />
  <enumeration value="Error" />
 </restriction>
 </simpleType>

 <complexType name="mediaSessionInfoType">
  <sequence>

   <element name="mediaSessionID" form="unqualified" type="string" />

   <element name="mediaSessionStatus" form="unqualified" nillable="true">
    <complexType>
     <simpleContent>
      <extension base="mms:mediaSessionStatusValueType">
       <attribute name="reason" form="unqualified" type="mms:mediaSessionStatusReasonType"
use="optional" />
      </extension>
     </simpleContent>
    </complexType>
   </element>

   <element name="mediaCapability" form="unqualified" nillable="true">
    <complexType>
     <simpleContent>
      <extension base="string">
       <attribute name="format" form="unqualified" type="mms:mediaCapabilityFormatType"
use="required" />
      </extension>
     </simpleContent>
```

```
        </complexType>
      </element>

    </sequence>
  </complexType>

  <element name="mediaCapabilityInfo">
   <complexType>

     <choice maxOccurs="unbounded">
      <element name="mediaCapability" form="unqualified" nillable="true">
        <complexType>
         <simpleContent>
           <extension base="string">
             <attribute name="format" form="unqualified" type="mms:mediaCapabilityFormatType"
use="required" />
           </extension>
         </simpleContent>
        </complexType>
      </element>
     </choice>

   </complexType>
  </element>

  <element name="mediaSessionInfo" type="mediaSessionInfoType" />

  <element name="mediaSessionInfoList">
   <complexType>
     <choice maxOccurs="unbounded">
      <element name="mediaSessionInfo" form="unqualified" type="mediaSessionInfoType" />
     </choice>

   </complexType>
  </element>

</schema>
```

Appendix B.　　Sequence Examples

B.1　Create a Call

B.1.1　Figure

| TC_A 192.168.1.21 | TelCP_A 192.168.1.11 | TS_A 192.168.1.1 | WAN | TS_X 192.168.2.1 | TelCP_X 192.168.2.11 | TC_X 192.168.2.21 |

F1: GetMediaCapabilities()

F2:200 OK

F3: GetMediaCapabilities()

F4:200 OK

F5: StartCall()

F6:200 OK

SIP INVITE

F7: Event CallInfo

F9: Event CallInfo

F8:200 OK

F10:200 OK

SIP 100 Trying

F11: GetMediaCapabilities()

SIP 180 Ringing

F12:200 OK

F13: Event CallInfo

F14:200 OK

Decide Media Capability

Accept a Call & stop RT

F15: AcceptCall()

F16: 200 OK

SIP 200 OK

SIP ACK

F17: Event CallInfo

F19: Event CallInfo

F18:200 OK

F20:200 OK

F21: StartMediaSession()

F23: StartMediaSession ()

F22:200 OK

F24:200 OK

F25: Event MediaSessionInfo

F27: Event MediaSessionInfo

F26:200 OK

F28:200 OK

F29: StartMediaTransfar ()

F31: StartMediaTransfar ()

F30:200 OK

F32:200 OK

Media Stream   Media Stream   Media Stream

F33: Event CallInfo

F35: Event CallInfo

F34:200 OK

F36:200 OK

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B.1.2   F1

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-
org:service:MediaManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.21:10021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1"
>
   <TSMediaCapabilityInfo></TSMediaCapabilityInfo>
  </u:GetMediaCapabilities>
 </s:Body>
</s:Envelope>
```

B.1.3   F2

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
    <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;mms:mediaCapabilityInfo
      xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
      http://www.upnp.org/schemas/phone/mms-v1.xsd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.21
s=-
c=IN IP4 192.168.1.21
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12021 RTP/AVP 96
c=IN IP4 192.168.1.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000120008c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability&gt;
```

```
    &lt;/mms:mediaCapabilityInfo&gt;
    </SupportedMediaCapabilityInfo>
   </u:GetMediaCapabilitiesResponse>
 </s:Body>
</s:Envelope>
```

B.1.4   F3

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service: CallManagement:1">
   <TCMediaCapabilityInfo></TCMediaCapabilityInfo>
   </u:GetMediaCapabilities>
 </s:Body>
</s:Envelope>
```

B.1.5   F4

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:CallManagement:1">
   <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
```

```
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability&gt;
   &lt;/cams:mediaCapabilityInfo&gt;</SupportedMediaCapabilityInfo>
  </u:GetMediaCapabilitiesResponse>
 </s:Body>
</s:Envelope>
```

B.1.6 F5

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName></TelCPName>
   <SecretKey></SecretKey>
   <CalleeID>tel:0774940201</CalleeID>
   <CallPriority>Normal</CallPriority>
   <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;cams:mediaCapabilityInfo
      xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
      http://www.upnp.org/schemas/phone/cams-v1.xsd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
  &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/mediaCapability&gt;
    &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
   <CallMode>Non-Monopolize</CallMode>
  </u:StartCall>
 </s:Body>
</s:Envelope>
```

B.1.7 F6

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
```

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartCallResponse xmlns:m="urn:schemas-upnp-org:service:CallManagement:1">
   <CallID>call101</CallID>
  </m:StartCallResponse>
 </s:Body>
</s:Envelope>
```

B.1.8   F7

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;TV@Living&lt;/targetNames&gt;
   &lt;callStatus&gt;Dialing&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
   &lt;/mediaCapability&gt;
   &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.1.9   F8

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.1.10 F9

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
  &lt;callID&gt;call201&lt;/callID&gt;
  &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
  &lt;callStatus&gt;Ringing&lt;/callStatus&gt;
  &lt;priority&gt;Normal&lt;/priority&gt;
  &lt;remoteParty&gt;
   &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
  &lt;/remoteParty&gt;
  &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
  &lt;/mediaCapability&gt;
 &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.1.11 F10

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.1.12 F11

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-
org:service:MediaManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.21:20021
Content-Length: [bytes in body]
```

```
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1"
>
   <TSMediaCapabilityInfo></TSMediaCapabilityInfo>
  </u:GetMediaCapabilities>
 </s:Body>
</s:Envelope>
```

B.1.13   F12

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
     <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.21
s=-
c=IN IP4 192.168.2.21
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22021 RTP/AVP 96
c=IN IP4 192.168.2.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
    &lt;/mms:mediaCapabilityInfo&gt;</SupportedMediaCapabilityInfo>
  </u:GetMediaCapabilitiesResponse>
 </s:Body>
</s:Envelope>
```

B.1.14   F13

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
```

```
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
  &lt;callID&gt;call101&lt;/callID&gt;
  &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
  &lt;callStatus&gt;Calling&lt;/callStatus&gt;
  &lt;priority&gt;Normal&lt;/priority&gt;
  &lt;remoteParty&gt;
   &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
  &lt;/remoteParty&gt;
  &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
  &lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.1.15   F14

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.1.16   F15

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#AcceptCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:AcceptCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
```

```
    <TelCPName></TelCPName>
    <SecretKey></SecretKey>
    <TargetCallID>call201</TargetCallID>
    <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
&lt;cams:mediaCapabilityInfo
 xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
 http://www.upnp.org/schemas/phone/cams-v1.xsd"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
 &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/mediaCapability&gt;
    &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
   <CallMode>"Non-Monopolize"</CallMode>
   </u:AcceptCall>
  </s:Body>
 </s:Envelope>
```

B.1.17   F16

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
   <m:AcceptCallResponse xmlns:m="urn:schemas-upnp-org:service:CallManagement:1"
/>
 </s:Body>
</s:Envelope>
```

B.1.18   F17

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
```

```
    <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:callInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"
     xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
     &lt;callID&gt;call101&lt;/callID&gt;
     &lt;targetNames type="TelCPName"&gt; *&lt;/targetNames&gt;
     &lt;callStatus&gt;Connected&lt;/callStatus&gt;
     &lt;priority&gt;Normal&lt;/priority&gt;
     &lt;remoteParty&gt;
      &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
     &lt;/remoteParty&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
        &lt;/mediaCapability&gt;
     &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.1.19   F18

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.1.20   F19

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
   <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:callInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"
    xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
    &lt;callID&gt;call201&lt;/callID&gt;
    &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
```

```
        &lt;callStatus&gt;Connected&lt;/callStatus&gt;
        &lt;priority&gt;Normal&lt;/priority&gt;
        &lt;remoteParty&gt;
         &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
        &lt;/remoteParty&gt;
        &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
  &lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.1.21　F20

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.1.22　F21

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.21:10021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
   <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
        &lt;/mediaCapability&gt;
       &lt;/mms:mediaCapabilityInfo&gt;
       </TSMediaCapabilityInfo>
  </u:StartMediaSession>
 </s:Body>
```

```
       </s:Envelope>
```

B.1.23 F22

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
    <MediaSessionID>media101</MediaSessionID>
    <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;mms:mediaCapabilityInfo
        xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
        http://www.upnp.org/schemas/phone/mms-v1.xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
        &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.21
s=-
c=IN IP4 192.168.1.21
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
        &lt;/mediaCapability&gt;
      &lt;/mms:mediaCapabilityInfo&gt;
      </TCMediaCapabilityInfo>
    </u:StartMediaSessionResponse>
  </s:Body>
</s:Envelope>
```

B.1.24 F23

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2:21:20021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
    <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;mms:mediaCapabilityInfo
        xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
        http://www.upnp.org/schemas/phone/mms-v1.xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

```
        xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
        &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
        &lt;/mediaCapability&gt;
        &lt;/mms:mediaCapabilityInfo&gt;
        </TSMediaCapabilityInfo>
    </u:StartMediaSession>
   </s:Body>
  </s:Envelope>
```

B.1.25   F24

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
     <MediaSessionID>media201</MediaSessionID>
     <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;mms:mediaCapabilityInfo
        xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
        http://www.upnp.org/schemas/phone/mms-v1.xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
        &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.21
s=-
c=IN IP4 192.168.2.21
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
        &lt;/mediaCapability&gt;
        &lt;/mms:mediaCapabilityInfo&gt;</TCMediaCapabilityInfo>
    </u:StartMediaSessionResponse>
   </s:Body>
  </s:Envelope>
```

B.1.26   F25

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.1.11:10011
```

CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10021
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <MediaSessionInfo><?xml version="1.0" encoding="utf-8"?>
  <mms:mediaSessionInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
   http://www.upnp.org/schemas/phone/mms-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:mms="urn:schemas-upnp-org:phone:mms">
  <mediaSessionID>*media101*</mediaSessionID>
  <mediaSessionStatus>*Started*</mediaSessionStatus>
  <mediaCapability format="SDP">v=0
o=- 0 0 IN IP4 192.168.1.21
s=-
c=IN IP4 192.168.1.21
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
    </mediaCapability>
   </mms:mediaSessionInfo></MediaSessionInfo>
 </e:property>
</e:propertyset>

B.1.27   F26

HTTP/1.1 200 OK
Content-Length: 0

B.1.28   F27

NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20021
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <MediaSessionInfo><?xml version="1.0" encoding="utf-8"?>
  <mms:mediaSessionInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
   http://www.upnp.org/schemas/phone/mms-v1.xsd"

```
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
        &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
        &lt;mediaSessionStatus&gt;Started&lt;/mediaSessionStatus&gt;
        &lt;mediaCapability format="SDP"&gt;v=0
    o=- 0 0 IN IP4 192.168.2.21
    s=-
    c=IN IP4 192.168.2.21
    t=0 0
    m=audio 21021 RTP/AVP 0
    c=IN IP4 192.168.2.21
    a=rtpmap:0 PCMU/8000
    a=ptime:20
        &lt;/mediaCapability&gt;
      &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfo>
     </e:property>
    </e:propertyset>
```

B.1.29   F28

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.1.30   F29

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
     <TelCPName></TelCPName>
     <SecretKey></SecretKey>
     <TargetCallID>call101</TargetCallID>
     <TCList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;cams:TCList
      xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
      http://www.upnp.org/schemas/phone/cams-v1.xsd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
     &lt;TC&gt;
      &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
      &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
     &lt;/TC&gt;
     &lt;/cams:TCList&gt;</TCList>
     <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;cams:mediaCapabilityInfo
      xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
      http://www.upnp.org/schemas/phone/cams-v1.xsd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
```

```
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/mediaCapability&gt;
   &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
  </u:StartMediaTransfer>
 </s:Body>
</s:Envelope>
```

B.1.31   F30

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
   <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.1.32   F31

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
    <TelCPName></TelCPName>
    <SecretKey></SecretKey>
    <TargetCallID>call201</TargetCallID>
    <TCList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:TCList
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
    &lt;TC&gt;
     &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
     &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
```

```
        &lt;/TC&gt;
       &lt;/cams:TCList&gt;</TCList>
      <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;cams:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
       http://www.upnp.org/schemas/phone/cams-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
        &lt;/mediaCapability&gt;
      &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
    </u:StartMediaTransfer>
   </s:Body>
</s:Envelope>
```

B.1.33   F32

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
</s:Body>
</s:Envelope>
```

B.1.34   F33

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
```

```
&lt;cams:callInfo
 xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
 http://www.upnp.org/schemas/phone/cams-v1.xsd"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:cams="urn:schemas-upnp-org:phone:cams"
 xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
 &lt;callID&gt;call101&lt;/callID&gt;
 &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
 &lt;callStatus&gt;Talking&lt;/callStatus&gt;
 &lt;priority&gt;Normal&lt;/priority&gt;
 &lt;remoteParty&gt;
  &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
 &lt;/remoteParty&gt;
 &lt;TCList&gt;
  &lt;TC&gt;
   &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
   &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
  &lt;/TC&gt;
 &lt;/TCList&gt;
 &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
  &lt;/mediaCapability&gt;
 &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.1.35   F34

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.1.36   F35

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:callInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
```

```
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:cams="urn:schemas-upnp-org:phone:cams"
        xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
        &lt;callID&gt;call201&lt;/callID&gt;
        &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
        &lt;callStatus&gt;Talking&lt;/callStatus&gt;
        &lt;priority&gt;Normal&lt;/priority&gt;
        &lt;remoteParty&gt;
         &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
        &lt;/remoteParty&gt;
        &lt;TCList&gt;
         &lt;TC&gt;
           &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
            &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
         &lt;/TC&gt;
        &lt;/TCList&gt;
        &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
          &lt;/mediaCapability&gt;
         &lt;/cams:callInfo&gt;</CallInfo>
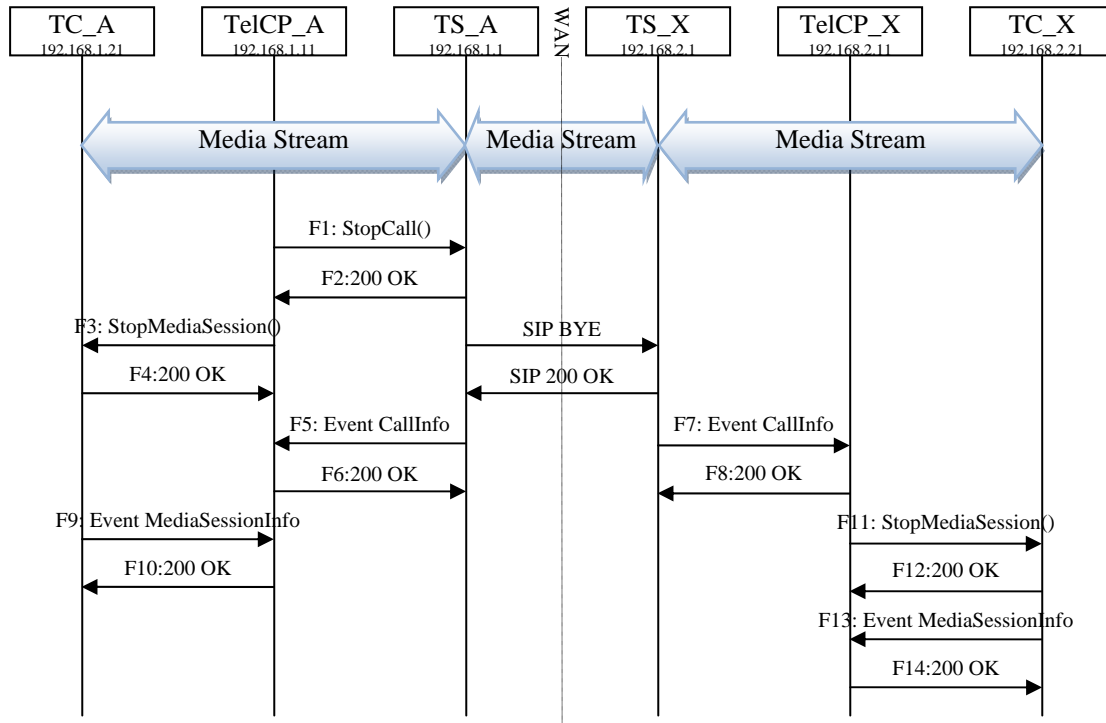        </e:property>
      </e:propertyset>
```

B.1.37   F36

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.2 Terminate a Call

B.2.1 Figure

B.2.2 F1

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StopCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StopCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName></TelCPName>
   <SecretKey></SecretKey>
   <CallID>cal101</CallID>
  </u:StopCall>
 </s:Body>
</s:Envelope>
```

B.2.3 F2

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
```

SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StopCallResponse xmlns:u="urn:schemas-upnp-org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>

B.2.4   F3

POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StopMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.21:10021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StopMediaSession xmlns:u="urn:schemas-upnp-org:service: MediaManagement:1">
   <TargetMediaSessionID>*media101*</TargetMediaSessionID>
  </u:StopMediaSession>
 </s:Body>
</s:Envelope>

B.2.5   F4

HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StopMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1" />
 </s:Body>
</s:Envelope>

B.2.6   F5

NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

```
<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Disconnected&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;ID of the Peer&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
   &lt;TCList&gt;
    &lt;TC&gt;
     &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
     &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
   &lt;/TCList&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.2.7   F6

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.2.8   F7

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
```

```
<e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
  &lt;callID&gt;call201&lt;/callID&gt;
  &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
  &lt;callStatus&gt;Disconnected&lt;/callStatus&gt;
  &lt;priority&gt;Normal&lt;/priority&gt;
  &lt;remoteParty&gt;
   &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
  &lt;/remoteParty&gt;
  &lt;TCList&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
  &lt;/TCList&gt;
  &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.2.9   F8

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.2.10   F9

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10021
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;mms:mediaSessionInfo
```

```
        xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
        http://www.upnp.org/schemas/phone/mms-v1.xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
        &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
        &lt;mediaSessionStatus&gt;Stopped&lt;/mediaSessionStatus&gt;
        &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.21
s=-
c=IN IP4 192.168.1.21
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
        &lt;/mediaCapability&gt;
      &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfo>
    </e:property>
  </e:propertyset>
```

B.2.11   F10

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.2.12   F11

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StopMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.21:20021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StopMediaSession xmlns:u="urn:schemas-upnp-org:service: MediaManagement:1">
   <TargetMediaSessionID>media201</TargetMediaSessionID>
  </u:StopMediaSession>
 </s:Body>
</s:Envelope>
```

B.2.13   F12

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
```

```
    <u:StopMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1" />
  </s:Body>
</s:Envelope>
```

B.2.14   F13

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20021
SEQ: [sequence number]
Connection: Keep-Alive

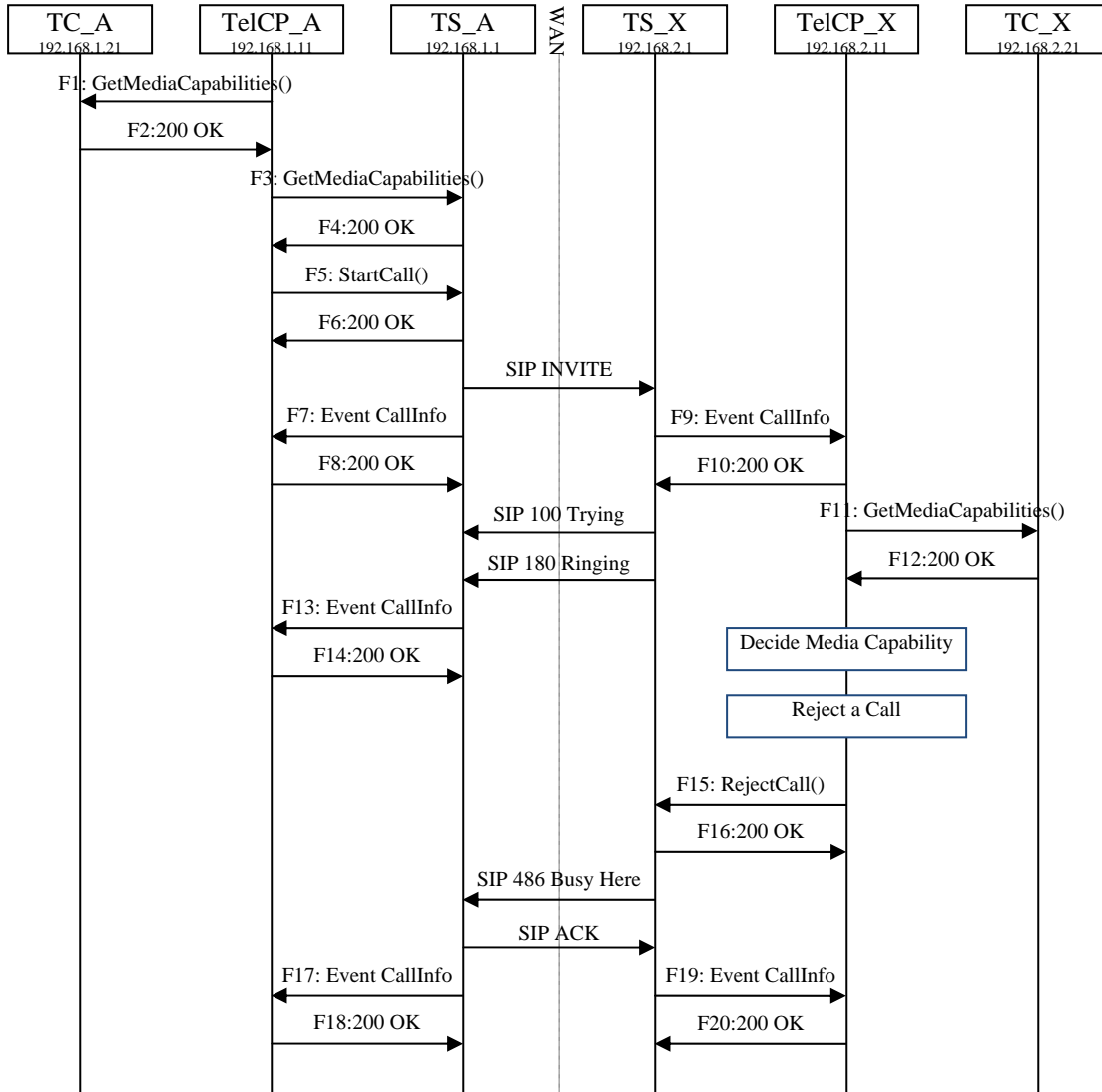<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
   <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;mms:mediaSessionInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
    http://www.upnp.org/schemas/phone/mms-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
   &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
   &lt;mediaSessionStatus&gt;Stopped&lt;/mediaSessionStatus&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.21
s=-
c=IN IP4 192.168.2.21
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/mediaCapability&gt;
   &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfo>
 </e:property>
</e:propertyset>
```

B.2.15   F14

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.3 Reject an incoming Call

B.3.1 Figure

B.3.2 F1 to F14 are the same as "B.1 Create a Call"

B.3.3 F15

POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#RejectCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">

```
 <s:Body>
  <u:RejectCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName></TelCPName>
   <SecretKey></SecretKey>
   <TargetCallID>call201</TargetCallID>
   <RejectReason>Busy</RejectReason>
  </u:RejectCall>
 </s:Body>
</s:Envelope>
```

B.3.4　F16

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
   <m:RejectCallResponse xmlns:m="urn:schemas-upnp-org:service:CallManagement:1"
/>
 </s:Body>
</s:Envelope>
```

B.3.5　F17

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus reason="Busy"gt;Disconnected&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
  &lt;mediaCapability format="SDP"&gt;v=0
```

```
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/mediaCapability&gt;
   &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.3.6   F18

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.3.7   F19

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:callInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"
    xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
    &lt;callID&gt;call101&lt;/callID&gt;
    &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
    &lt;callStatus reason="Busy"&gt;Disconnected&lt;/callStatus&gt
    &lt;priority&gt;Normal&lt;/priority&gt;
    &lt;remoteParty&gt;
     &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
    &lt;/remoteParty&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
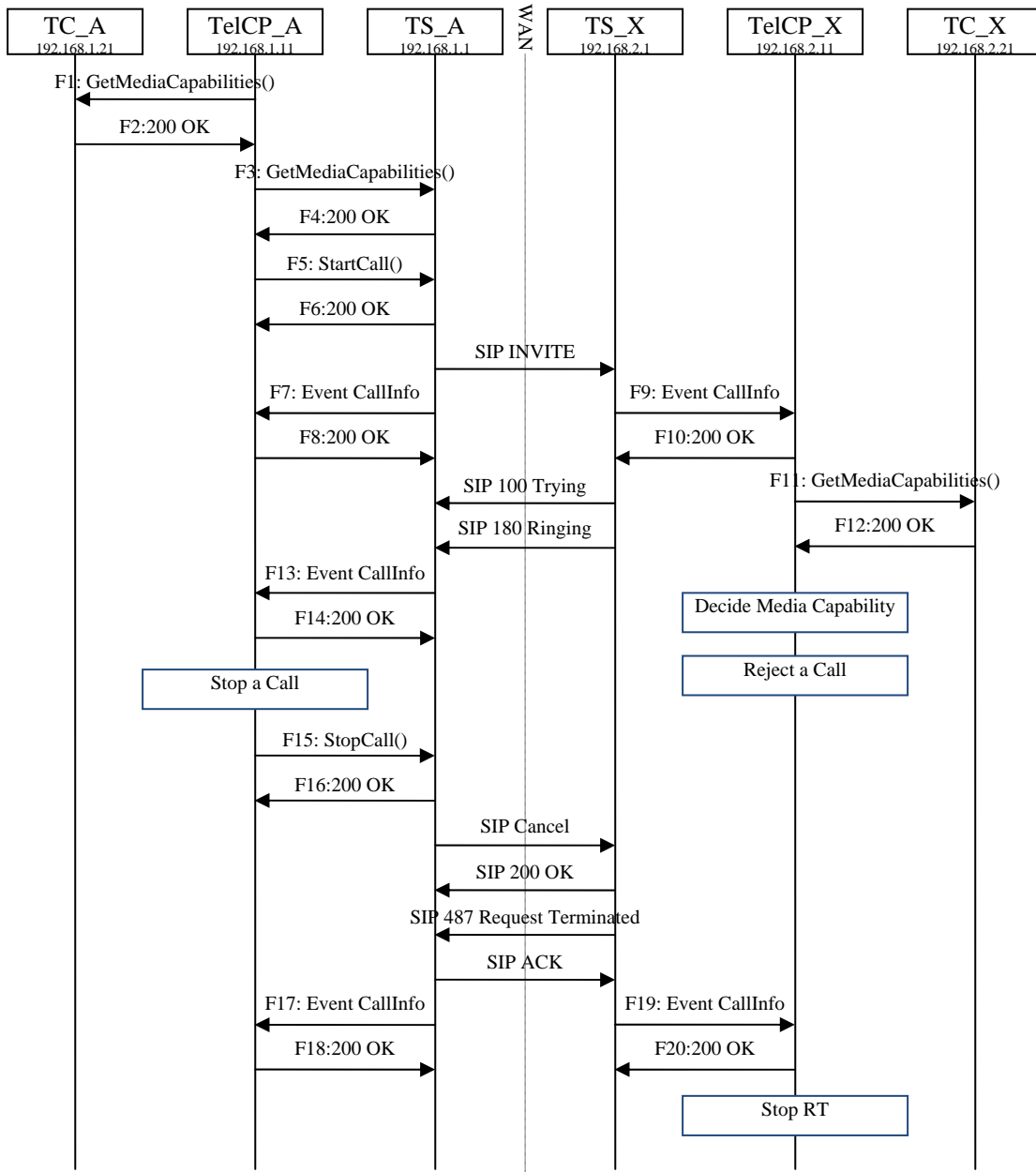a=ptime:20
    &lt;/mediaCapability&gt;
```

```
    &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.3.8   F20

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.4   Cancel an outgoing Call

B.4.1   Figure

B.4.2   F1 to F14 are the same as "B.1 Create a Call"

B.4.3   F15

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StopCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StopCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName></TelCPName>
   <SecretKey></SecretKey>
   <CallID>call101</CallID>
  </u:StopCall>
 </s:Body>
</s:Envelope>
```

B.4.4   F16

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
   <m:StopCallResponse xmlns:m="urn:schemas-upnp-org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.4.5   F17

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
   <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:callInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
```

```
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:cams="urn:schemas-upnp-org:phone:cams"
        xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
        &lt;callID&gt;call101&lt;/callID&gt;
        &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
        &lt;callStatus reason="Cancelled"&gt;Disconnected&lt;/callStatus&gt;
        &lt;priority&gt;Normal&lt;/priority&gt;
        &lt;remoteParty&gt;
        &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
        &lt;/remoteParty&gt;
      &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
       &lt;/mediaCapability&gt;
      &lt;/cams:callInfo&gt;</CallInfo>
    </e:property>
</e:propertyset>
```

B.4.6   F18

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.4.7   F19

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
   <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus reason="Cancelled"&gt;Disconnected&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0355550101;/peer:id&gt;
```

```
    &lt;/remoteParty&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
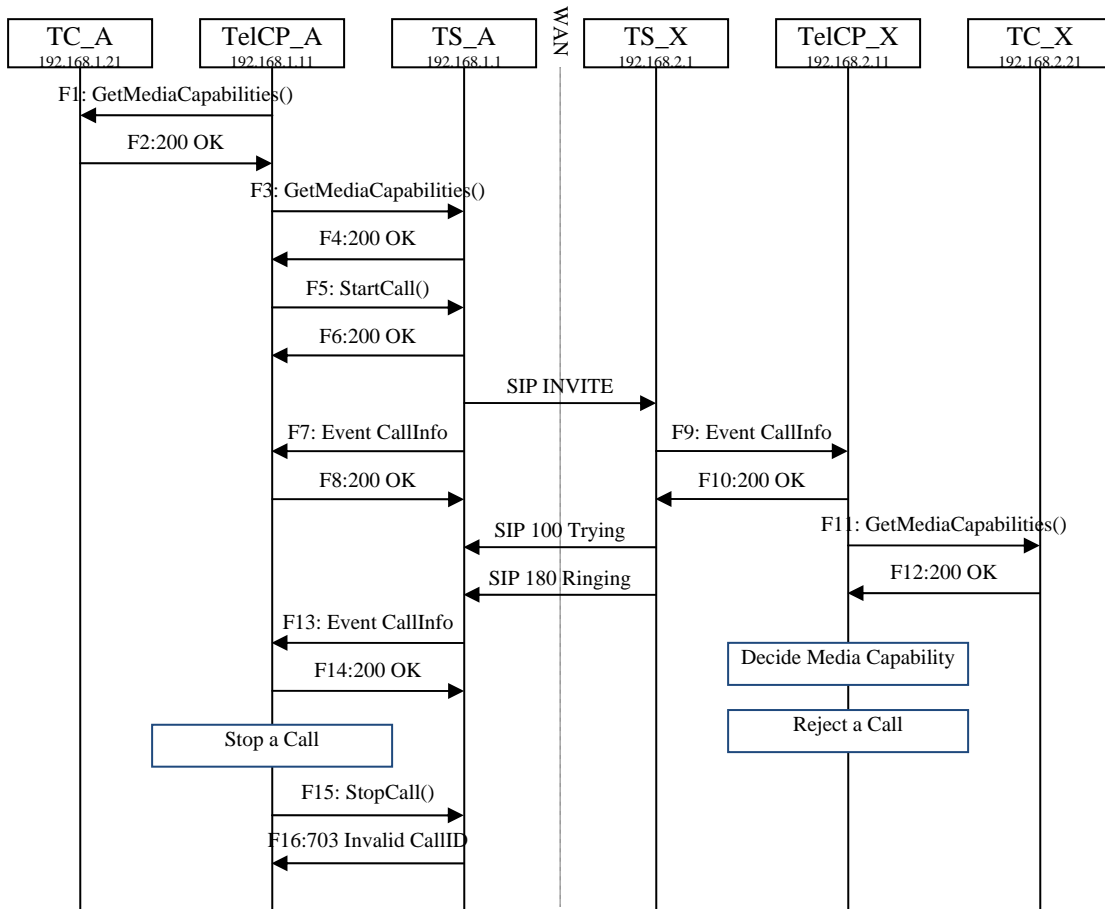    &lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.4.8   F20

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.5   Cancel an outgoing Call (But the specified CallID does not exist.)

B.5.1   Figure

B.5.2 F1 to F14 are the same as "B.1 Create a Call"

B.5.3 F15

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StopCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StopCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>TV@Living</TelCPName>
   <SecretKey>secret101</SecretKey>
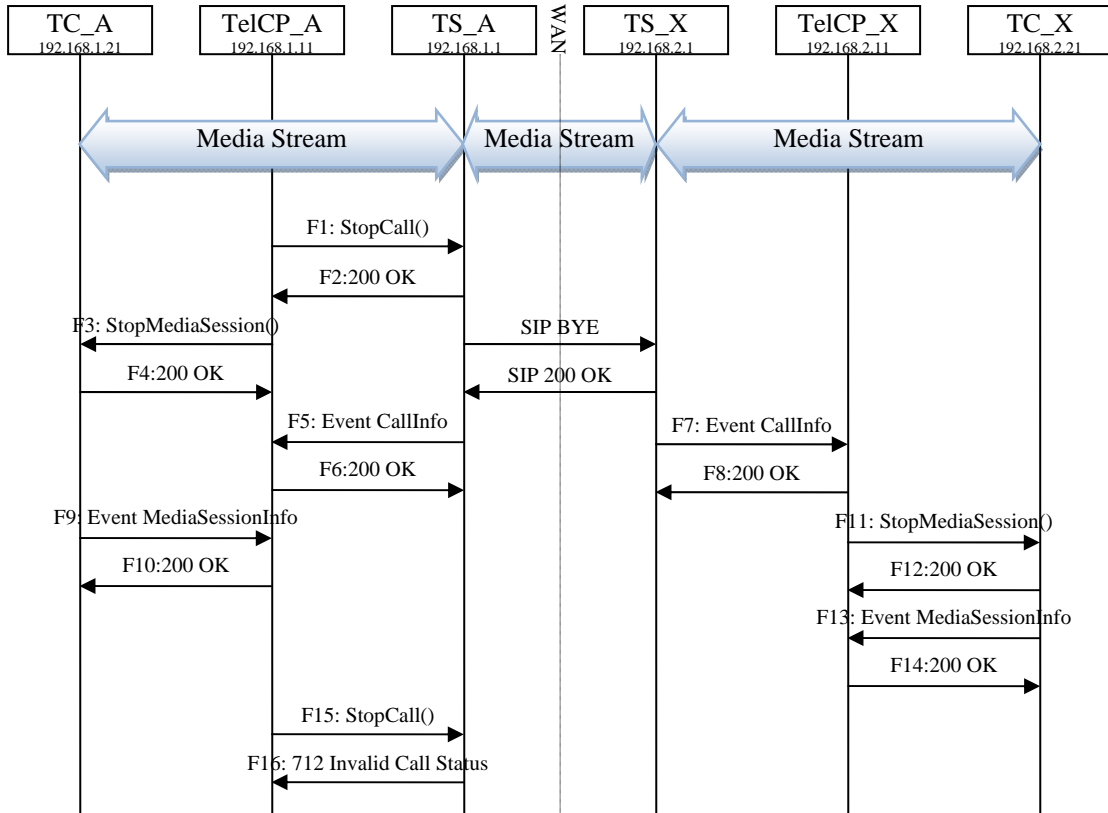   <CallID>wrongcallid</CallID>
  </u:StopCall>
 </s:Body>
</s:Envelope>
```

B.5.4 F16

```
HTTP/1.1 500 Internal Server Error
Content-Length: [bytes in body]

<s:Envelope
 xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
 s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <s:Fault>
   <faultcode>s:Client</faultcode>
   <faultstring>UPnPError</faultstring>
   <detail>
    <UPnPError xmlns="urn:schemas-upnp-org:control-1-0">
     <errorCode>703</errorCode>
     <errorDescription>Invalid CallID</errorDescription>
    </UPnPError>
   </detail>
  </s:Fault>
 </s:Body>
</s:Envelope>
```

B.6 Cancel an outgoing Call (But the StopCall() action is invoked at invalid timing.)

B.6.1 Figure

B.6.2 F1 to F14 are the same as "B.2 Terminate a Call"

B.6.3 F15

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StopCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StopCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
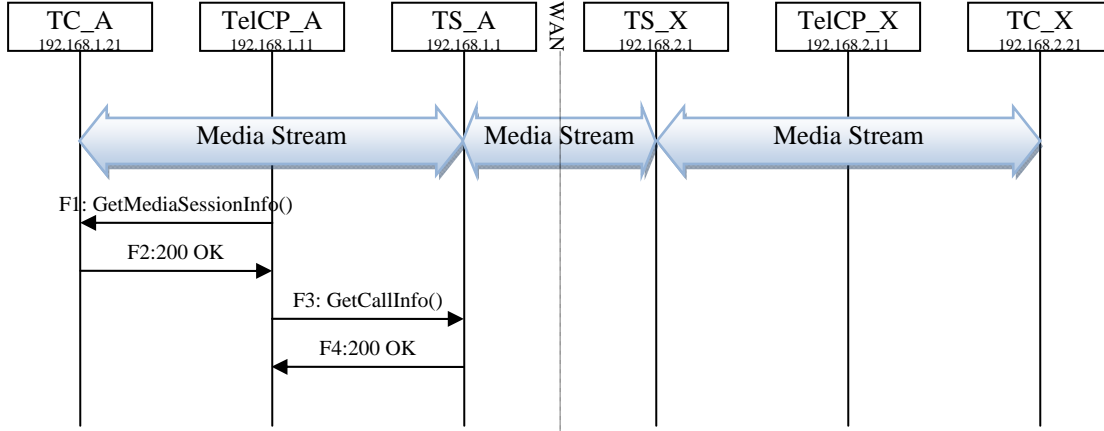   <TelCPName></TelCPName>
   <SecretKey></SecretKey>
   <CallID>call101</CallID>
  </u:StopCall>
 </s:Body>
</s:Envelope>
```

B.6.4   F16

```
HTTP/1.1 500 Internal Server Error
Content-Length: [bytes in body]

<s:Envelope
 xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
 s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
   <s:Fault>
   <faultcode>s:Client</faultcode>
   <faultstring>UPnPError</faultstring>
   <detail>
    <UPnPError xmlns="urn:schemas-upnp-org:control-1-0">
     <errorCode>712</errorCode>
     <errorDescription>Invalid Call Status</errorDescription>
    </UPnPError>
   </detail>
  </s:Fault>
 </s:Body>
</s:Envelope>
```

B.7   Get MediaSessionInfo and CallInfo during the Call

B.7.1   Figure

B.7.2   F1

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-
org:service:MediaManagement:1#GetMediaSessionInfo"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.21:10021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
```

```
 <s:Body>
  <u:GetMediaSessionInfo xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1"
 />
   <TargetMediaSessionID>media101</TargetMediaSessionID>
  </u:GetMediaSessionInfo>
 </s:Body>
</s:Envelope>
```

B.7.3   F2

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaSessionInfoResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
   <MediaSessionInfoList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;mss:mediaSessionInfoList xsi:schemaLocation="urn:schemas-upnp-
org:phone:mms
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
    &lt;mediaSessionInfo&gt;
     &it;mediaSessionID&gt;media101&it;/mediaSessionID&gt;
     &it;mediaSessionStatus&gt;Started&it;/mediaSessionStatus&gt;
     &it;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.21
s=-
c=IN IP4 192.168.1.21
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/mediaCapability&gt;
    &lt;/mediaSessionInfo&gt;
   &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfoList>
  </u:GetMediaSessionInfoResponse>
 </s:Body>
</s:Envelope>
```

B.7.4   F3

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#GetCallInfo"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
```

```
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetCallInfo xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName></TelCPName>
   <SecretKey></SecretKey>
   <TargetCallID>call101</TargetCallID>
  </u:GetCallInfo>
 </s:Body>
</s:Envelope>
```

B.7.5 F4

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
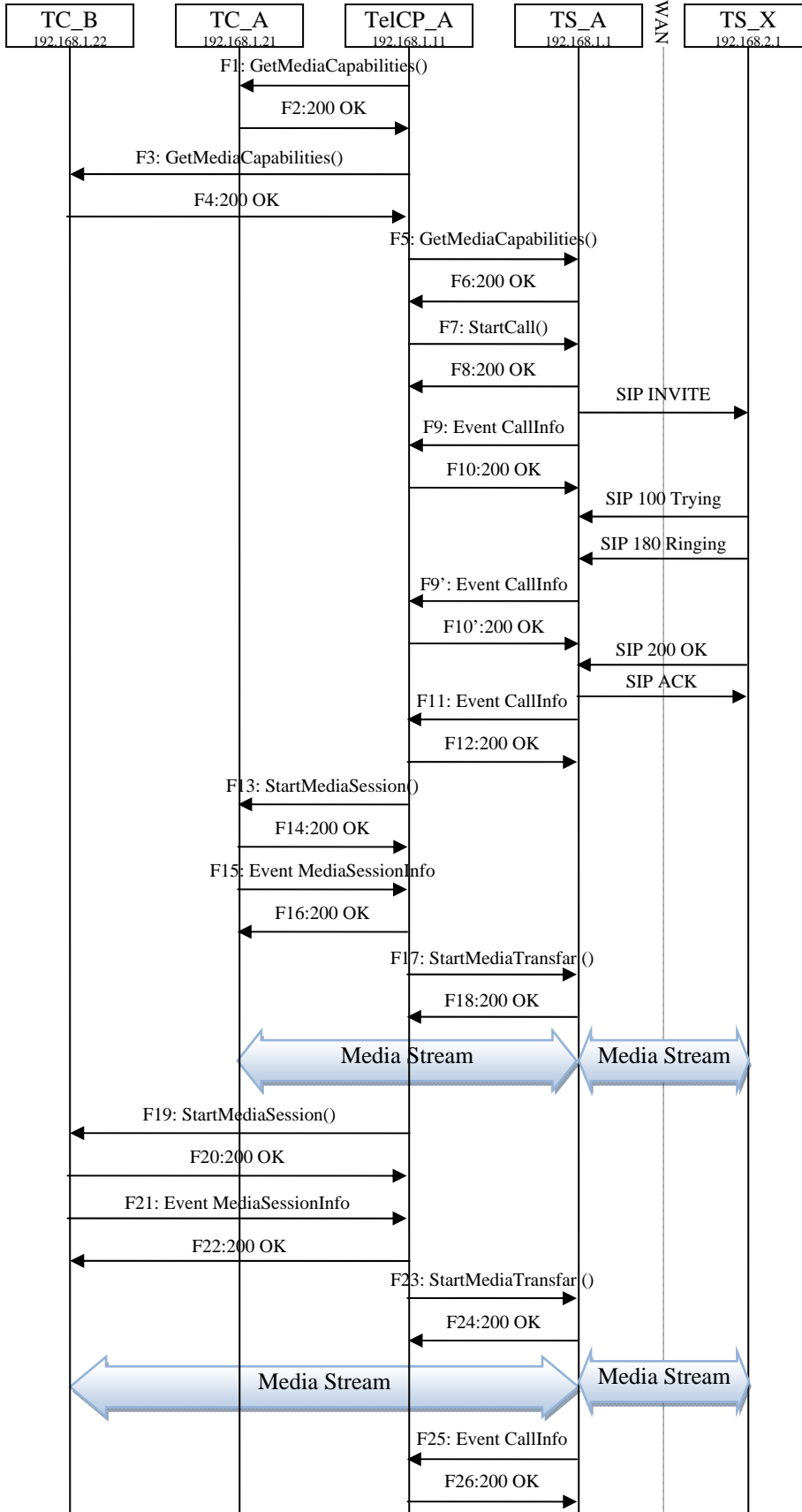<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetCallInfoResponse xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <callInfoList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;cams:callInfoList
       xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
       http://www.upnp.org/schemas/phone/cams-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:cams"
       xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
  &lt;callInfo&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;TelCPNames&gt;&lt;/TelCPNames&gt;
   &lt;callStatus&gt;Talking &lt;/callStatus&gt;
   &lt;priority&gt;"Normal"&lt;/priority&gt;
   &lt;peer&gt;
    &lt;peer:id&gt;0774940201&lt;peer:id&gt;
   &lt;/peer&gt;
   &lt;TCList&gt;
    &lt;TC&gt;
            &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
      &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
   &lt;/TCList&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
   &lt;/mediaCapability&gt;
   &lt;/callInfo&gt;
```

```
&lt;/cams:callInfoList&gt;</callInfoList>
    </m:GetCallInfoResponse>
  </s:Body>
</s:Envelope>
```

B.8 Create an outgoing Call using multiple TCs (Case 1)

B.8.1 Figure

TC_B	TC_A	TelCP_A	TS_A	WAN	TS_X
192.168.1.22	192.168.1.21	192.168.1.11	192.168.1.1		192.168.2.1

F1: GetMediaCapabilities()

F2:200 OK

F3: GetMediaCapabilities()

F4:200 OK

F5: GetMediaCapabilities()

F6:200 OK

F7: StartCall()

F8:200 OK

SIP INVITE

F9: Event CallInfo

F10:200 OK

SIP 100 Trying

SIP 180 Ringing

F9': Event CallInfo

F10':200 OK

SIP 200 OK

SIP ACK

F11: Event CallInfo

F12:200 OK

F13: StartMediaSession()

F14:200 OK

F15: Event MediaSessionInfo

F16:200 OK

F17: StartMediaTransfar ()

F18:200 OK

Media Stream   Media Stream

F19: StartMediaSession()

F20:200 OK

F21: Event MediaSessionInfo

F22:200 OK

F23: StartMediaTransfar ()

F24:200 OK

Media Stream   Media Stream

F25: Event CallInfo

F26:200 OK

B.8.2   F1

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-
org:service:MediaManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.21:10021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1"
>
   <TSMediaCapabilityInfo></TSMediaCapabilityInfo>
  </u:GetMediaCapabilities>
 </s:Body>
</s:Envelope>
```

B.8.3   F2

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
    <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;mms:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.21
s=-
c=IN IP4 192.168.1.21
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12021 RTP/AVP 96
c=IN IP4 192.168.1.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000001200086c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability&gt;
```

```
    &lt;/mms:mediaCapabilityInfo&gt;
    </SupportedMediaCapabilityInfo>
  </u:GetMediaCapabilitiesResponse>
 </s:Body>
</s:Envelope>
```

B.8.4   F3

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-
org:service:MediaManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.22:10022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1"
>
   <TSMediaCapabilityInfo></TSMediaCapabilityInfo>
  </u:GetMediaCapabilities>
 </s:Body>
</s:Envelope>
```

B.8.5   F4

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
    <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;mms:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.22
s=-
c=IN IP4 192.168.1.22
t=0 0
m=audio 11022 RTP/AVP 0
c=IN IP4 192.168.1.22
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12022 RTP/AVP 96
c=IN IP4 192.168.1.22
```

```
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability&gt;
   &lt;/mms:mediaCapabilityInfo&gt;
   </SupportedMediaCapabilityInfo>
 </u:GetMediaCapabilitiesResponse>
 </s:Body>
</s:Envelope>
```

B.8.6   F5

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service: CallManagement:1">
   <TCMediaCapabilityInfo></TCMediaCapabilityInfo>
  </u:GetMediaCapabilities>
 </s:Body>
</s:Envelope>
```

B.8.7   F6

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:CallManagement:1">
   <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
```

```
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000100000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
    &lt;/cams:mediaCapabilityInfo&gt;</SupportedMediaCapabilityInfo>
  </u:GetMediaCapabilitiesResponse>
 </s:Body>
</s:Envelope>
```

B.8.8   F7

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>TV@Living</TelCPName>
   <SecretKey>secret101</SecretKey>
   <CalleeID> tel:0774940201</CalleeID>
   <CallPriority>Normal</CallPriority>
   <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12022 RTP/AVP 96
c=IN IP4 192.168.1.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000100000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
    &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
```

```
     <CallMode>Non-Monopolize</CallMode>
    </u:StartCall>
   </s:Body>
  </s:Envelope>
```

B.8.9   F8

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartCallResponse xmlns:m="urn:schemas-upnp-org:service:CallManagement:1">
   <CallID>call101</CallID>
  </m:StartCallResponse>
 </s:Body>
</s:Envelope>
```

B.8.10   F9

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Dialing&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
```

```
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000120008c40fa28a021e0a21
a=framerate:30&lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.8.11   F10

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.8.12   F9'

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Calling&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
```

```
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000120086c40fa28a021e0a21
a=framerate:30&lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.8.13   F10'

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.8.14   F11

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Connected&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
```

```
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
a=framerate:30&lt;/mediaCapability&gt;
 &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.8.15　F12

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.8.16　F13

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.21:10021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
   <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
      xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
      http://www.upnp.org/schemas/phone/mms-v1.xsd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/mediaCapability&gt;
     &lt;/mms:mediaCapabilityInfo&gt;
     </TSMediaCapabilityInfo>
  </u:StartMediaSession>
 </s:Body>
</s:Envelope>
```

B.8.17　F14

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]
```

```
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
   <MediaSessionID>media101</MediaSessionID>
   <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;mms:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
     http://www.upnp.org/schemas/phone/mms-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.21
s=-
c=IN IP4 192.168.1.21
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/mediaCapability&gt;
    &lt;/mms:mediaCapabilityInfo&gt;
   </TCMediaCapabilityInfo>
  </u:StartMediaSessionResponse>
 </s:Body>
</s:Envelope>
```

B.8.18   F15

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10021
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;mms:mediaSessionInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
   http://www.upnp.org/schemas/phone/mms-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
   &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
   &lt;mediaSessionStatus&gt;Started&lt;/mediaSessionStatus&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.21
s=-
c=IN IP4 192.168.1.21
```

```
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/mediaCapability&gt;
   &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfo>
  </e:property>
</e:propertyset>
```

B.8.19   F16

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.8.20   F17

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
    <TelCPName>TV@Living</TelCPName>
    <SecretKey>secret101</SecretKey>
    <TargetCallID>call101</TargetCallID>
    <TCList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:TCList
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
    &lt;TC&gt;
     &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
     &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
    &lt;/cams:TCList&gt;</TCList>
   <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
```

```
        &lt;/mediaCapability &gt;
      &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
    </u:StartMediaTransfer>
  </s:Body>
</s:Envelope>
```

B.8.21   F18

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
  <s:Body>
    <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
  </s:Body>
</s:Envelope>
```

B.8.22   F19

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.22:10022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
   <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
    <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;mms:mediaCapabilityInfo
        xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
        http://www.upnp.org/schemas/phone/mms-v1.xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
        &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
        &lt;/mediaCapability&gt;
      &lt;/mms:mediaCapabilityInfo&gt;
      </TSMediaCapabilityInfo>
```

```
        </u:StartMediaSession>
    </s:Body>
</s:Envelope>
```

B.8.23   F20

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
    <s:Body>
        <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
            <MediaSessionID>media102</MediaSessionID>
            <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
             &lt;mms:mediaCapabilityInfo
                xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
                http://www.upnp.org/schemas/phone/mms-v1.xsd"
                xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
                &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.22
s=-
c=IN IP4 192.168.1.22
t=0 0
m=video 12022 RTP/AVP 96
c=IN IP4 192.168.1.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
a=framerate:30
             &lt;/mediaCapability&gt;
            &lt;/mms:mediaCapabilityInfo&gt;</TCMediaCapabilityInfo>
        </u:StartMediaSessionResponse>
    </s:Body>
</s:Envelope>
```

B.8.24   F21

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10022
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
```

```
  <e:property>
   <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;mms:mediaSessionInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
    http://www.upnp.org/schemas/phone/mms-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
    &lt;mediaSessionID&gt;media102&lt;/mediaSessionID&gt;
    &lt;mediaSessionStatus&gt;Started&lt;/mediaSessionStatus&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.22
s=-
c=IN IP4 192.168.1.22
t=0 0
m=video 12022 RTP/AVP 96
c=IN IP4 192.168.1.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability&gt;
   &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfo>
  </e:property>
</e:propertyset>
```

B.8.25   F22

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.8.26   F23

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>TV@Living</TelCPName>
   <SecretKey>secret101</SecretKey>
   <TargetCallID>call101</TargetCallID>
   <TCList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:TCList
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
    &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn102&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media102&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
```

```
        &lt;/cams:TCList&gt;</TCList>
    <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=video 12022 RTP/AVP 96
c=IN IP4 192.168.1.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
        &lt;/mediaCapability&gt;
    &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
   </u:StartMediaTransfer>
 </s:Body>
</s:Envelope>
```

B.8.27 F24

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.8.28 F25

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
```

```
<e:property>
 <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
 &lt;cams:callInfo
  xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
  http://www.upnp.org/schemas/phone/cams-v1.xsd"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:cams="urn:schemas-upnp-org:phone:cams"
  xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
 &lt;callID&gt;call101&lt;/callID&gt;
 &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
 &lt;callStatus&gt;Talking&lt;/callStatus&gt;
 &lt;priority&gt;Normal&lt;/priority&gt;
 &lt;remoteParty&gt;
  &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
 &lt;/remoteParty&gt;
 &lt;TCList&gt;
  &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
  &lt;/TC&gt;
  &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn102&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media102&lt;/mediaSessionID&gt;
  &lt;/TC&gt;
 &lt;/TCList&gt;
 &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
   &lt;/mediaCapability&gt;
 &lt;/cams:callInfo&gt;</CallInfo>
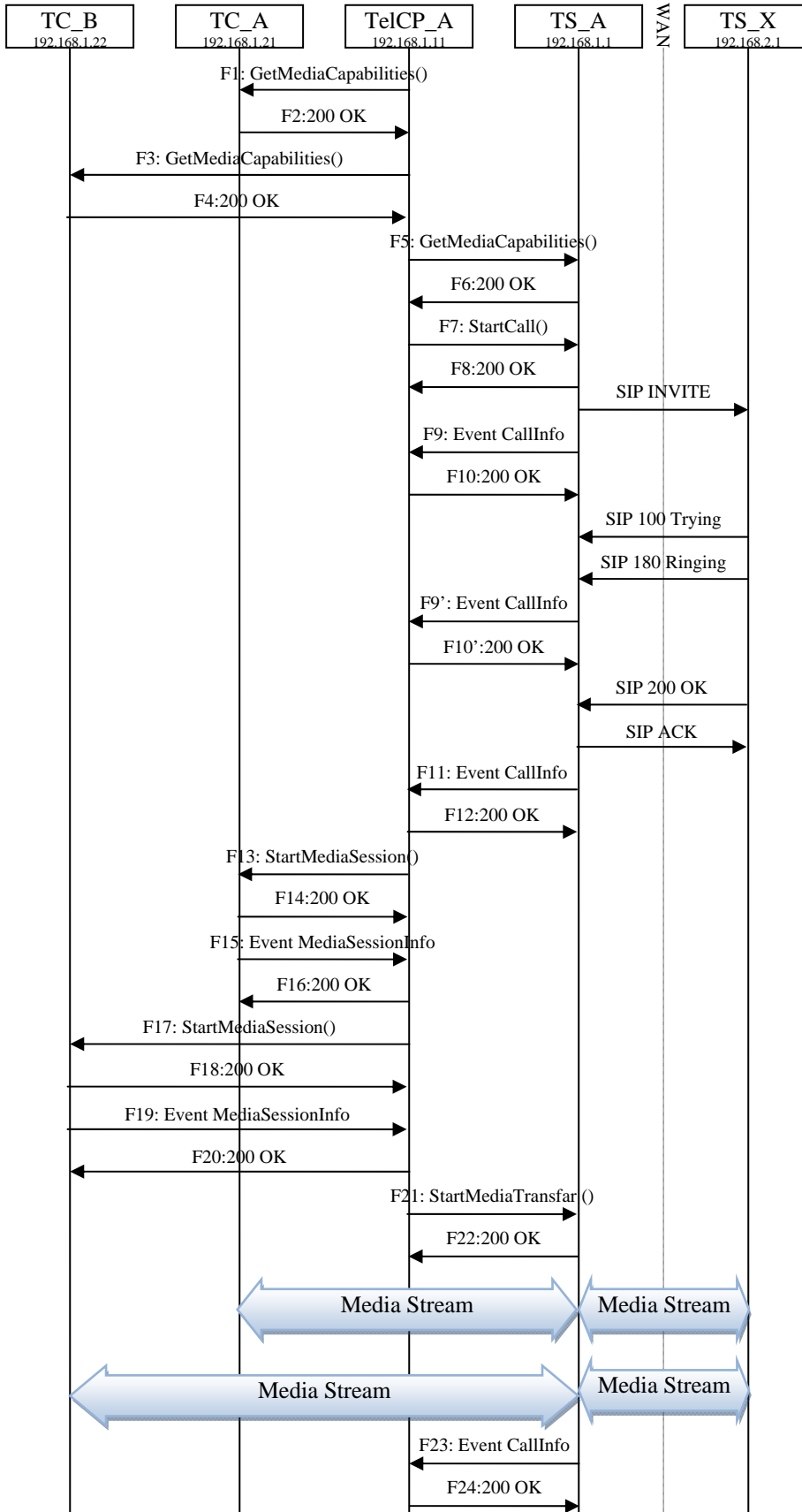 </e:property>
</e:propertyset>
```

B.8.29   F26

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.9   Create an outgoing Call using multiple TCs (Case 2)

B.9.1   Figure

TC_B	TC_A	TelCP_A	TS_A	WAN	TS_X
192.168.1.22	192.168.1.21	192.168.1.11	192.168.1.1		192.168.2.1

F1: GetMediaCapabilities()

F2:200 OK

F3: GetMediaCapabilities()

F4:200 OK

F5: GetMediaCapabilities()

F6:200 OK

F7: StartCall()

F8:200 OK

SIP INVITE

F9: Event CallInfo

F10:200 OK

SIP 100 Trying

SIP 180 Ringing

F9': Event CallInfo

F10':200 OK

SIP 200 OK

SIP ACK

F11: Event CallInfo

F12:200 OK

F13: StartMediaSession()

F14:200 OK

F15: Event MediaSessionInfo

F16:200 OK

F17: StartMediaSession()

F18:200 OK

F19: Event MediaSessionInfo

F20:200 OK

F21: StartMediaTransfar ()

F22:200 OK

Media Stream

Media Stream

Media Stream

Media Stream

F23: Event CallInfo

F24:200 OK

B.9.2   F1 to F16 are the same as "B.8 Create an outgoing Call using multiple TCs (Case 1)"

B.9.3   F17

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.22:10022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
   <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000120086c40fa28a021e0a21
a=framerate:30
       &lt;/mediaCapability&gt;
       &lt;/mms:mediaCapabilityInfo&gt;
       </TSMediaCapabilityInfo>
  </u:StartMediaSession>
 </s:Body>
</s:Envelope>
```

B.9.4   F18

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
    <MediaSessionID>media102</MediaSessionID>
```

```
          <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
           &lt;mms:mediaCapabilityInfo
             xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
             http://www.upnp.org/schemas/phone/mms-v1.xsd"
             xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
             xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
             &lt;mediaCapability format="SDP"&gt;v=0
      o=- 0 0 IN IP4 192.168.1.22
      s=-
      c=IN IP4 192.168.1.22
      t=0 0
      m=video 12022 RTP/AVP 96
      c=IN IP4 192.168.1.22
      b=AS:2500
      a=rtpmap:96 MP4V-ES/90000
      a=fmtp:96 profile-level-
      id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
      a=framerate:30
             &lt;/mediaCapability&gt;
           &lt;/mms:mediaCapabilityInfo&gt;</TCMediaCapabilityInfo>
         </u:StartMediaSessionResponse>
        </s:Body>
      </s:Envelope>
```

B.9.5   F19

```
      NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
      HOST: 192.168.1.11:10011
      CONTENT-TYPE: text/xml
      Content-Length: [bytes in body]
      NT: upnp:event
      NTS: upnp:propchange
      SID: uuid:c3580410-1dd1-11b2-8000-10022
      SEQ: [sequence number]
      Connection: Keep-Alive

      <?xml version="1.0" encoding="utf-8"?>
      <e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
       <e:property>
        <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
         &lt;mms:mediaSessionInfo
          xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
          http://www.upnp.org/schemas/phone/mms-v1.xsd"
          xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
          &lt;mediaSessionID&gt;media102&lt;/mediaSessionID&gt;
          &lt;mediaSessionStatus&gt;Started&lt;/mediaSessionStatus&gt;
          &lt;mediaCapability format="SDP"&gt;v=0
      o=- 0 0 IN IP4 192.168.1.22
      s=-
      c=IN IP4 192.168.1.22
      t=0 0
      m=video 12022 RTP/AVP 96
      c=IN IP4 192.168.1.22
      b=AS:2500
      a=rtpmap:96 MP4V-ES/90000
```

```
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000001200086c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability&gt;
  &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfo>
 </e:property>
</e:propertyset>
```

B.9.6   F20

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.9.7   F21

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>TV@Living</TelCPName>
   <SecretKey>secret101</SecretKey>
   <TargetCallID>call101</TargetCallID>
   <TCList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:TCList
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
    &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn102&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media102&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
   &lt;/cams:TCList&gt;</TCList>
   <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:mediaCapabilityInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
```

```
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12022 RTP/AVP 96
c=IN IP4 192.168.1.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
a=framerate:30
      &lt;/mediaCapability&gt;
    &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
   </u:StartMediaTransfer>
  </s:Body>
</s:Envelope>
```

B.9.8   F22

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.9.9   F23

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Talking&lt;/callStatus&gt;
```

```
&lt;priority&gt;Normal&lt;/priority&gt;
&lt;remoteParty&gt;
 &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
&lt;/remoteParty&gt;
&lt;TCList&gt;
 &lt;TC&gt;
   &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
 &lt;/TC&gt;
 &lt;TC&gt;
   &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn102&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media102&lt;/mediaSessionID&gt;
 &lt;/TC&gt;
&lt;/TCList&gt;
&lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000001200086c40fa28a021e0a21
a=framerate:30
  &lt;/mediaCapability&gt;
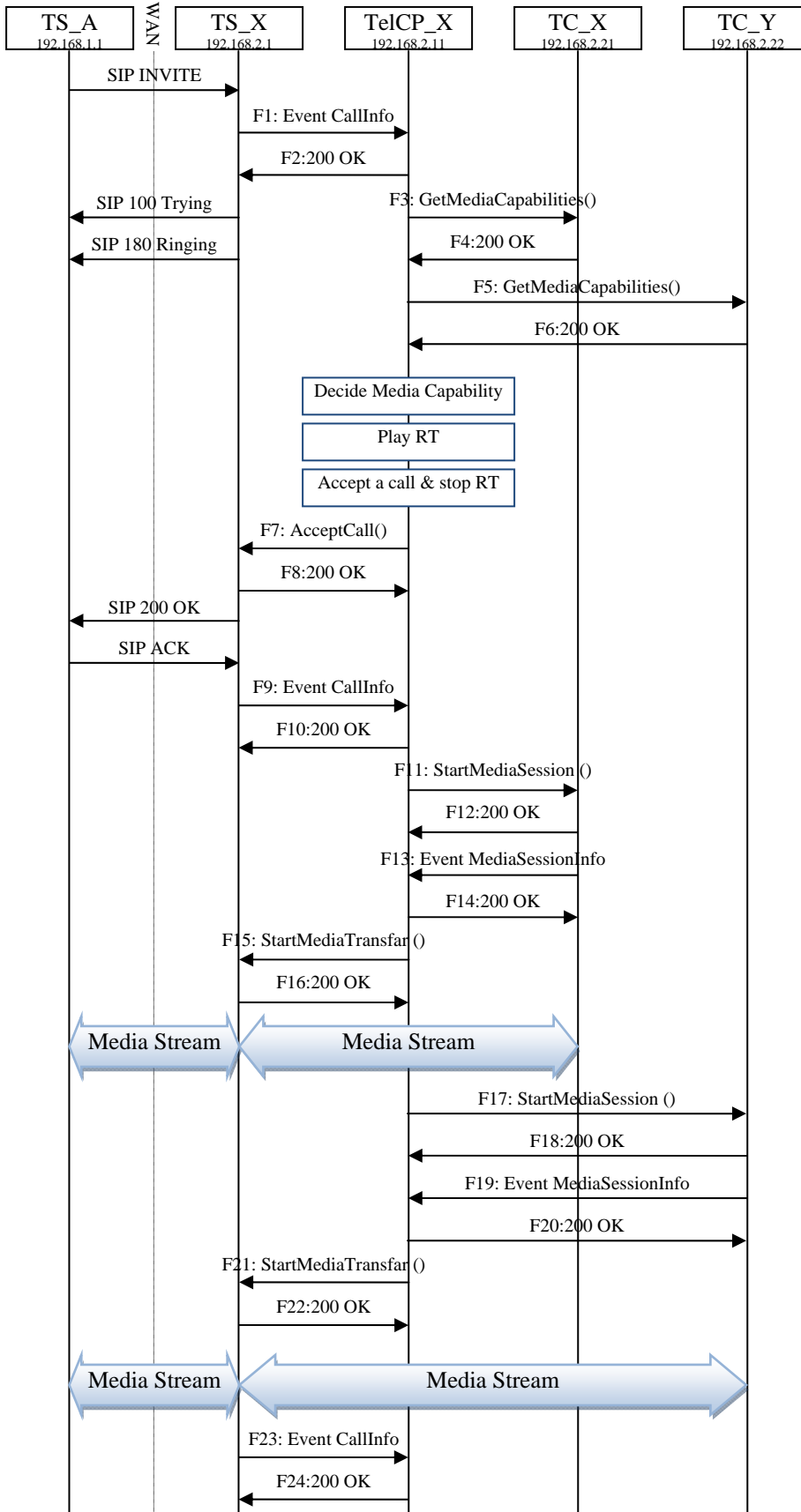 &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.9.10   F24

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.10 Accept an incoming Call using multiple TCs (Case 1)

B.10.1 Figure

TS_A
192.168.1.1

WAN

TS_X
192.168.2.1

TelCP_X
192.168.2.11

TC_X
192.168.2.21

TC_Y
192.168.2.22

SIP INVITE

F1: Event CallInfo

F2:200 OK

SIP 100 Trying

F3: GetMediaCapabilities()

F4:200 OK

SIP 180 Ringing

F5: GetMediaCapabilities()

F6:200 OK

Decide Media Capability

Play RT

Accept a call & stop RT

F7: AcceptCall()

F8:200 OK

SIP 200 OK

SIP ACK

F9: Event CallInfo

F10:200 OK

F11: StartMediaSession ()

F12:200 OK

F13: Event MediaSessionInfo

F14:200 OK

F15: StartMediaTransfar ()

F16:200 OK

Media Stream

Media Stream

F17: StartMediaSession ()

F18:200 OK

F19: Event MediaSessionInfo

F20:200 OK

F21: StartMediaTransfar ()

F22:200 OK

Media Stream

Media Stream

F23: Event CallInfo

F24:200 OK

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B.10.2 F1

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call201&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Ringing&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22001 RTP/AVP 96
c=IN IP4 192.168.2.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
   &lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.10.3 F2

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.10.4 F3

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-
org:service:MediaManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.21:20021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1"
>
   <TSMediaCapabilityInfo></TSMediaCapabilityInfo>
  </u:GetMediaCapabilities>
 </s:Body>
</s:Envelope>
```

B.10.5 F4

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
     <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.21
s=-
c=IN IP4 192.168.2.21
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22021 RTP/AVP 96
c=IN IP4 192.168.2.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
```

</mms:mediaCapabilityInfo></SupportedMediaCapabilityInfo>
   </u:GetMediaCapabilitiesResponse>
  </s:Body>
 </s:Envelope>

B.10.6   F5

POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-
org:service:MediaManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.22:20022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1"
>
   <TSMediaCapabilityInfo></TSMediaCapabilityInfo>
 </u:GetMediaCapabilities>
</s:Envelope>

B.10.7   F6

HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
    <SupportedMediaCapabilityInfo><?xml version="1.0" encoding="utf-8"?>
    <mms:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
     http://www.upnp.org/schemas/phone/mms-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:mms">
     <mediaCapability format="SDP">v=0
o=- 0 0 IN IP4 192.168.2.22
s=-
c=IN IP4 192.168.2.22
t=0 0
m=audio 21022 RTP/AVP 0
c=IN IP4 192.168.2.22
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22022 RTP/AVP 96
c=IN IP4 192.168.2.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000

```
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability &gt;
   &lt;/mms:mediaCapabilityInfo&gt;</SupportedMediaCapabilityInfo>
  </u:GetMediaCapabilitiesResponse>
 </s:Body>
</s:Envelope>
```

B.10.8   F7

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#AcceptCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#AcceptCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:AcceptCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>phone @Bedroom</TelCPName>
   <SecretKey>secret201</SecretKey>
   <TargetCallID>call201</TargetCallID>
   <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22022 RTP/AVP 96
c=IN IP4 192.168.2.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability&gt;
   &lt;/cams:mediaCapabilityInfo&gt;
   </MediaCapabilityInfo>
```

```
  <CallMode>Non-Monopolize</CallMode>
 </u:AcceptCall>
 </s:Body>
</s:Envelope>
```

B.10.9   F8

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
   <m:AcceptCallResponse xmlns:m="urn:schemas-upnp-org:service:CallManagement:1"
/>
 </s:Body>
</s:Envelope>
```

B.10.10 F9

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
   <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call201&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Connected&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
```

```
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22001 RTP/AVP 96
c=IN IP4 192.168.2.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000001200086c40fa28a021e0a21
 a=framerate:30
   &lt;/mediaCapability&gt;
   &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.10.11 F10

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.10.12 F11

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.21:20021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
   <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
       &lt;/mediaCapability&gt;
       &lt;/mms:mediaCapabilityInfo&gt;
       </TSMediaCapabilityInfo>
  </u:StartMediaSession>
 </s:Body>
</s:Envelope>
```

B.10.13 F12

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
   <MediaSessionID>media201</MediaSessionID>
   <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;mms:mediaCapabilityInfo
      xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
      http://www.upnp.org/schemas/phone/mms-v1.xsd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
      &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.21
s=-
c=IN IP4 192.168.2.21
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/mediaCapability&gt;
    &lt;/mms:mediaCapabilityInfo&gt;</TCMediaCapabilityInfo>
  </u:StartMediaSessionResponse>
 </s:Body>
</s:Envelope>
```

B.10.14 F13

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20021
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;mms:mediaSessionInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
    http://www.upnp.org/schemas/phone/mms-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
```

<mediaSessionID>*media201*</mediaSessionID>
<mediaSessionStatus>*Started*</mediaSessionStatus>
<mediaCapability format="SDP">v=0
o=- 0 0 IN IP4 192.168.2.21
s=-
c=IN IP4 192.168.2.21
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
</mediaCapability>
</mms:mediaSessionInfo></MediaSessionInfo>
  </e:property>
</e:propertyset>

B.10.15 F14

HTTP/1.1 200 OK
Content-Length: 0

B.10.16 F15

POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>*phone @Bedroom*</TelCPName>
   <SecretKey>*secret201*</SecretKey>
   <TargetCallID>*call201*</TargetCallID>
   <TCList><?xml version="1.0" encoding="utf-8"?>
   <cams:TCList
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams">
   <TC>
    <UDN>uuid:*97ef6efa-ac89-4ea2-0001-udn201*</UDN>
    <mediaSessionID>*media201*</mediaSessionID>
   </TC>
   </cams:TCList></TCList>
   <MediaCapabilityInfo><?xml version="1.0" encoding="utf-8"?>
   <cams:mediaCapabilityInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams">
   <mediaCapability format="SDP">v=0
o=- 0 0 IN IP4 192.168.2.11
s=-

```
c=IN IP4 192.168.2.11
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/mediaCapability&gt;
   &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
   </u:StartMediaTransfer>
  </s:Body>
</s:Envelope>
```

B.10.17 F16

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.10.18 F17

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.22:20022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
   <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=video 22001 RTP/AVP 96
c=IN IP4 192.168.2.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
```

```
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
a=framerate:30
      &lt;/mediaCapability&gt;
      &lt;/mms:mediaCapabilityInfo&gt;
      </TSMediaCapabilityInfo>
  </u:StartMediaSession>
 </s:Body>
</s:Envelope>
```

B.10.19 F18

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
     <MediaSessionID>media202</MediaSessionID>
     <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;mms:mediaCapabilityInfo
        xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
        http://www.upnp.org/schemas/phone/mms-v1.xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
      &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.22
s=-
c=IN IP4 192.168.2.22
t=0 0
m=video 22022 RTP/AVP 96
c=IN IP4 192.168.2.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
a=framerate:30
      &lt;/mediaCapability&gt;
     &lt;/mms:mediaCapabilityInfo&gt;</TCMediaCapabilityInfo>
   </u:StartMediaSessionResponse>
 </s:Body>
</s:Envelope>
```

B.10.20 F19

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
```

SID: uuid:c3580410-1dd1-11b2-8000-20022
SEQ: [sequence number]
Connection: Keep-Alive

```
<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
   <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;mms:mediaSessionInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
    http://www.upnp.org/schemas/phone/mms-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
   &lt;mediaSessionID&gt;media202&lt;/mediaSessionID&gt;
   &lt;mediaSessionStatus&gt;Started&lt;/mediaSessionStatus&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.22
s=-
c=IN IP4 192.168.2.22
t=0 0
m=video 22022 RTP/AVP 96
c=IN IP4 192.168.2.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
   &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfo>
 </e:property>
</e:propertyset>
```

B.10.21 F20

HTTP/1.1 200 OK
Content-Length: 0

B.10.22 F21

POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

```
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
    <TelCPName>phone @Bedroom</TelCPName>
    <SecretKey>secret201</SecretKey>
    <TargetCallID>call201</TargetCallID>
    <TCList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:TCList
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
```

```
                http://www.upnp.org/schemas/phone/cams-v1.xsd"
                xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
                &lt;TC&gt;
                 &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn202&lt;/UDN&gt;
                 &lt;mediaSessionID&gt;media202&lt;/mediaSessionID&gt;
                &lt;/TC&gt;
                &lt;/cams:TCList&gt;</TCList>
              <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
              &lt;cams:mediaCapabilityInfo
               xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
               http://www.upnp.org/schemas/phone/cams-v1.xsd"
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
               xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
               &lt;mediaCapability format="SDP"&gt;v=0
          o=- 0 0 IN IP4 192.168.2.11
          s=-
          c=IN IP4 192.168.2.11
          t=0 0
          m=video 22022 RTP/AVP 96
          c=IN IP4 192.168.2.22
          b=AS:2500
          a=rtpmap:96 MP4V-ES/90000
          a=fmtp:96 profile-level-
          id=4;config=000001b004000001b5090000010000000001200086c40fa28a021e0a21
          a=framerate:30
                &lt;/mediaCapability&gt;
              &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
            </u:StartMediaTransfer>
           </s:Body>
          </s:Envelope>
```

B.10.23 F22

```
          HTTP/1.1 200 OK
          Content-Length: [bytes in body]
          CONTENT-TYPE: text/xml; charset="utf-8"
          SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
          EXT:

          <?xml version="1.0" encoding="utf-8"?>
          <s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
          s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
           <s:Body>
            <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
          org:service:CallManagement:1" />
           </s:Body>
          </s:Envelope>
```

B.10.24 F23

```
          NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
          HOST: 192.168.2.11:20011
          CONTENT-TYPE: text/xml
          Content-Length: [bytes in body]
          NT: upnp:event
          NTS: upnp:propchange
```

SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

```
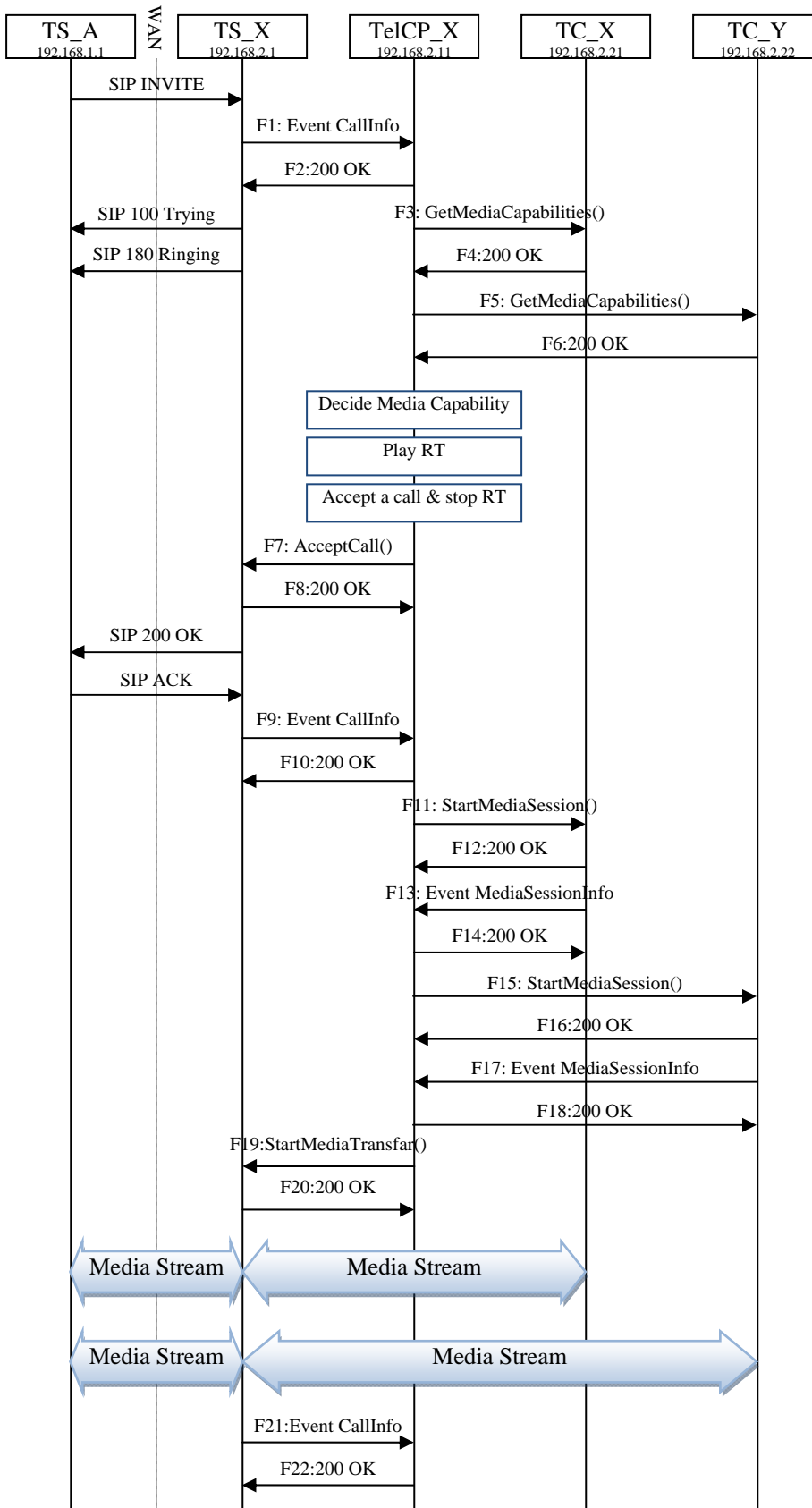<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call201&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Talking&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
   &lt;TCList&gt;
    &lt;TC&gt;
     &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
     &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
    &lt;TC&gt;
     &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn202&lt;/UDN&gt;
     &lt;mediaSessionID&gt;media202&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
   &lt;/TCList&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22001 RTP/AVP 96
c=IN IP4 192.168.2.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
   &lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.10.25 F24

HTTP/1.1 200 OK
Content-Length: 0

B.11 Accept an incoming Call using multiple TCs (Case 2)

B.11.1 Figure

B.11.2 F1 to F14 are the same as "B.10 Accept an incoming Call using multiple TCs (Case 1)"

B.11.3 F15

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.22:20022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
   <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=video 22001 RTP/AVP 96
c=IN IP4 192.168.2.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
     &lt;/mms:mediaCapabilityInfo&gt;
     </TSMediaCapabilityInfo>
  </u:StartMediaSession>
 </s:Body>
</s:Envelope>
```

B.11.4 F16

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
    <MediaSessionID>media202</MediaSessionID>
```

```
            <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
              &lt;mms:mediaCapabilityInfo
                xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
                http://www.upnp.org/schemas/phone/mms-v1.xsd"
                xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
                &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.22
s=-
c=IN IP4 192.168.2.22
t=0 0
m=video 22022 RTP/AVP 96
c=IN IP4 192.168.2.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000001200086c40fa28a021e0a21
a=framerate:30
              &lt;/mediaCapability&gt;
              &lt;/mms:mediaCapabilityInfo&gt;</TCMediaCapabilityInfo>
          </u:StartMediaSessionResponse>
        </s:Body>
      </s:Envelope>
```

B.11.5   F17

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20022
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
  <e:property>
    <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaSessionInfo
      xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
      http://www.upnp.org/schemas/phone/mms-v1.xsd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
      &lt;mediaSessionID&gt;media202&lt;/mediaSessionID&gt;
      &lt;mediaSessionStatus&gt;Started&lt;/mediaSessionStatus&gt;
      &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.22
s=-
c=IN IP4 192.168.2.22
t=0 0
m=video 22022 RTP/AVP 96
c=IN IP4 192.168.2.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
```

a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
</mediaCapability>
</mms:mediaSessionInfo></MediaSessionInfo>
 </e:property>
</e:propertyset>

B.11.6 F18

HTTP/1.1 200 OK
Content-Length: 0

B.11.7 F19

POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>*phone@Bedroom*</TelCPName>
   <SecretKey>*secret201*</SecretKey>
   <TargetCallID>*call201*</TargetCallID>
   <TCList><?xml version="1.0" encoding="utf-8"?>
   <cams:TCList
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams">
   <TC>
    <UDN>uuid:*97ef6efa-ac89-4ea2-0001-udn201*</UDN>
    <mediaSessionID>*media201*</mediaSessionID>
   </TC>
   <TC>
    <UDN>uuid:*97ef6efa-ac89-4ea2-0001-udn202*</UDN>
    <mediaSessionID>*media202*</mediaSessionID>
   </TC>
   </cams:TCList></TCList>
   <MediaCapabilityInfo><?xml version="1.0" encoding="utf-8"?>
   <cams:mediaCapabilityInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams">
   <mediaCapability format="SDP">v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21

```
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22022 RTP/AVP 96
c=IN IP4 192.168.2.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000001200086c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability&gt;
   &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
  </u:StartMediaTransfer>
 </s:Body>
</s:Envelope>
```

B.11.8   F20

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.11.9   F21

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call201&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Talking&lt;/callStatus&gt;
```

```
&lt;priority&gt;Normal&lt;/priority&gt;
&lt;remoteParty&gt;
 &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
&lt;/remoteParty&gt;
&lt;TCList&gt;
 &lt;TC&gt;
   &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
   &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
 &lt;/TC&gt;
 &lt;TC&gt;
   &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn202&lt;/UDN&gt;
   &lt;mediaSessionID&gt;media202&lt;/mediaSessionID&gt;
 &lt;/TC&gt;
&lt;/TCList&gt;
&lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22001 RTP/AVP 96
c=IN IP4 192.168.2.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
   &lt;/mediaCapability&gt;
 &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.11.10 F22

```
HTTP/1.1 200 OK
Content-Length: 0
</s:Envelope>
```

B.12 Add TC during a Call (Create a modification request)

B.12.1   Figure
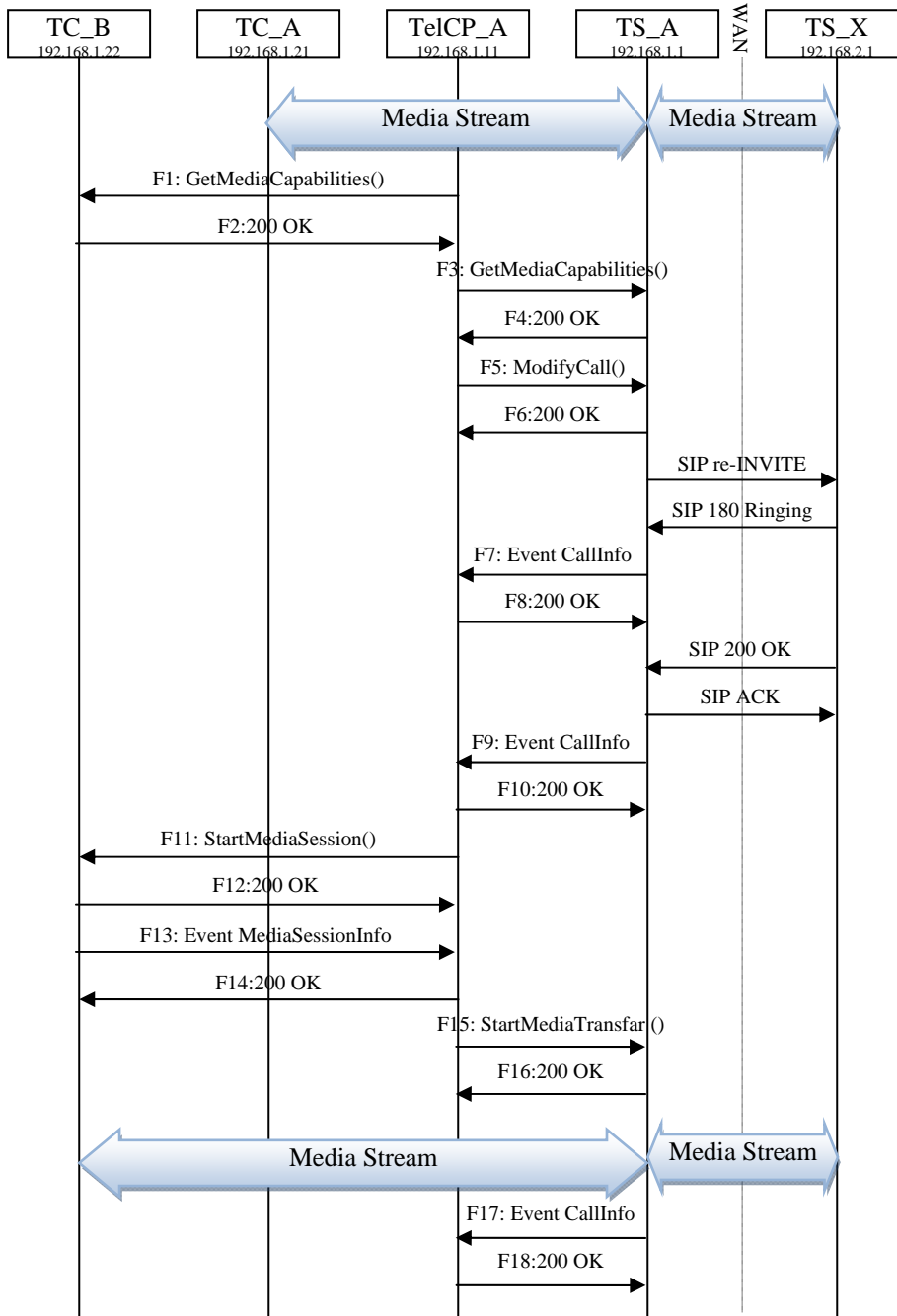
B.12.2   F1

POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-
org:service:MediaManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"

```
HOST: 192.168.1.22:10022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1"
>
   <TSMediaCapabilityInfo></TSMediaCapabilityInfo>
  </u:GetMediaCapabilities>
 </s:Body>
</s:Envelope>
```

B.12.3 F2

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
    <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;mms:mediaCapabilityInfo
      xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
      http://www.upnp.org/schemas/phone/mms-v1.xsd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
      &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.22
s=-
c=IN IP4 192.168.1.22
t=0 0
m=audio 11022 RTP/AVP 0
c=IN IP4 192.168.1.22
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12022 RTP/AVP 96
c=IN IP4 192.168.1.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000001200086c40fa28a021e0a21
a=framerate:30
&lt;/mediaCapability&gt;
&lt;/mms:mediaCapabilityInfo&gt;
    </SupportedMediaCapabilityInfo>
  </u:GetMediaCapabilitiesResponse>
 </s:Body>
</s:Envelope>
```

B.12.4 F3

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service: CallManagement:1">
   <TCMediaCapabilityInfo></TCMediaCapabilityInfo>
  </u:GetMediaCapabilities>
 </s:Body>
</s:Envelope>
```

B.12.5 F4

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:CallManagement:1">
   <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000000100000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
    &lt;/cams:mediaCapabilityInfo&gt;</SupportedMediaCapabilityInfo>
  </u:GetMediaCapabilitiesResponse>
```

```
  </s:Body>
 </s:Envelope>
```

B.12.6   F5

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#ModifyCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:ModifyCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>TV@Living</TelCPName>
   <SecretKey>secret101</SecretKey>
   <TargetCallID>call101</TargetCallID>
    <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12022 RTP/AVP 96
c=IN IP4 192.168.1.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000120086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
    &lt;/cams:mediaCapabilityInfo&gt;
    </MediaCapabilityInfo>
  </u:ModifyCall>
 </s:Body>
</s:Envelope>
```

B.12.7   F6

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:
```

```
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:ModifyCallResponse xmlns:m="urn:schemas-upnp-org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.12.8   F7

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
  &lt;callID&gt;call101&lt;/callID&gt;
  &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
  &lt;callStatus&gt;SendingModifyRequest&lt;/callStatus&gt;
  &lt;priority&gt;Normal&lt;/priority&gt;
  &lt;remoteParty&gt;
   &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
  &lt;/remoteParty&gt;
  &lt;TCList&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
  &lt;/TCList&gt;
  &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
```

```
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability&gt;
   &lt;/cams:callInfo&gt;
  </CallInfo>
 </e:property>
</e:propertyset>
```

B.12.9   F8

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.12.10 F9

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Modified&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
   &lt;TCList&gt;
    &lt;TC&gt;
     &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
     &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
   &lt;/TCList&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
```

```
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
      &lt;/mediaCapability&gt;
    &lt;/cams:callInfo&gt;
   </CallInfo>
  </e:property>
</e:propertyset>
```

B.12.11 F10

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.12.12 F11

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.22:10022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
   <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
      &lt;/mediaCapability&gt;
      &lt;/mms:mediaCapabilityInfo&gt;
      </TSMediaCapabilityInfo>
  </u:StartMediaSession>
 </s:Body>
</s:Envelope>
```

B.12.13 F12

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
     <MediaSessionID>media102</MediaSessionID>
     <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;mms:mediaCapabilityInfo
        xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
        http://www.upnp.org/schemas/phone/mms-v1.xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
        &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.22
s=-
c=IN IP4 192.168.1.22
t=0 0
m=video 12022 RTP/AVP 96
c=IN IP4 192.168.1.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
        &lt;/mediaCapability&gt;
      &lt;/mms:mediaCapabilityInfo&gt;
     </TCMediaCapabilityInfo>
   </u:StartMediaSessionResponse>
 </s:Body>
</s:Envelope>
```

B.12.14 F13

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10022
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
   <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;mms:mediaSessionInfo
```

xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
http://www.upnp.org/schemas/phone/mms-v1.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:mms="urn:schemas-upnp-org:phone:mms">
<mediaSessionID>*media102*</mediaSessionID>
<mediaSessionStatus>*Started*</mediaSessionStatus>
<mediaCapability format="SDP">v=0
o=- 0 0 IN IP4 192.168.1.22
s=-
c=IN IP4 192.168.1.22
t=0 0
m=video 12022 RTP/AVP 96
c=IN IP4 192.168.1.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
</mediaCapability>
</mms:mediaSessionInfo></MediaSessionInfo>
</e:property>
</e:propertyset>

B.12.15   F14

HTTP/1.1 200 OK
Content-Length: 0

B.12.16   F15

POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>*TV@Living*</TelCPName>
   <SecretKey>*secret101*</SecretKey>
   <TargetCallID>*call101*</TargetCallID>
   <TCList><?xml version="1.0" encoding="utf-8"?>
   <cams:TCList
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams">
   <TC>
    <UDN>uuid:*97ef6efa-ac89-4ea2-0001-udn101*</UDN>
    <mediaSessionID>*media101*</mediaSessionID>
   </TC>
   <TC>
    <UDN>uuid:*97ef6efa-ac89-4ea2-0001-udn102*</UDN>
    <mediaSessionID>*media102*</mediaSessionID>

```
        &lt;/TC&gt;
        &lt;/cams:TCList&gt;</TCList>
      <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;cams:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
       http://www.upnp.org/schemas/phone/cams-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12022 RTP/AVP 96
c=IN IP4 192.168.1.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
       &lt;/mediaCapability&gt;
      &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
    </u:StartMediaTransfer>
   </s:Body>
</s:Envelope>
```

B.12.17 F16

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.12.18 F17

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
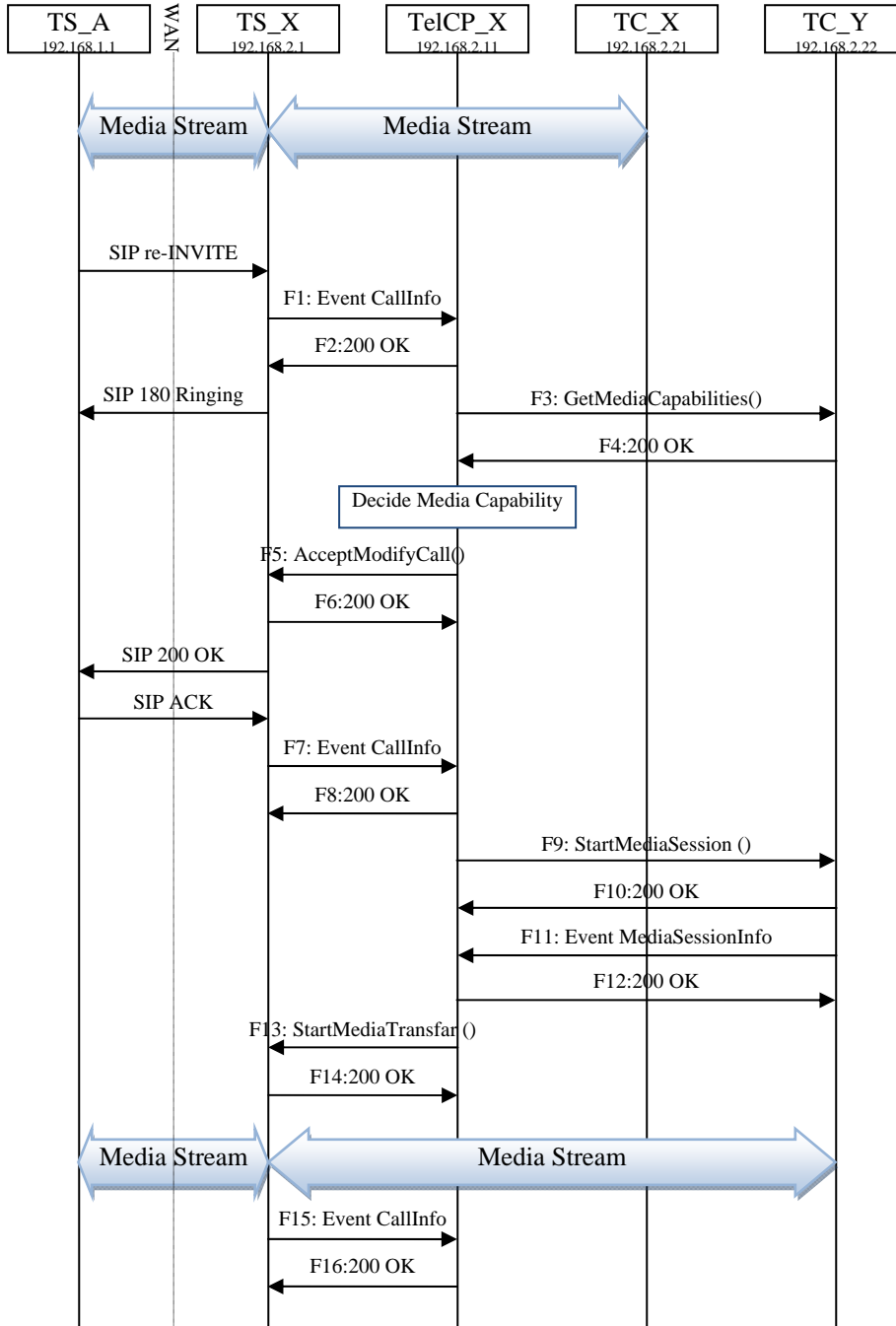```

Connection: Keep-Alive

```
<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
  &lt;callID&gt;call101&lt;/callID&gt;
  &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
  &lt;callStatus&gt;Talking&lt;/callStatus&gt;
  &lt;priority&gt;Normal&lt;/priority&gt;
  &lt;remoteParty&gt;
   &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
  &lt;/remoteParty&gt;
  &lt;TCList&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn102&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media102&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
  &lt;/TCList&gt;
  &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000120086c40fa28a021e0a21
a=framerate:30
  &lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.12.19 F18

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.13 Add TC during a Call (Accept a modification request)

B.13.1   Figure

B.13.2   F1

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
```

NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

```
<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
  <e:property>
    <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:callInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"
     xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
    &lt;callID&gt;call201&lt;/callID&gt;
    &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
    &lt;callStatus&gt;ReceivingModifyRequest&lt;/callStatus&gt;
    &lt;priority&gt;Normal&lt;/priority&gt;
    &lt;remoteParty&gt;
     &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
    &lt;/remoteParty&gt;
    &lt;TCList&gt;
     &lt;TC&gt;
       &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
       &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
     &lt;/TC&gt;
    &lt;/TCList&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22001 RTP/AVP 96
c=IN IP4 192.168.2.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000120086c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability&gt;
   &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.13.3   F2

HTTP/1.1 200 OK
Content-Length: 0

B.13.4 F3

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-
org:service:MediaManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.22:20022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1"
>
   <TSMediaCapabilityInfo></TSMediaCapabilityInfo>
 </u:GetMediaCapabilities>
</s:Envelope>
```

B.13.5 F4

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
    <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;mms:mediaCapabilityInfo
      xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
      http://www.upnp.org/schemas/phone/mms-v1.xsd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
      &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.22
s=-
c=IN IP4 192.168.2.22
t=0 0
m=audio 21022 RTP/AVP 0
c=IN IP4 192.168.2.22
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22022 RTP/AVP 96
c=IN IP4 192.168.2.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
    &lt;/mms:mediaCapabilityInfo&gt;</SupportedMediaCapabilityInfo>
  </u:GetMediaCapabilitiesResponse>
```

```
  </s:Body>
 </s:Envelope>
```

B.13.6   F5

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#AcceptModifyCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:AcceptModifyCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>phone @Bedroom</TelCPName>
   <SecretKey>secret201</SecretKey>
   <TargetCallID>call201</TargetCallID>
    <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22022 RTP/AVP 96
c=IN IP4 192.168.2.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability&gt;
    &lt;/cams:mediaCapabilityInfo&gt;
    </MediaCapabilityInfo>
  </u:AcceptModifyCall>
 </s:Body>
</s:Envelope>
```

B.13.7   F6

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
```

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:AcceptModifyCallResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.13.8 F7

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
  &lt;callID&gt;call201&lt;/callID&gt;
  &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
  &lt;callStatus&gt;Modified&lt;/callStatus&gt;
  &lt;priority&gt;Normal&lt;/priority&gt;
  &lt;remoteParty&gt;
   &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
  &lt;/remoteParty&gt;
  &lt;TCList&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
  &lt;/TCList&gt;
  &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22001 RTP/AVP 96
c=IN IP4 192.168.2.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
```

```
   a=fmtp:96 profile-level-
   id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
    a=framerate:30
      &lt;/mediaCapability&gt;
      &lt;/cams:callInfo&gt;</CallInfo>
    </e:property>
  </e:propertyset>
```

B.13.9   F8

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.13.10 F9

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.22:20022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
   <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
      xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
      http://www.upnp.org/schemas/phone/mms-v1.xsd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
      &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=video 22001 RTP/AVP 96
c=IN IP4 192.168.2.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
      &lt;/mediaCapability&gt;
      &lt;/mms:mediaCapabilityInfo&gt;
      </TSMediaCapabilityInfo>
   </u:StartMediaSession>
 </s:Body>
</s:Envelope>
```

B.13.11 F10

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
```

```
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
    <MediaSessionID>media202</MediaSessionID>
    <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.22
s=-
c=IN IP4 192.168.2.22
t=0 0
m=video 22022 RTP/AVP 96
c=IN IP4 192.168.2.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000001200086c40fa28a021e0a21
a=framerate:30
       &lt;/mediaCapability&gt;
     &lt;/mms:mediaCapabilityInfo&gt;</TCMediaCapabilityInfo>
  </u:StartMediaSessionResponse>
 </s:Body>
</s:Envelope>
```

B.13.12 F11

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20022
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;mms:mediaSessionInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
   http://www.upnp.org/schemas/phone/mms-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
   &lt;mediaSessionID&gt;media202&lt;/mediaSessionID&gt;
   &lt;mediaSessionStatus&gt;Started&lt;/mediaSessionStatus&gt;
```

```
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.22
s=-
c=IN IP4 192.168.2.22
t=0 0
m=video 22022 RTP/AVP 96
c=IN IP4 192.168.2.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability&gt;
   &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfo>
  </e:property>
</e:propertyset>
```

B.13.13 F12

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.13.14 F13

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>phone@Bedroom</TelCPName>
   <SecretKey>secret201</SecretKey>
   <TargetCallID>call201</TargetCallID>
   <TCList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:TCList
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn202&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media202&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
   &lt;/cams:TCList&gt;</TCList>
   <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:mediaCapabilityInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
```

```
              xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
              xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
              &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22022RTP/AVP 96
c=IN IP4 192.168.2.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
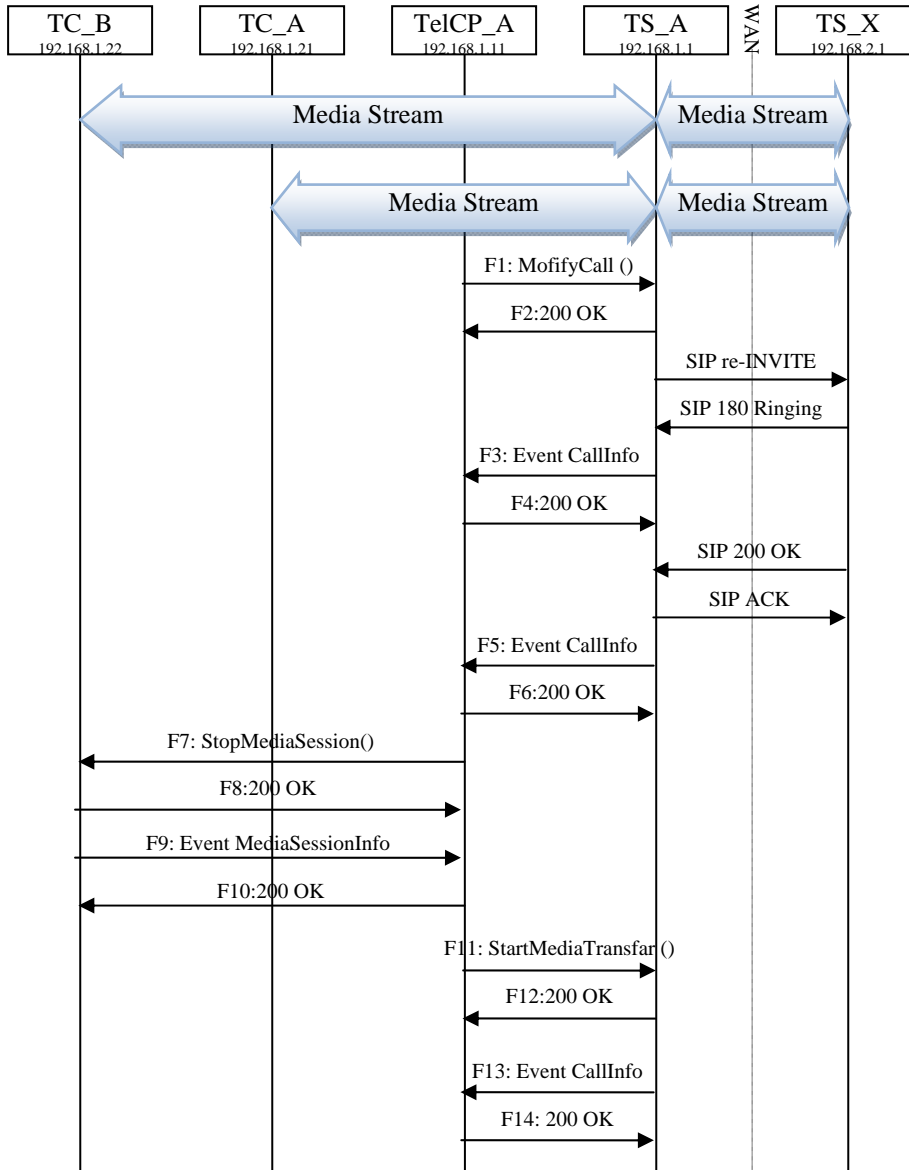a=framerate:30
            &lt;/mediaCapability&gt;
          &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
        </u:StartMediaTransfer>
      </s:Body>
    </s:Envelope>
```

B.13.15 F14

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
  <s:Body>
    <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
  </s:Body>
</s:Envelope>
```

B.13.16 F15

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
  <e:property>
    <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
```

```
&lt;cams:callInfo
 xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
 http://www.upnp.org/schemas/phone/cams-v1.xsd"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:cams="urn:schemas-upnp-org:phone:cams"
 xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
 &lt;callID&gt;call201&lt;/callID&gt;
 &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
 &lt;callStatus&gt;Talking&lt;/callStatus&gt;
 &lt;priority&gt;Normal&lt;/priority&gt;
 &lt;remoteParty&gt;
  &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
 &lt;/remoteParty&gt;
 &lt;TCList&gt;
  &lt;TC&gt;
   &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
   &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
  &lt;/TC&gt;
  &lt;TC&gt;
   &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn202&lt;/UDN&gt;
   &lt;mediaSessionID&gt;media202&lt;/mediaSessionID&gt;
  &lt;/TC&gt;
 &lt;/TCList&gt;
 &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22001 RTP/AVP 96
c=IN IP4 192.168.2.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
  &lt;/mediaCapability&gt;
 &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.13.17 F16

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.14 Remove TC during a Call (Create a modification request)

B.14.1   Figure

B.14.2   F1

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#ModifyCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
```

```
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:ModifyCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>TV@Living</TelCPName>
   <SecretKey>secret101</SecretKey>
   <TargetCallID>call101</TargetCallID>
    <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/mediaCapability &gt;
     &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
  </u:ModifyCall>
 </s:Body>
</s:Envelope>
```

B.14.3   F2

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:ModifyCallResponse xmlns:m="urn:schemas-upnp-org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.14.4   F3

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
```

```
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
  &lt;callID&gt;call101&lt;/callID&gt;
  &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
  &lt;callStatus&gt;SendingModifyRequest&lt;/callStatus&gt;
  &lt;priority&gt;Normal&lt;/priority&gt;
  &lt;remoteParty&gt;
   &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
  &lt;/remoteParty&gt;
  &lt;TCList&gt;
   &lt;TC&gt;
     &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
     &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
   &lt;TC&gt;
     &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn102&lt;/UDN&gt;
     &lt;mediaSessionID&gt;media102&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
  &lt;/TCList&gt;
  &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000001200086c40fa28a021e0a21
a=framerate:30&lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.14.5   F4

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.14.6   F5

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
```

NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo><?xml version="1.0" encoding="utf-8"?>
  <cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer">
  <callID>*call101*</callID>
  <targetNames type="TelCPName">*</targetNames>
  <callStatus>*Modified*</callStatus>
  <priority>Normal</priority>
  <remoteParty>
   <peer:id>*0774940201*</peer:id>
  </remoteParty>
  <TCList>
   <TC>
    <UDN>uuid:*97ef6efa-ac89-4ea2-0001-udn101*</UDN>
    <mediaSessionID>*media101*</mediaSessionID>
   </TC>
  </TCList>
  <mediaCapability format="SDP">v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20</mediaCapability>
  </cams:callInfo></CallInfo>
 </e:property>
</e:propertyset>

B.14.7 F6

HTTP/1.1 200 OK
Content-Length: 0

B.14.8 F7

POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StopMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.22:10022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>

```
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StopMediaSession xmlns:u="urn:schemas-upnp-org:service: MediaManagement:1">
   <TargetMediaSessionID>media102</TargetMediaSessionID>
  </u:StopMediaSession>
 </s:Body>
</s:Envelope>
```

B.14.9   F8

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StopMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1" />
 </s:Body>
</s:Envelope>
```

B.14.10   F9

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10022
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;mms:mediaSessionInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
   http://www.upnp.org/schemas/phone/mms-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
   &lt;mediaSessionID&gt;media102&lt;/mediaSessionID&gt;
   &lt;mediaSessionStatus&gt;Stopped&lt;/mediaSessionStatus&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.22
s=-
c=IN IP4 192.168.1.22
t=0 0
m=video 12022 RTP/AVP 96
c=IN IP4 192.168.1.22
b=AS:2500
```

```
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:3
    &lt;/mediaCapability&gt;
   &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfo>
  </e:property>
</e:propertyset>
```

B.14.11 F10

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.14.12 F11

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>TV@Living</TelCPName>
   <SecretKey>secret101</SecretKey>
   <TargetCallID>call101</TargetCallID>
   <TCList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:TCList
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
   &lt;/cams:TCList&gt;</TCList>
   <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:mediaCapabilityInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/mediaCapability&gt;
```

</cams:mediaCapabilityInfo></MediaCapabilityInfo>
  </u:StartMediaTransfer>
 </s:Body>
</s:Envelope>

B.14.13 F12

HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>

B.14.14 F13

NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo><?xml version="1.0" encoding="utf-8"?>
  <cams:callInfo
  xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
  http://www.upnp.org/schemas/phone/cams-v1.xsd"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:cams="urn:schemas-upnp-org:phone:cams"
  xmlns:peer="urn:schemas-upnp-org:phone:peer">
  <callID>*call101*</callID>
  <targetNames type="TelCPName">*</targetNames>
  <callStatus>*Talking*</callStatus>
  <priority>Normal</priority>
  <remoteParty>
   <peer:id>*0774940201*</peer:id>
  </remoteParty>
  <TCList>
   <TC>
    <UDN>uuid:*97ef6efa-ac89-4ea2-0001-udn101*</UDN>
    <mediaSessionID>*media101*</mediaSessionID>
   </TC>
  </TCList>

```
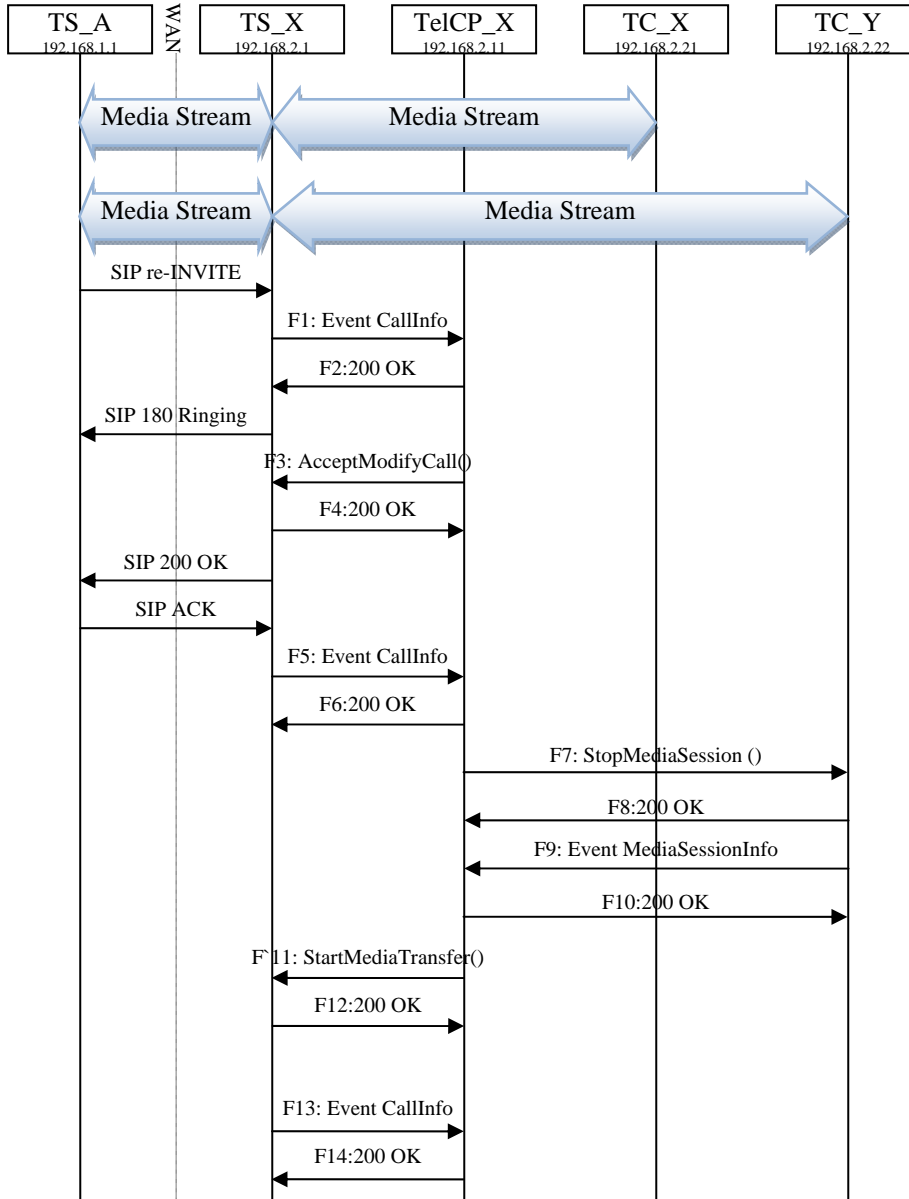    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
   &lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.14.15   F14

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.15 Remove TC during a Call (Accept a modification request)

B.15.1   Figure

B.15.2   F1

NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

```
<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
  &lt;callID&gt;call201&lt;/callID&gt;
  &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
  &lt;callStatus&gt;ReceivingModifyRequest&lt;/callStatus&gt;
  &lt;priority&gt;Normal&lt;/priority&gt;
  &lt;remoteParty&gt;
   &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
  &lt;/remoteParty&gt;
  &lt;TCList&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn202&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media202&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
  &lt;/TCList&gt;
  &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
   &lt;/mediaCapability&gt;
 &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.15.3   F2

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.15.4   F3

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#AcceptModifyCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
```

```
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:AcceptModifyCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>phone@Bedroom</TelCPName>
   <SecretKey>secret201</SecretKey>
   <TargetCallID>call201</TargetCallID>
    <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
      &lt;/mediaCapability&gt;
     &lt;/cams:mediaCapabilityInfo&gt;
    </MediaCapabilityInfo>
  </u:AcceptModifyCall>
 </s:Body>
</s:Envelope>
```

B.15.5　F4

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:AcceptModifyCallResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.15.6　F5

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive
```

```xml
<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
  &lt;callID&gt;call201&lt;/callID&gt;
  &lt;targetNames type="TelCPName"&gt;phone@Bedroom&lt;/targetNames&gt;
  &lt;callStatus&gt;Modified&lt;/callStatus&gt;
  &lt;priority&gt;Normal&lt;/priority&gt;
  &lt;remoteParty&gt;
   &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
  &lt;/remoteParty&gt;
  &lt;TCList&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn202&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media202&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
  &lt;/TCList&gt;
  &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
  &lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.15.7   F6

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.15.8   F7

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StopMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.22:20022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
```

```
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StopMediaSession xmlns:u="urn:schemas-upnp-org:service: MediaManagement:1">
   <TargetMediaSessionID>media202</TargetMediaSessionID>
  </u:StopMediaSession>
 </s:Body>
</s:Envelope>
```

B.15.9   F8

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StopMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1" />
 </s:Body>
</s:Envelope>
```

B.15.10   F9

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20022
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;mms:mediaSessionInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
   http://www.upnp.org/schemas/phone/mms-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
   &lt;mediaSessionID&gt;media202&lt;/mediaSessionID&gt;
   &lt;mediaSessionStatus&gt;Stopped&lt;/mediaSessionStatus&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.22
s=-
c=IN IP4 192.168.2.22
t=0 0
m=video 22022 RTP/AVP 96
c=IN IP4 192.168.2.22
b=AS:2500
```

```
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000001200086c40fa28a021e0a21
a=framerate:3
    &lt;/mediaCapability&gt;
   &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfo>
  </e:property>
</e:propertyset>
```

B.15.11 F10

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.15.12 F11

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>phone@Bedroom</TelCPName>
   <SecretKey>secret201</SecretKey>
   <TargetCallID>call201</TargetCallID>
   <TCList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:TCList
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
   &lt;/cams:TCList&gt;</TCList>
   <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:mediaCapabilityInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/mediaCapability&gt;
```

</cams:mediaCapabilityInfo></MediaCapabilityInfo>
   </u:StartMediaTransfer>
  </s:Body>
</s:Envelope>

B.15.13 F12

HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
  </s:Body>
</s:Envelope>

B.15.14 F13

NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo><?xml version="1.0" encoding="utf-8"?>
  <cams:callInfo
  xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
  http://www.upnp.org/schemas/phone/cams-v1.xsd"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:cams="urn:schemas-upnp-org:phone:cams"
  xmlns:peer="urn:schemas-upnp-org:phone:peer">
  <callID>*call201*</callID>
  <targetNames type="TelCPName">*phone @Bedroom*</targetNames>
  <callStatus>*Talking*</callStatus>
  <priority>Normal</priority>
  <remoteParty>
  <peer:id>*0355550101*</peer:id>
  </remoteParty>
  <TCList>
  <TC>
   <UDN>uuid:*97ef6efa-ac89-4ea2-0001-udn201*</UDN>
   <mediaSessionID>*media201*</mediaSessionID>
  </TC>
  </TCList>

```
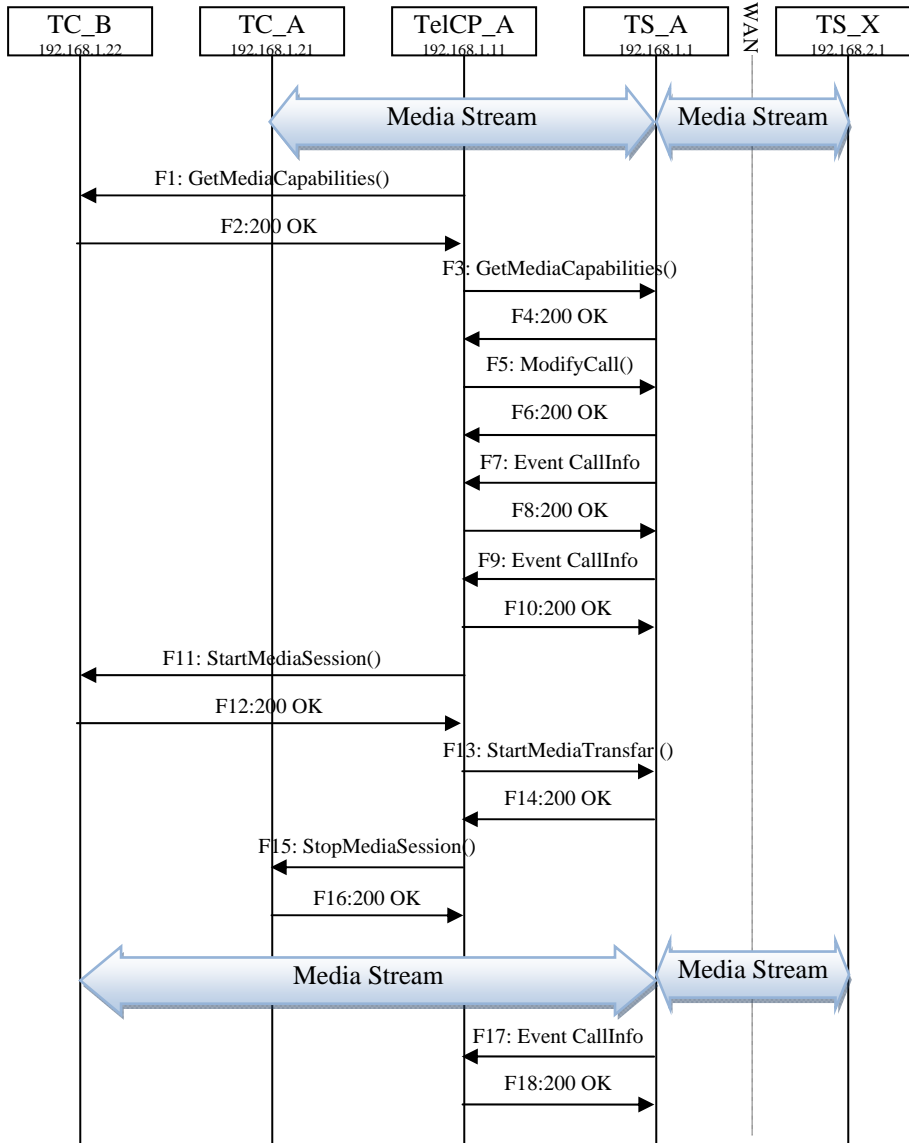   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
   &lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.15.15   F14

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.16 Change TC during a Call

B.16.1 Figure

B.16.2 F1

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-
org:service:MediaManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.22:10022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
```

```
 <s:Body>
  <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1"
>
   <TSMediaCapabilityInfo></TSMediaCapabilityInfo>
  </u:GetMediaCapabilities>
 </s:Body>
</s:Envelope>
```

B.16.3   F2

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
    <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
      xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
      http://www.upnp.org/schemas/phone/mms-v1.xsd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
      &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.22
s=-
c=IN IP4 192.168.1.22
t=0 0
m=audio 11022 RTP/AVP 0
c=IN IP4 192.168.1.22
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12022 RTP/AVP 96
c=IN IP4 192.168.1.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
      &lt;/mediaCapability&gt;
    &lt;/mms:mediaCapabilityInfo&gt;
    </SupportedMediaCapabilityInfo>
  </u:GetMediaCapabilitiesResponse>
 </s:Body>
</s:Envelope>
```

B.16.4   F3

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
```

Content-Length: [bytes in body]

```
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service: CallManagement:1">
    <TCMediaCapabilityInfo></TCMediaCapabilityInfo>
   </u:GetMediaCapabilities>
 </s:Body>
</s:Envelope>
```

B.16.5   F4

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:CallManagement:1">
    <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
    &lt;/cams:mediaCapabilityInfo&gt;</SupportedMediaCapabilityInfo>
  </u:GetMediaCapabilitiesResponse>
 </s:Body>
</s:Envelope>
```

B.16.6   F5

POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1

```
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#ModifyCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:ModifyCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>TV@Living</TelCPName>
   <SecretKey>secret101</SecretKey>
   <TargetCallID>call101</TargetCallID>
    <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11022 RTP/AVP 0
c=IN IP4 192.168.1.22
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/mediaCapability&gt;
     &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
  </u:ModifyCall>
 </s:Body>
</s:Envelope>
```

B.16.7   F6

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:ModifyCallResponse xmlns:m="urn:schemas-upnp-org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.16.8   F7

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
```

NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

```
<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:callInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"
    xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
    &lt;callID&gt;call101&lt;/callID&gt;
    &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
    &lt;callStatus&gt;SendingModifyRequest&lt;/callStatus&gt;
    &lt;priority&gt;Normal&lt;/priority&gt;
    &lt;remoteParty&gt;
     &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
    &lt;/remoteParty&gt;
    &lt;TCList&gt;
     &lt;TC&gt;
      &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
      &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
     &lt;/TC&gt;
    &lt;/TCList&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
&lt;/mediaCapability&gt;
   &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.16.9   F8

HTTP/1.1 200 OK
Content-Length: 0

B.16.10   F9

NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]

```
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
   <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Modified&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
   &lt;TCList&gt;
    &lt;TC&gt;
     &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
     &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
   &lt;/TCList&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
   &lt;/mediaCapability&gt;
   &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.16.11 F10

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.16.12 F11

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.22:10022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
```

```
      <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
        &lt;mms:mediaCapabilityInfo
          xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
          http://www.upnp.org/schemas/phone/mms-v1.xsd"
          xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
          &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
        &lt;/mediaCapability&gt;
        &lt;/mms:mediaCapabilityInfo&gt;
        </TSMediaCapabilityInfo>
   </u:StartMediaSession>
  </s:Body>
</s:Envelope>
```

B.16.13 F12

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
    <MediaSessionID>media102</MediaSessionID>
    <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;mms:mediaCapabilityInfo
        xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
        http://www.upnp.org/schemas/phone/mms-v1.xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
        &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.22
s=-
c=IN IP4 192.168.1.22
t=0 0
m=audio 11022 RTP/AVP 0
c=IN IP4 192.168.1.22
a=rtpmap:0 PCMU/8000
a=ptime:20
        &lt;/mediaCapability&gt;
        &lt;/mms:mediaCapabilityInfo&gt;
      </TCMediaCapabilityInfo>
    </u:StartMediaSessionResponse>
```

```
        </s:Body>
      </s:Envelope>
```

B.16.14   F13

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10022
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;mms:mediaSessionInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
    http://www.upnp.org/schemas/phone/mms-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
    &lt;mediaSessionID&gt;media102&lt;/mediaSessionID&gt;
    &lt;mediaSessionStatus&gt;Started&lt;/mediaSessionStatus&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.22
s=-
c=IN IP4 192.168.1.22
t=0 0
m=audio 11022 RTP/AVP 0
c=IN IP4 192.168.1.22
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/mediaCapability&gt;
   &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfo>
 </e:property>
</e:propertyset>
```

B.16.15   F14

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.16.16   F15

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
```

```
      <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
       <TelCPName>TV @Living</TelCPName>
       <SecretKey>secret101</SecretKey>
       <TargetCallID>call101</TargetCallID>
       <TCList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
       &lt;cams:TCList
        xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
        http://www.upnp.org/schemas/phone/cams-v1.xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
       &lt;TC&gt;
        &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn102&lt;/UDN&gt;
        &lt;mediaSessionID&gt;media102&lt;/mediaSessionID&gt;
       &lt;/TC&gt;
       &lt;/cams:TCList&gt;</TCList>
       <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
       &lt;cams:mediaCapabilityInfo
        xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
        http://www.upnp.org/schemas/phone/cams-v1.xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11022 RTP/AVP 0
c=IN IP4 192.168.1.22
a=rtpmap:0 PCMU/8000
a=ptime:20
        &lt;/mediaCapability&gt;
       &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
      </u:StartMediaTransfer>
     </s:Body>
    </s:Envelope>
```

B.16.17 F16

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.16.18 F17

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
```

```
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
  &lt;callID&gt;call101&lt;/callID&gt;
  &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
  &lt;callStatus&gt;Talking&lt;/callStatus&gt;
  &lt;priority&gt;Normal&lt;/priority&gt;
  &lt;remoteParty&gt;
   &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
  &lt;/remoteParty&gt;
  &lt;TCList&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn102&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media102&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
  &lt;/TCList&gt;
  &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
  &lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.16.19 F18

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.16.20 F19

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
```

```
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10021
SEQ: [sequence number]
Connection: Keep-Alive
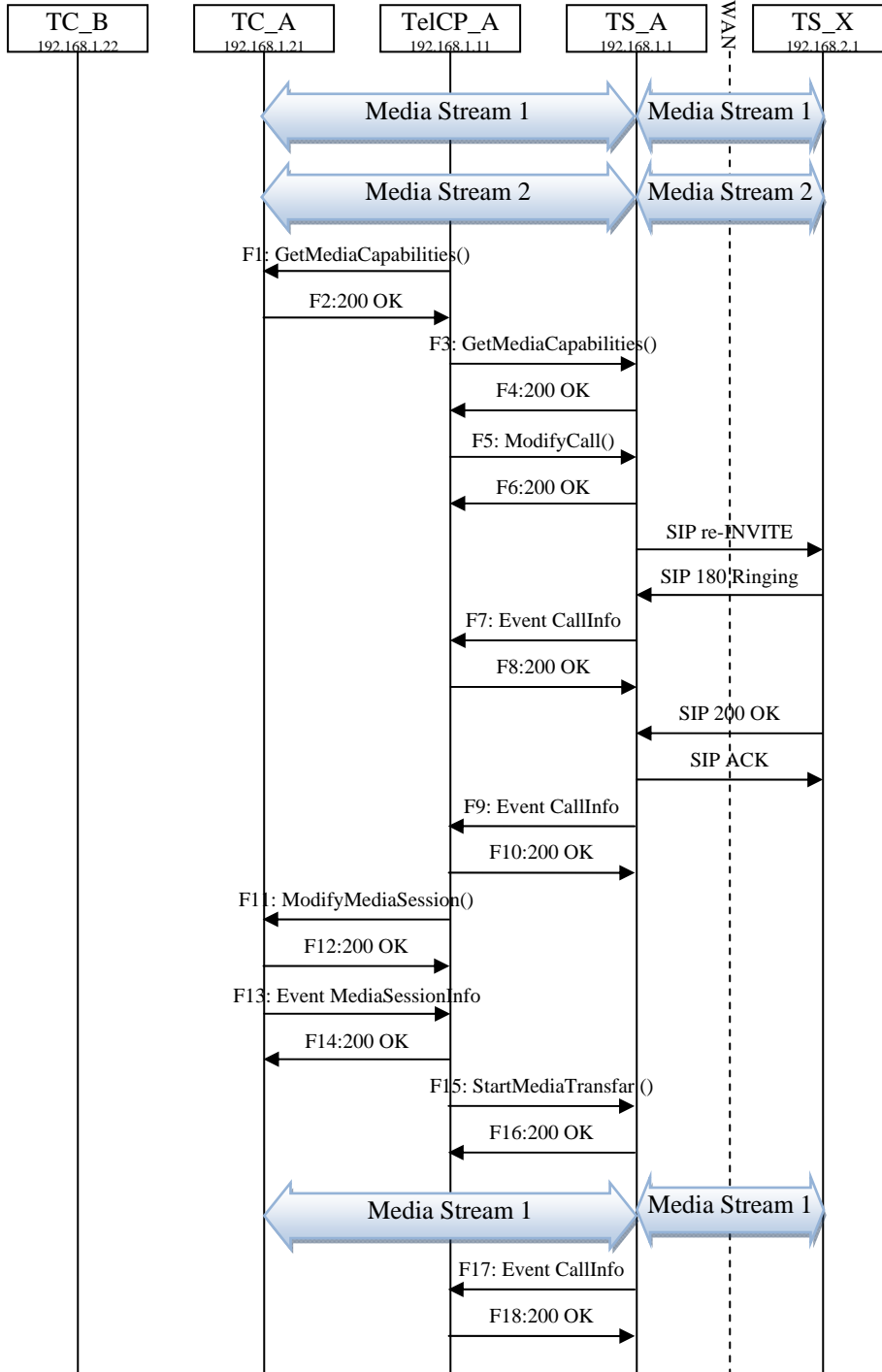
<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;mms:mediaSessionInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
    http://www.upnp.org/schemas/phone/mms-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
    &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
    &lt;mediaSessionStatus&gt;Stopped&lt;/mediaSessionStatus&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.21
s=-
c=IN IP4 192.168.1.21
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/mediaCapability&gt;
   &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfo>
 </e:property>
</e:propertyset>
```

B.16.21   F20

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.17 Modify Media Session during a Call

B.17.1   Figure

B.17.2   F1

POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1

```
SOAPACTION: "urn:schemas-upnp-
org:service:MediaManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.22:10022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1"
>
   <TSMediaCapabilityInfo></TSMediaCapabilityInfo>
  </u:GetMediaCapabilities>
 </s:Body>
</s:Envelope>
```

B.17.3   F2

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
     <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.22
s=-
c=IN IP4 192.168.1.22
t=0 0
m=audio 11022 RTP/AVP 0
c=IN IP4 192.168.1.22
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12022 RTP/AVP 96
c=IN IP4 192.168.1.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
       &lt;/mediaCapability&gt;
     &lt;/mms:mediaCapabilityInfo&gt;
     </SupportedMediaCapabilityInfo>
```

```
    </u:GetMediaCapabilitiesResponse>
  </s:Body>
</s:Envelope>
```

B.17.4 F3

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service: CallManagement:1">
    <TCMediaCapabilityInfo></TCMediaCapabilityInfo>
  </u:GetMediaCapabilities>
  </s:Body>
</s:Envelope>
```

B.17.5 F4

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:CallManagement:1">
    <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000120086c40fa28a021e0a21
```

```
a=framerate:30
    &lt;/mediaCapability&gt;
  &lt;/cams:mediaCapabilityInfo&gt;</SupportedMediaCapabilityInfo>
 </u:GetMediaCapabilitiesResponse>
 </s:Body>
</s:Envelope>
```

B.17.6   F5

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#ModifyCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:ModifyCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>TV@Living</TelCPName>
   <SecretKey>secret101</SecretKey>
   <TargetCallID>call101</TargetCallID>
    <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11022 RTP/AVP 0
c=IN IP4 192.168.1.22
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/mediaCapability&gt;
    &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
  </u:ModifyCall>
 </s:Body>
</s:Envelope>
```

B.17.7   F6

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:ModifyCallResponse xmlns:m="urn:schemas-upnp-org:service:CallManagement:1" />
```

```
    </s:Body>
  </s:Envelope>
```

B.17.8   F7

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
   <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:callInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"
    xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;SendingModifyRequest&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
   &lt;TCList&gt;
    &lt;TC&gt;
      &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
      &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
   &lt;/TCList&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
&lt;/mediaCapability&gt;
   &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.17.9   F8

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.17.10 F9

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
   <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:callInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"
    xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Modified&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
   &lt;TCList&gt;
    &lt;TC&gt;
      &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
      &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
   &lt;/TCList&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
   &lt;/mediaCapability&gt;
   &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.17.11 F10

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.17.12 F11

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
```

```
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.22:10022
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
   <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
       &lt;/mediaCapability&gt;
       &lt;/mms:mediaCapabilityInfo&gt;
       </TSMediaCapabilityInfo>
  </u:StartMediaSession>
 </s:Body>
</s:Envelope>
```

B.17.13 F12

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
     <MediaSessionID>media102</MediaSessionID>
     <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;mms:mediaCapabilityInfo
        xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
        http://www.upnp.org/schemas/phone/mms-v1.xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
        &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.22
s=-
```

```
c=IN IP4 192.168.1.22
t=0 0
m=audio 11022 RTP/AVP 0
c=IN IP4 192.168.1.22
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/mediaCapability &gt;
    &lt;/mms:mediaCapabilityInfo&gt;
   </TCMediaCapabilityInfo>
  </u:StartMediaSessionResponse>
 </s:Body>
</s:Envelope>
```

B.17.14 F13

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10022
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
   <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;mms:mediaSessionInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
    http://www.upnp.org/schemas/phone/mms-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
    &lt;mediaSessionID&gt;media102&lt;/mediaSessionID&gt;
    &lt;mediaSessionStatus&gt;Started&lt;/mediaSessionStatus&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.22
s=-
c=IN IP4 192.168.1.22
t=0 0
m=video 12022 RTP/AVP 96
c=IN IP4 192.168.1.22
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000120008c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
    &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfo>
 </e:property>
</e:propertyset>
```

B.17.15 F14

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.17.16 F15

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
    <TelCPName>TV@Living</TelCPName>
    <SecretKey>secret101</SecretKey>
    <TargetCallID>call101</TargetCallID>
    <TCList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:TCList
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
    &lt;TC&gt;
     &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn102&lt;/UDN&gt;
     &lt;mediaSessionID&gt;media102&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
    &lt;/cams:TCList&gt;</TCList>
    <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11022 RTP/AVP 0
c=IN IP4 192.168.1.22
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/mediaCapability&gt;
     &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
   </u:StartMediaTransfer>
 </s:Body>
</s:Envelope>
```

B.17.17 F16

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
```

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.17.18 F17

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
  &lt;callID&gt;call101&lt;/callID&gt;
  &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
  &lt;callStatus&gt;Talking&lt;/callStatus&gt;
  &lt;priority&gt;Normal&lt;/priority&gt;
  &lt;remoteParty&gt;
   &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
  &lt;/remoteParty&gt;
  &lt;TCList&gt;
   &lt;TC&gt;
    &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn102&lt;/UDN&gt;
    &lt;mediaSessionID&gt;media102&lt;/mediaSessionID&gt;
   &lt;/TC&gt;
  &lt;/TCList&gt;
  &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
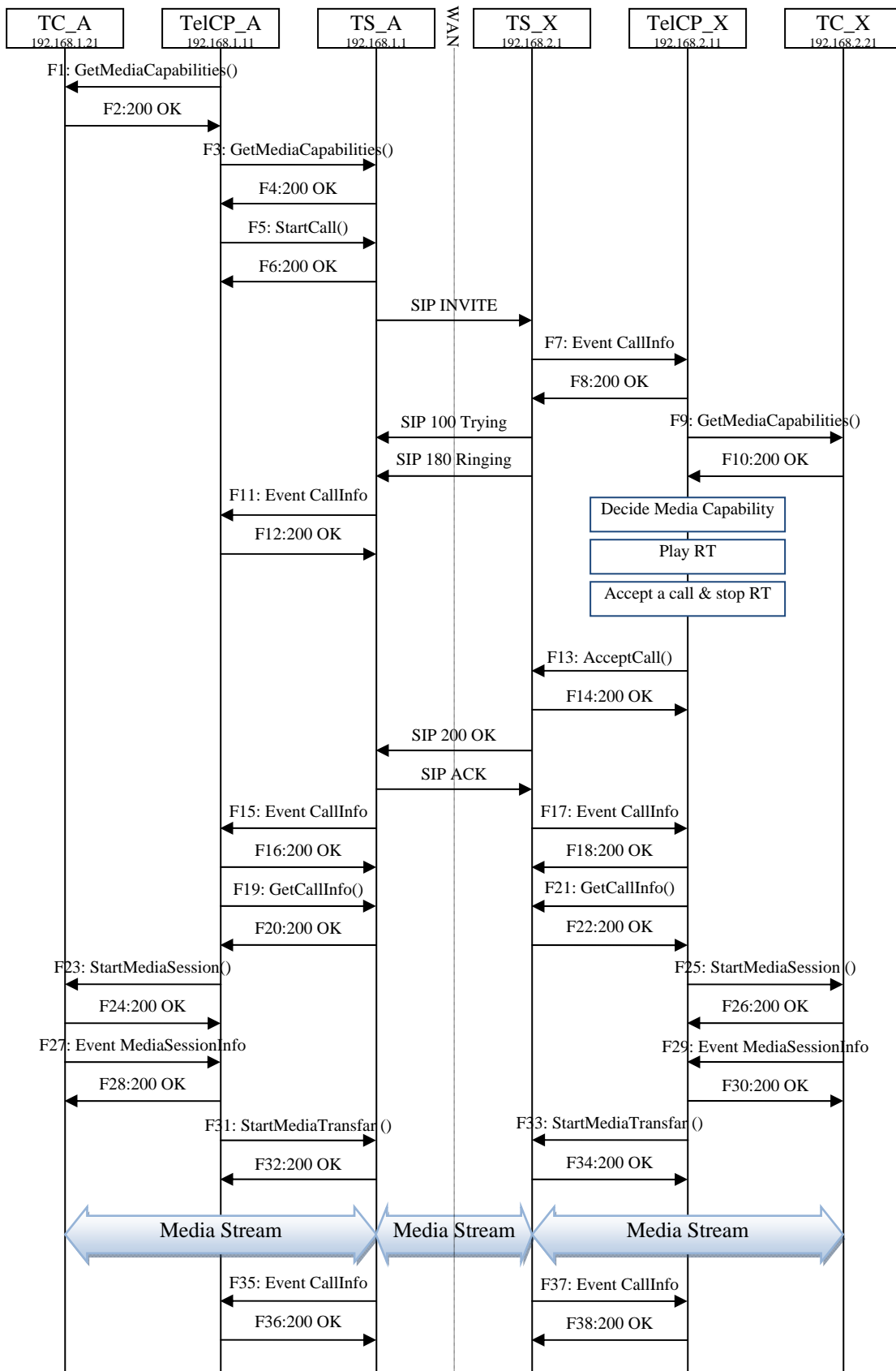  &lt;/mediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.17.19 F18

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.18 Create an outgoing Call (Monopolization Mode Call(PHONE-TelCP))

B.18.1   Figure

| TC_A
192.168.1.21 | TelCP_A
192.168.1.11 | TS_A
192.168.1.1 | WAN | TS_X
192.168.2.1 | TelCP_X
192.168.2.11 | TC_X
192.168.2.21 |

F1: GetMediaCapabilities()

F2:200 OK

F3: GetMediaCapabilities()

F4:200 OK

F5: StartCall()

F6:200 OK

SIP INVITE

F7: Event CallInfo

F8:200 OK

SIP 100 Trying

F9: GetMediaCapabilities()

SIP 180 Ringing

F10:200 OK

F11: Event CallInfo

F12:200 OK

Decide Media Capability

Play RT

Accept a call & stop RT

F13: AcceptCall()

F14:200 OK

SIP 200 OK

SIP ACK

F15: Event CallInfo

F17: Event CallInfo

F16:200 OK

F18:200 OK

F19: GetCallInfo()

F21: GetCallInfo()

F20:200 OK

F22:200 OK

F23: StartMediaSession()

F25: StartMediaSession ()

F24:200 OK

F26:200 OK

F27: Event MediaSessionInfo

F29: Event MediaSessionInfo

F28:200 OK

F30:200 OK

F31: StartMediaTransfer ()

F33: StartMediaTransfer ()

F32:200 OK

F34:200 OK

Media Stream   Media Stream   Media Stream

F35: Event CallInfo

F37: Event CallInfo

F36:200 OK

F38:200 OK

B.18.2   F1

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-
org:service:MediaManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.21:10021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1"
>
   <TSMediaCapabilityInfo></TSMediaCapabilityInfo>
  </u:GetMediaCapabilities>
 </s:Body>
</s:Envelope>
```

B.18.3   F2

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
    <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;mms:mediaCapabilityInfo
      xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
      http://www.upnp.org/schemas/phone/mms-v1.xsd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
      &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.21
s=-
c=IN IP4 192.168.1.21
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12021 RTP/AVP 96
c=IN IP4 192.168.1.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000 1200086c40fa28a021e0a21
a=framerate:30
      &lt;/mediaCapability&gt;
```

</mms:mediaCapabilityInfo>
        </SupportedMediaCapabilityInfo>
     </u:GetMediaCapabilitiesResponse>
   </s:Body>
   </s:Envelope>

B.18.4   F3

POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service: CallManagement:1">
  <TCMediaCapabilityInfo></TCMediaCapabilityInfo>
  </u:GetMediaCapabilities>
  </s:Body>
</s:Envelope>

B.18.5   F4

HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:CallManagement:1">
     <SupportedMediaCapabilityInfo><?xml version="1.0" encoding="utf-8"?>
     <cams:mediaCapabilityInfo
      xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
      http://www.upnp.org/schemas/phone/cams-v1.xsd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:cams="urn:schemas-upnp-org:phone:cams">
      <mediaCapability format="SDP">v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000

```
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability&gt;
   &lt;/cams:mediaCapabilityInfo&gt;</SupportedMediaCapabilityInfo>
  </u:GetMediaCapabilitiesResponse>
 </s:Body>
</s:Envelope>
```

B.18.6   F5

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>TV@Living</TelCPName>
   <SecretKey>secret101</SecretKey>
   <CalleeID> tel:0774940201</CalleeID>
   <CallPriority>Normal</CallPriority>
    <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/mediaCapability&gt;
    &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
   <CallMode>PHONE-TelCP</CallMode>
  </u:StartCall>
 </s:Body>
</s:Envelope>
```

B.18.7   F6

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
```

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartCallResponse xmlns:m="urn:schemas-upnp-org:service:CallManagement:1">
   <CallID>call101</CallID>
  </m:StartCallResponse>
 </s:Body>
</s:Envelope>
```

B.18.8   F7

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
  &lt;callID&gt;call201&lt;/callID&gt;
  &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
  &lt;callStatus&gt;Ringing&lt;/callStatus&gt;
  &lt;priority&gt;Normal&lt;/priority&gt;
  &lt;remoteParty&gt;
   &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
  &lt;/remoteParty&gt;
  &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
  &lt;/mediaCapability&gt;
 &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.18.9   F8

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.18.10 F9

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-
org:service:MediaManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.21:20021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1"
>
   <TSMediaCapabilityInfo></TSMediaCapabilityInfo>
  </u:GetMediaCapabilities>
 </s:Body>
</s:Envelope>
```

B.18.11 F10

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
    <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.21
s=-
c=IN IP4 192.168.2.21
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22021 RTP/AVP 96
c=IN IP4 192.168.2.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
    &lt;/mms:mediaCapabilityInfo&gt;</SupportedMediaCapabilityInfo>
```

```
          </u:GetMediaCapabilitiesResponse>
        </s:Body>
      </s:Envelope>
```

B.18.12 F11

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
  <e:property>
    <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:callInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"
    xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
    &lt;callID&gt;call101&lt;/callID&gt;
    &lt;targetNames type="TelCPName"&gt;TV@Living&lt;/targetNames&gt;
    &lt;callStatus&gt;Calling&lt;/callStatus&gt;
    &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.18.13 F12

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.18.14 F13

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#AcceptCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <u:AcceptCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
      <TelCPName>phone@Bedroom</TelCPName>
      <SecretKey>secret201</SecretKey>
      <TargetCallID>call201</TargetCallID>
      <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
        &lt;cams:mediaCapabilityInfo
        xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
```

```
       http://www.upnp.org/schemas/phone/cams-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
        &lt;/mediaCapability&gt;
      &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
   <CallMode>PHONE-TelCP</CallMode>
  </u:AcceptCall>
 </s:Body>
</s:Envelope>
```

B.18.15 F14

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
   <m:AcceptCallResponse xmlns:m="urn:schemas-upnp-org:service:CallManagement:1"
/>
 </s:Body>
</s:Envelope>
```

B.18.16 F15

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
   <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:callInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"
```

```
        xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
        &lt;callID&gt;call101&lt;/callID&gt;
        &lt;targetNames type="TelCPName"&gt;TV@Living&lt;/targetNames&gt;
        &lt;callStatus&gt;Connected&lt;/callStatus&gt;
       &lt;/cams:callInfo&gt;</CallInfo>
     </e:property>
    </e:propertyset>
```

B.18.17 F16

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.18.18 F17

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
   <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:callInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"
     xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
     &lt;callID&gt;call201&lt;/callID&gt;
     &lt;targetNames type="TelCPName"&gt;phone@Bedroom&lt;/targetNames&gt;
     &lt;callStatus&gt;Connected&lt;/callStatus&gt;
    &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
 </e:propertyset>
```

B.18.19 F18

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.18.20 F19

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#GetCallInfo"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
```

```
 <s:Body>
  <u:GetCallInfo xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>TV@Living</TelCPName>
   <SecretKey>secret101</SecretKey>
   <TargetCallID>call101</TargetCallID>
  </u:GetCallInfo>
 </s:Body>
</s:Envelope>
```

B.18.21 F20

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetCallInfoResponse xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <callInfoList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;cams:callInfoList
       xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
       http://www.upnp.org/schemas/phone/cams-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:cams"
       xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
  &lt;callInfo&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;TelCPNames&gt;TV@Living&lt;/TelCPNames&gt;
   &lt;callStatus&gt;Connected &lt;/callStatus&gt;
   &lt;priority&gt;"Normal"&lt;/priority&gt;
   &lt;peer&gt;
    &lt;peer:id&gt;0774940201&lt;peer:id&gt;
   &lt;/peer&gt;
   &lt;TCList&gt;
    &lt;TC&gt;
            &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
      &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
   &lt;/TCList&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
   &lt;/mediaCapability&gt;
  &lt;/callInfo&gt;
&lt;/cams:callInfoList&gt;</callInfoList>
    </m:GetCallInfoResponse>
```

```
    </s:Body>
   </s:Envelope>
```

B.18.22 F21

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#GetCallInfo"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetCallInfo xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>phone@Bedroom</TelCPName>
   <SecretKey>secret201</SecretKey>
   <TargetCallID>call201</TargetCallID>
  </u:GetCallInfo>
 </s:Body>
</s:Envelope>
```

B.18.23 F22

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetCallInfoResponse xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <callInfoList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;cams:callInfoList
       xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
       http://www.upnp.org/schemas/phone/cams-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:cams"
       xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
  &lt;callInfo&gt;
  &lt;callID&gt;call201&lt;/callID&gt;
  &lt;TelCPNames&gt;phone@Bedroom&lt;/TelCPNames&gt;
  &lt;callStatus&gt;Connected &lt;/callStatus&gt;
  &lt;priority&gt;"Normal"&lt;/priority&gt;
  &lt;peer&gt;
   &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
  &lt;/peer&gt;
  &lt;TCList&gt;
   &lt;TC&gt;
          &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
     &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
   &lt;/TCList&gt;
```

```
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/mediaCapability&gt;
   &lt;/callInfo&gt;
&lt;/cams:callInfoList&gt;</callInfoList>
    </m:GetCallInfoResponse>
  </s:Body>
</s:Envelope>
```

B.18.24 F23

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.21:10021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
   <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
       &lt;/mediaCapability&gt;
     &lt;/mms:mediaCapabilityInfo&gt;
     </TSMediaCapabilityInfo>
   </u:StartMediaSession>
  </s:Body>
</s:Envelope>
```

B.18.25 F24

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
```

Content-Length: [bytes in body]

```
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
    <MediaSessionID>media101</MediaSessionID>
    <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.21
s=-
c=IN IP4 192.168.1.21
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
      &lt;/mediaCapability &gt;
     &lt;/mms:mediaCapabilityInfo&gt;
     </TCMediaCapabilityInfo>
  </u:StartMediaSessionResponse>
 </s:Body>
</s:Envelope>
```

B.18.26 F25

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2:21:20021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
   <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=audio 21001 RTP/AVP 0
```

```
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/mediaCapability&gt;
     &lt;/mms:mediaCapabilityInfo&gt;
     </TSMediaCapabilityInfo>
  </u:StartMediaSession>
 </s:Body>
</s:Envelope>
```

B.18.27 F26

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
     <MediaSessionID>media201</MediaSessionID>
     <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;mms:mediaCapabilityInfo
        xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
        http://www.upnp.org/schemas/phone/mms-v1.xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
        &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.21
s=-
c=IN IP4 192.168.2.21
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
      &lt;/mediaCapability&gt;
     &lt;/mms:mediaCapabilityInfo&gt;</TCMediaCapabilityInfo>
   </u:StartMediaSessionResponse>
 </s:Body>
</s:Envelope>
```

B.18.28 F27

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10021
SEQ: [sequence number]
Connection: Keep-Alive
```

```
<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;mms:mediaSessionInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
   http://www.upnp.org/schemas/phone/mms-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
   &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
   &lt;mediaSessionStatus&gt;Started&lt;/mediaSessionStatus&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.21
s=-
c=IN IP4 192.168.1.21
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/mediaCapability&gt;
   &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfo>
 </e:property>
</e:propertyset>
```

B.18.29 F28

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.18.30 F29

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20021
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;mms:mediaSessionInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
   http://www.upnp.org/schemas/phone/mms-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
   &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
   &lt;mediaSessionStatus&gt;Started&lt;/mediaSessionStatus&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.21
s=-
```

```
c=IN IP4 192.168.2.21
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/mediaCapability&gt;
   &lt;/mms:mediaSessionInfo&gt;</MediaSessionInfo>
  </e:property>
</e:propertyset>
```

B.18.31 F30

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.18.32 F31

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
    <TelCPName>TV @Living</TelCPName>
    <SecretKey>secret101</SecretKey>
    <TargetCallID>call101</TargetCallID>
    <TCList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:TCList
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
    &lt;TC&gt;
     &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
     &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
    &lt;/cams:TCList&gt;</TCList>
   <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:mediaCapabilityInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11021 RTP/AVP 0
c=IN IP4 192.168.1.21
a=rtpmap:0 PCMU/8000
```

```
       a=ptime:20
          &lt;/mediaCapability&gt;
        &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
      </u:StartMediaTransfer>
    </s:Body>
</s:Envelope>
```

B.18.33 F32

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
   <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.18.34 F33

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
    <TelCPName>phone@Bedroom</TelCPName>
    <SecretKey>secret201</SecretKey>
    <TargetCallID>call201</TargetCallID>
    <TCList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:TCList
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
    &lt;TC&gt;
     &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
     &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
    &lt;/cams:TCList&gt;</TCList>
    <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

```
      xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
      &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=audio 21021 RTP/AVP 0
c=IN IP4 192.168.2.21
a=rtpmap:0 PCMU/8000
a=ptime:20
      &lt;/mediaCapability&gt;
     &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
    </u:StartMediaTransfer>
   </s:Body>
</s:Envelope>
```

B.18.35 F34

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.18.36 F35

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
```

<targetNames type="TelCPName">*TV@Living*</targetNames>
<callStatus>*Talking*</callStatus>
</cams:callInfo></CallInfo>
  </e:property>
</e:propertyset>

B.18.37   F36

HTTP/1.1 200 OK
Content-Length: 0

B.18.38   F37

NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo><?xml version="1.0" encoding="utf-8"?>
  <cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer">
  <callID>*call201*</callID>
  <targetNames type="TelCPName">*phone@Bedroom*</targetNames>
  <callStatus>*Talking*</callStatus>
  </cams:callInfo></CallInfo>
  </e:property>
</e:propertyset>

B.18.39   F38

HTTP/1.1 200 OK
Content-Length: 0

B.19 Terminate Call (But the specified TelCP is not authorized.)

B.19.1   Figure

B.19.2   F1

```
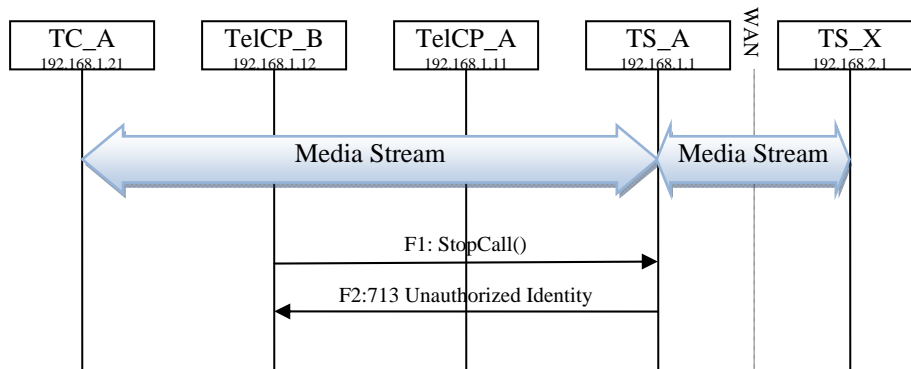POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StopCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StopCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
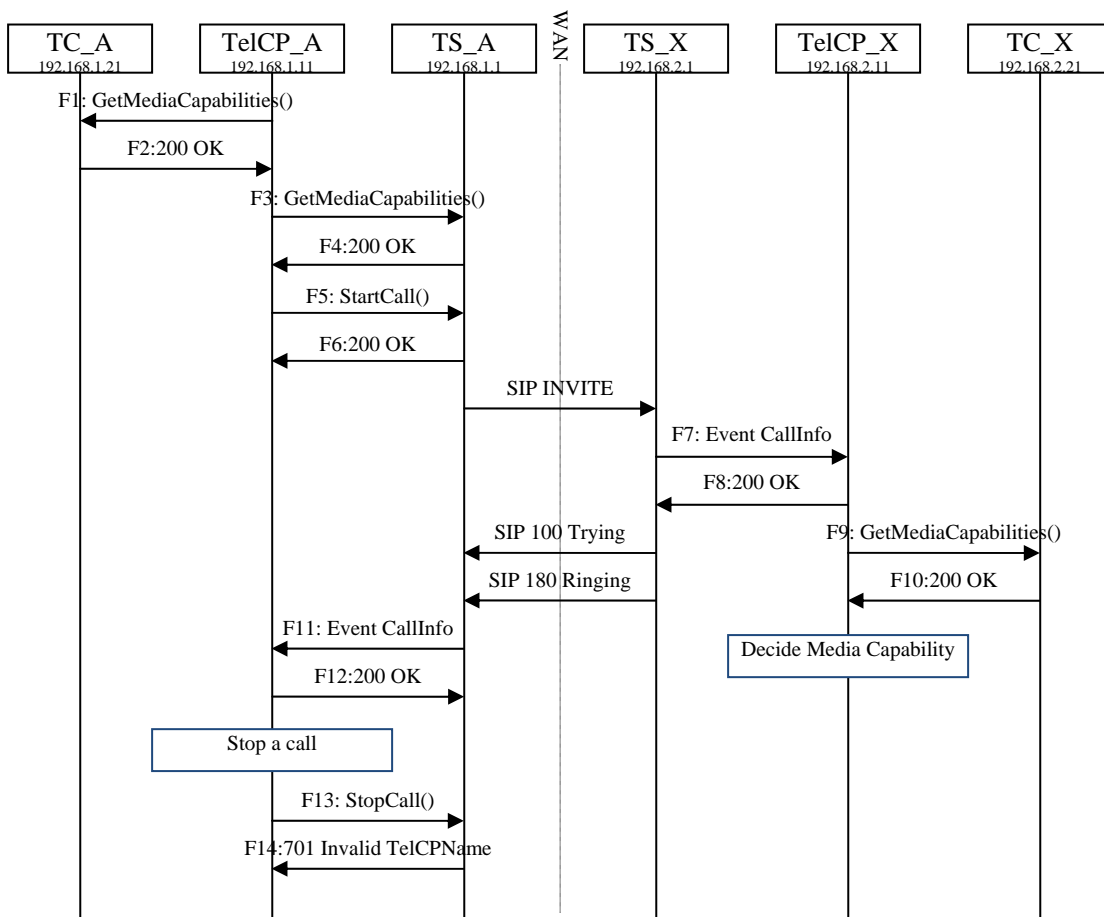   <TelCPName>TV@Living</TelCPName>
   <SecretKey>wrongkey</SecretKey>
   <CallID>cal101</CallID>
  </u:StopCall>
 </s:Body>
</s:Envelope>
```

B.19.3   F2

```
HTTP/1.1 500 Internal Server Error
Content-Length: [bytes in body]

<s:Envelope
 xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
 s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <s:Fault>
   <faultcode>s:Client</faultcode>
   <faultstring>UPnPError</faultstring>
   <detail>
    <UPnPError xmlns="urn:schemas-upnp-org:control-1-0">
     <errorCode>713</errorCode>
     <errorDescription>Unauthorized Identity</errorDescription>
    </UPnPError>
   </detail>
  </s:Fault>
```

```
    </s:Body>
   </s:Envelope>
```

B.20 Cancel an outgoing Call (But the specified TelCP is not authorized.)

B.20.1 Figure

B.20.2 F1 to F12 are the same as "B.1 Create a Call"

B.20.3 F13

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StopCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]
```

```
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StopCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName>Alice's TV</TelCPName>
   <SecretKey>secret101</SecretKey>
   <CallID>call101</CallID>
  </u:StopCall>
 </s:Body>
</s:Envelope>
```

B.20.4   F14

```
HTTP/1.1 500 Internal Server Error
Content-Length: [bytes in body]

<s:Envelope
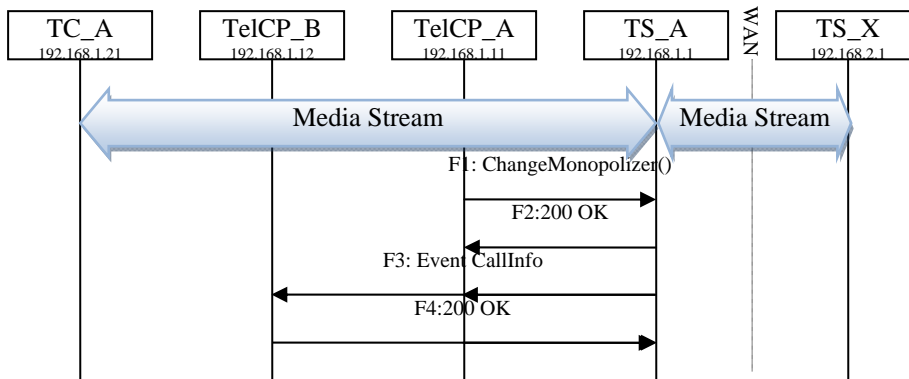 xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
 s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <s:Fault>
  <faultcode>s:Client</faultcode>
  <faultstring>UPnPError</faultstring>
  <detail>
   <UPnPError xmlns="urn:schemas-upnp-org:control-1-0">
    <errorCode>713</errorCode>
    <errorDescription>Unauthorized Identity</errorDescription>
   </UPnPError>
  </detail>
 </s:Fault>
 </s:Body>
</s:Envelope>
```

B.21 Change TelCP which Monopolize the Call

B.21.1   Figure

B.21.2   F1

POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1

```
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#ChangeMonopolizer"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:ChangeMonopolizer xmlns:u="urn:schemas-upnp-org:service: CallManagement:1">
  <CurrentMonopolizer>TV@Living</CurrentMonopolizer>
  <SecretKey>secret101</SecretKey>
  <CallID>call101</CallID>
  <NewMonopolizer>HD-TV@Living</NewMonopolizer>
  </u:ChangeMonopolizer>
  </s:Body>
</s:Envelope>
```

B.21.3   F2

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:ChangeMonopolizerResponse xmlns:u="urn:schemas-upnp-
org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.21.4   F3

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.12:10012
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
```

<callID>*call101*</callID>
<targetNames type="TelCPName">*HD-TV @Living*</targetNames>
<callStatus>*Talking*</callStatus>
<priority>Normal</priority>
<remoteParty>
 <peer:id>*0774940201*</peer:id>
</remoteParty>
<TCList>
 <TC>
  <UDN>uuid:*97ef6efa-ac89-4ea2-0001-udn101*</UDN>
  <mediaSessionID>*media101*</mediaSessionID>
 </TC>
</TCList>
<mediaCapability format="SDP">v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
  </mediaCapability>
 </cams:callInfo></CallInfo>
  </e:property>
</e:propertyset>

B.21.5 F4

HTTP/1.1 200 OK
Content-Length: 0

B.22 Create a Call with TC-Based and TS-Based Media Handlings

B.22.1   Figure

B.22.2 F1

```
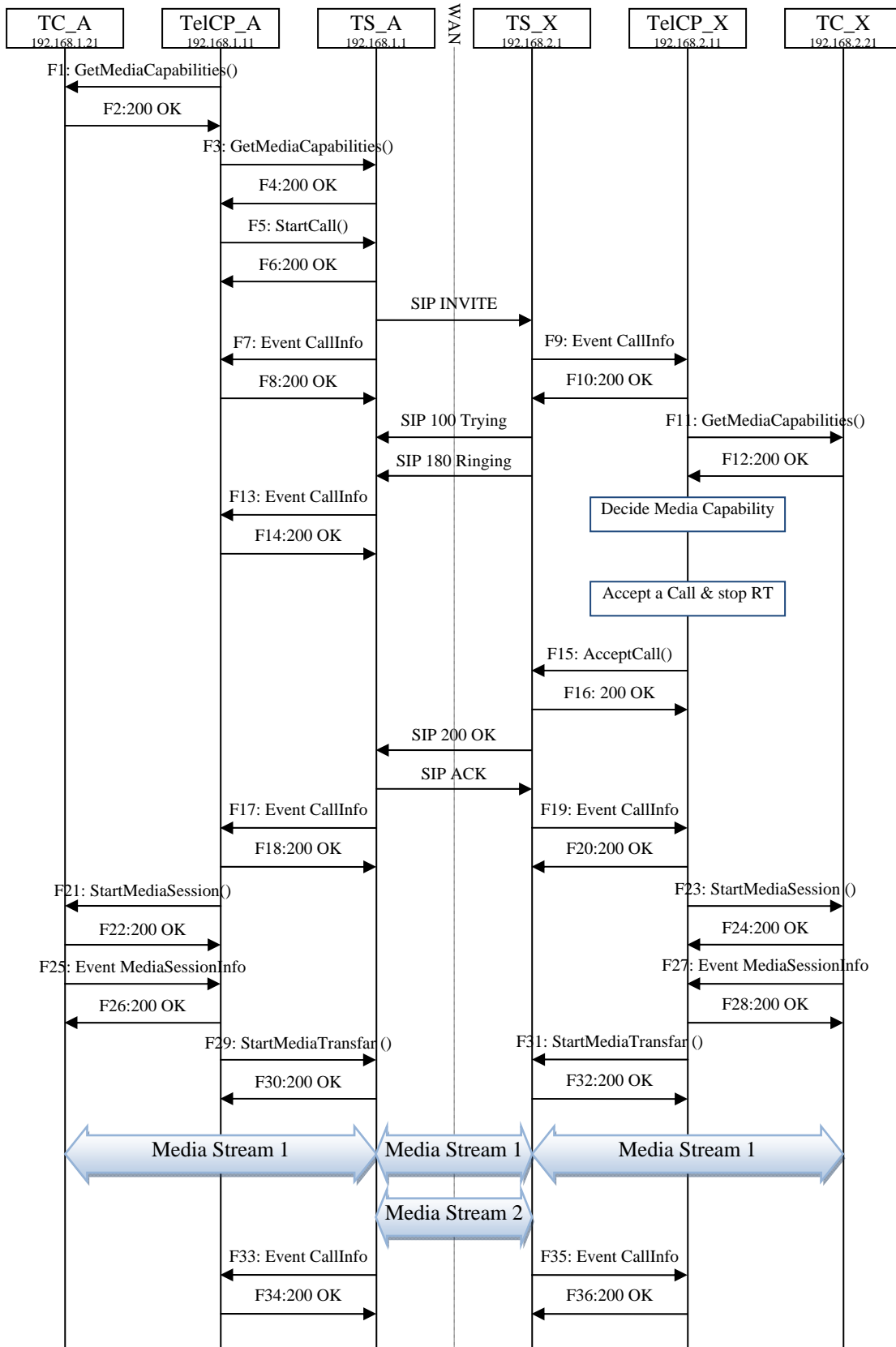POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-
org:service:MediaManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.21:10021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1"
>
   <TSMediaCapabilityInfo></TSMediaCapabilityInfo>
  </u:GetMediaCapabilities>
 </s:Body>
</s:Envelope>
```

B.22.3 F2

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
    <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.21
s=-
c=IN IP4 192.168.1.21
t=0 0
m=video 12021 RTP/AVP 96
c=IN IP4 192.168.1.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000001200086c40fa28a021e0a21
a=framerate:30
       &lt;/mediaCapability&gt;
     &lt;/mms:mediaCapabilityInfo&gt;
    </SupportedMediaCapabilityInfo>
  </u:GetMediaCapabilitiesResponse>
 </s:Body>
```

```
    </s:Envelope>
```

B.22.4   F3

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
  <TCMediaCapabilityInfo></TCMediaCapabilityInfo>
  </u:GetMediaCapabilities>
  </s:Body>
</s:Envelope>
```

B.22.5   F4

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:CallManagement:1">
   <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
```

```
    &lt;nativeMediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/nativeMediaCapability&gt;
    &lt;/cams:mediaCapabilityInfo&gt;</SupportedMediaCapabilityInfo>
  </u:GetMediaCapabilitiesResponse>
 </s:Body>
</s:Envelope>
```

B.22.6   F5

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.1:10001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName></TelCPName>
   <SecretKey></SecretKey>
   <CalleeID> tel:0774940201</CalleeID>
   <CallPriority>Normal</CallPriority>
   <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
  &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=video 12021 RTP/AVP 96
c=IN IP4 192.168.1.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000101200086c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability&gt;
    &lt;nativeMediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
```

```
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/nativeMediaCapability&gt;
   &lt;/cams:mediaCapabilityInfo&gt;
   </MediaCapabilityInfo>
  <CallMode>Non-Monopolize</CallMode>
 </u:StartCall>
 </s:Body>
</s:Envelope>
```

B.22.7 F6

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartCallResponse xmlns:m="urn:schemas-upnp-org:service:CallManagement:1">
   <CallID>call101</CallID>
  </m:StartCallResponse>
 </s:Body>
</s:Envelope>
```

B.22.8 F7

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Dialing&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
```

```
    &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
    &lt;/remoteParty&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000120086c40fa28a021e0a21
a=framerate:30
    &lt;/mediaCapability&gt;
    &lt;nativeMediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
    &lt;/nativeMediaCapability&gt;
  &lt;/cams:callInfo&gt;</CallInfo>
 </e:property>
</e:propertyset>
```

B.22.9   F8

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.22.10   F9

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call201&lt;/callID&gt;
```

<targetNames type="TelCPName">*</targetNames>
<callStatus>*Ringing*</callStatus>
<priority>Normal</priority>
<remoteParty>
 <peer:id>*0355550101*</peer:id>
</remoteParty>
<mediaCapability format="SDP">v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
m=video 22001 RTP/AVP 96
c=IN IP4 192.168.2.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
a=framerate:30
    </mediaCapability>
    <nativeMediaCapability format="SDP">v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
    </nativeMediaCapability>
  </cams:callInfo></CallInfo>
  </e:property>
</e:propertyset>

B.22.11 F10

HTTP/1.1 200 OK
Content-Length: 0

B.22.12 F11

POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-
org:service:MediaManagement:1#GetMediaCapabilities"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.21:20021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilities xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1"
>

```
    <TSMediaCapabilityInfo></TSMediaCapabilityInfo>
   </u:GetMediaCapabilities>
  </s:Body>
</s:Envelope>
```

B.22.13 F12

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:GetMediaCapabilitiesResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
     <SupportedMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.21
s=-
c=IN IP4 192.168.2.21
t=0 0
m=video 22021 RTP/AVP 96
c=IN IP4 192.168.2.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
       &lt;/mediaCapability&gt;
      &lt;/mms:mediaCapabilityInfo&gt;</SupportedMediaCapabilityInfo>
   </u:GetMediaCapabilitiesResponse>
  </s:Body>
</s:Envelope>
```

B.22.14 F13

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
```

```
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Calling&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
     &lt;nativeMediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/nativeMediaCapability&gt;
   &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.22.15 F14

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.22.16 F15

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#AcceptCall"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
```

```
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:AcceptCall xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
   <TelCPName></TelCPName>
   <SecretKey></SecretKey>
   <TargetCallID>call201</TargetCallID>
   <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
&lt;cams:mediaCapabilityInfo
 xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
 http://www.upnp.org/schemas/phone/cams-v1.xsd"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
 &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=video 22021 RTP/AVP 96
c=IN IP4 192.168.2.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
     &lt;nativeMediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/nativeMediaCapability&gt;
    &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
   <CallMode>"Non-Monopolize"</CallMode>
  </u:AcceptCall>
 </s:Body>
</s:Envelope>
```

B.22.17 F16

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
   <m:AcceptCallResponse xmlns:m="urn:schemas-upnp-org:service:CallManagement:1"
/>
```

```
    </s:Body>
</s:Envelope>
```

B.22.18   F17

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:callInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"
    xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
    &lt;callID&gt;call101&lt;/callID&gt;
    &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
    &lt;callStatus&gt;Connected&lt;/callStatus&gt;
    &lt;priority&gt;Normal&lt;/priority&gt;
    &lt;remoteParty&gt;
     &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
    &lt;/remoteParty&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
     &lt;nativeMediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/nativeMediaCapability&gt;
   &lt;/cams:callInfo&gt;</CallInfo>
```

```
      </e:property>
    </e:propertyset>
```

B.22.19 F18

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.22.20 F19

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
   <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
   &lt;cams:callInfo
    xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
    http://www.upnp.org/schemas/phone/cams-v1.xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:cams="urn:schemas-upnp-org:phone:cams"
    xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call201&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Connected&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
   &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=video 22001 RTP/AVP 96
c=IN IP4 192.168.2.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000001200086c40fa28a021e0a21
a=framerate:30
   &lt;/mediaCapability&gt;
   &lt;nativeMediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
```

```
   a=rtpmap:0 PCMU/8000
   a=ptime:20
        &lt;/nativeMediaCapability&gt;
     &lt;/cams:callInfo&gt;</CallInfo>
    </e:property>
</e:propertyset>
```

B.22.21 F20

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.22.22 F21

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.1.21:10021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
   <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000001200086c40fa28a021e0a21
a=framerate:30
       &lt;/mediaCapability&gt;
       &lt;/mms:mediaCapabilityInfo&gt;
       </TSMediaCapabilityInfo>
   </u:StartMediaSession>
 </s:Body>
</s:Envelope>
```

B.22.23 F22

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]
```

```
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
   <MediaSessionID>media101</MediaSessionID>
   <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.21
s=-
c=IN IP4 192.168.1.21
t=0 0
m=video 12021 RTP/AVP 96
c=IN IP4 192.168.1.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000120008c6c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability &gt;
     &lt;/mms:mediaCapabilityInfo&gt;
    </TCMediaCapabilityInfo>
   </u:StartMediaSessionResponse>
  </s:Body>
</s:Envelope>
```

B.22.24 F23

```
POST /_urn:upnp-org:serviceId:MediaManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:MediaManagement:1#StartMediaSession"
CONTENT-TYPE: text/xml ; charset="utf-8"
HOST: 192.168.2:21:20021
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
  <u:StartMediaSession xmlns:u="urn:schemas-upnp-org:service:MediaManagement:1">
   <TSMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
     &lt;mms:mediaCapabilityInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
       &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
```

```
t=0 0
m=video 22001 RTP/AVP 96
c=IN IP4 192.168.2.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000 1200086c40fa28a021e0a21
a=framerate:30
        &lt;/mediaCapability&gt;
      &lt;/mms:mediaCapabilityInfo&gt;
      </TSMediaCapabilityInfo>
  </u:StartMediaSession>
 </s:Body>
</s:Envelope>
```

B.22.25 F24

```
HTTP/1.1 200 OK
EXT:
CONTENT-TYPE: text/xml ; charset="utf-8"
SERVER: Windows NT/5.0, UPnP/1.0, Intel CLR SDK/1.0
Content-Length: [bytes in body]

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:StartMediaSessionResponse xmlns:u="urn:schemas-upnp-
org:service:MediaManagement:1">
     <MediaSessionID>media201</MediaSessionID>
     <TCMediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;mms:mediaCapabilityInfo
        xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
        http://www.upnp.org/schemas/phone/mms-v1.xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:cams="urn:schemas-upnp-org:phone:mms"&gt;
        &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.21
s=-
c=IN IP4 192.168.2.21
t=0 0
m=video 22021 RTP/AVP 96
c=IN IP4 192.168.2.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000 1200086c40fa28a021e0a21
a=framerate:30
        &lt;/mediaCapability&gt;
      &lt;/mms:mediaCapabilityInfo&gt;</TCMediaCapabilityInfo>
   </u:StartMediaSessionResponse>
 </s:Body>
</s:Envelope>
```

B.22.26 F25

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
```

```
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10021
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;mms:mediaSessionInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
   http://www.upnp.org/schemas/phone/mms-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
   &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
   &lt;mediaSessionStatus&gt;Started&lt;/mediaSessionStatus&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.21
s=-
c=IN IP4 192.168.1.21
t=0 0
m=video 12021 RTP/AVP 96
c=IN IP4 192.168.1.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000000120086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
   &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.22.27 F26

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.22.28 F27

```
NOTIFY /_urn:upnp-org:serviceId:MediaManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20021
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
```

```
      <MediaSessionInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
      &lt;mms:mediaSessionInfo
       xsi:schemaLocation="urn:schemas-upnp-org:phone:mms
       http://www.upnp.org/schemas/phone/mms-v1.xsd"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:mms="urn:schemas-upnp-org:phone:mms"&gt;
      &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
      &lt;mediaSessionStatus&gt;Started&lt;/mediaSessionStatus&gt;
      &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.21
s=-
c=IN IP4 192.168.2.21
t=0 0
m=video 22021 RTP/AVP 96
c=IN IP4 192.168.2.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b509000001000000001200086c40fa28a021e0a21
a=framerate:30
        &lt;/mediaCapability&gt;
      &lt;/cams:callInfo&gt;</CallInfo>
   </e:property>
</e:propertyset>
```

B.22.29   F28

```
      HTTP/1.1 200 OK
      Content-Length: 0
```

B.22.30   F29

```
      POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
      SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
      CONTENT-TYPE: text/xml ; charset="utf-8"
      HOST: 192.168.1.1:10001
      Content-Length: [bytes in body]

      <?xml version="1.0" encoding="utf-8"?>
      <s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
      xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
       <s:Body>
        <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
         <TelCPName></TelCPName>
         <SecretKey></SecretKey>
         <TargetCallID>call101</TargetCallID>
         <TCList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
         &lt;cams:TCList
          xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
          http://www.upnp.org/schemas/phone/cams-v1.xsd"
          xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
         &lt;TC&gt;
          &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
          &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
         &lt;/TC&gt;
         &lt;/cams:TCList&gt;</TCList>
```

```
            <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
            &lt;cams:mediaCapabilityInfo
             xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
             http://www.upnp.org/schemas/phone/cams-v1.xsd"
             xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
             xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
            &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=video 12021 RTP/AVP 96
c=IN IP4 192.168.1.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b5090000010000001200086c40fa28a021e0a21
a=framerate:30
            &lt;/mediaCapability&gt;
            &lt;nativeMediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.11
s=-
c=IN IP4 192.168.1.11
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
            &lt;/nativeMediaCapability&gt;
           &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
         </u:StartMediaTransfer>
       </s:Body>
     </s:Envelope>
```

B.22.31 F30

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
   <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
 </s:Body>
</s:Envelope>
```

B.22.32 F31

```
POST /_urn:upnp-org:serviceId:CallManagement_control HTTP/1.1
SOAPACTION: "urn:schemas-upnp-org:service:CallManagement:1#StartMediaTransfer"
CONTENT-TYPE: text/xml ; charset="utf-8"
```

HOST: 192.168.2.1:20001
Content-Length: [bytes in body]

```xml
<?xml version="1.0" encoding="utf-8"?>
<s:Envelope s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
 <s:Body>
   <u:StartMediaTransfer xmlns:u="urn:schemas-upnp-org:service:CallManagement:1">
    <TelCPName></TelCPName>
    <SecretKey></SecretKey>
    <TargetCallID>call201</TargetCallID>
    <TCList>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:TCList
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
    &lt;TC&gt;
     &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
     &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
    &lt;/cams:TCList&gt;</TCList>
    <MediaCapabilityInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
    &lt;cams:mediaCapabilityInfo
     xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
     http://www.upnp.org/schemas/phone/cams-v1.xsd"
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
     xmlns:cams="urn:schemas-upnp-org:phone:cams"&gt;
     &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=video 22021 RTP/AVP 96
c=IN IP4 192.168.2.21
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
     &lt;nativeMediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.11
s=-
c=IN IP4 192.168.2.11
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/nativeMediaCapability&gt;
     &lt;/mediaCapability&gt;
    &lt;/cams:mediaCapabilityInfo&gt;</MediaCapabilityInfo>
   </u:StartMediaTransfer>
 </s:Body>
</s:Envelope>
```

B.22.33 F32

```
HTTP/1.1 200 OK
Content-Length: [bytes in body]
CONTENT-TYPE: text/xml; charset="utf-8"
SERVER: TS-HTTP/1.1 UPnP/1.0 UPnP-Device-Host/1.0
EXT:

<?xml version="1.0" encoding="utf-8"?>
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"
s:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
 <s:Body>
  <m:StartMediaTransferResponse xmlns:m="urn:schemas-upnp-
org:service:CallManagement:1" />
</s:Body>
</s:Envelope>
```

B.22.34 F33

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.1.11:10011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-10001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call101&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Talking&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0774940201&lt;/peer:id&gt;
   &lt;/remoteParty&gt;
   &lt;TCList&gt;
    &lt;TC&gt;
     &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn101&lt;/UDN&gt;
     &lt;mediaSessionID&gt;media101&lt;/mediaSessionID&gt;
    &lt;/TC&gt;
   &lt;/TCList&gt;
    &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
```

```
c=IN IP4 192.168.1.1
t=0 0
m=video 12001 RTP/AVP 96
c=IN IP4 192.168.1.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
     &lt;/mediaCapability&gt;
     &lt;nativeMediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.1.1
s=-
c=IN IP4 192.168.1.1
t=0 0
m=audio 11001 RTP/AVP 0
c=IN IP4 192.168.1.1
a=rtpmap:0 PCMU/8000
a=ptime:20
     &lt;/nativeMediaCapability&gt;
   &lt;/cams:callInfo&gt;</CallInfo>
  </e:property>
</e:propertyset>
```

B.22.35 F34

```
HTTP/1.1 200 OK
Content-Length: 0
```

B.22.36 F35

```
NOTIFY /_urn:upnp-org:serviceId:CallManagement HTTP/1.1
HOST: 192.168.2.11:20011
CONTENT-TYPE: text/xml
Content-Length: [bytes in body]
NT: upnp:event
NTS: upnp:propchange
SID: uuid:c3580410-1dd1-11b2-8000-20001
SEQ: [sequence number]
Connection: Keep-Alive

<?xml version="1.0" encoding="utf-8"?>
<e:propertyset xmlns:e="urn:schemas-upnp-org:event-1-0">
 <e:property>
  <CallInfo>&lt;?xml version="1.0" encoding="utf-8"?&gt;
  &lt;cams:callInfo
   xsi:schemaLocation="urn:schemas-upnp-org:phone:cams
   http://www.upnp.org/schemas/phone/cams-v1.xsd"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:cams="urn:schemas-upnp-org:phone:cams"
   xmlns:peer="urn:schemas-upnp-org:phone:peer"&gt;
   &lt;callID&gt;call201&lt;/callID&gt;
   &lt;targetNames type="TelCPName"&gt;*&lt;/targetNames&gt;
   &lt;callStatus&gt;Talking&lt;/callStatus&gt;
   &lt;priority&gt;Normal&lt;/priority&gt;
   &lt;remoteParty&gt;
    &lt;peer:id&gt;0355550101&lt;/peer:id&gt;
```

```
        &lt;/remoteParty&gt;
        &lt;TCList&gt;
         &lt;TC&gt;
          &lt;UDN&gt;uuid:97ef6efa-ac89-4ea2-0001-udn201&lt;/UDN&gt;
          &lt;mediaSessionID&gt;media201&lt;/mediaSessionID&gt;
         &lt;/TC&gt;
        &lt;/TCList&gt;
         &lt;mediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=video 22001 RTP/AVP 96
c=IN IP4 192.168.2.1
b=AS:2500
a=rtpmap:96 MP4V-ES/90000
a=fmtp:96 profile-level-
id=4;config=000001b004000001b50900000100000001200086c40fa28a021e0a21
a=framerate:30
         &lt;/mediaCapability&gt;
         &lt;nativeMediaCapability format="SDP"&gt;v=0
o=- 0 0 IN IP4 192.168.2.1
s=-
c=IN IP4 192.168.2.1
t=0 0
m=audio 21001 RTP/AVP 0
c=IN IP4 192.168.2.1
a=rtpmap:0 PCMU/8000
a=ptime:20
         &lt;/nativeMediaCapability&gt;
        &lt;/cams:callInfo&gt;</CallInfo>
      </e:property>
     </e:propertyset>
```

B.22.37 F36

```
HTTP/1.1 200 OK
Content-Length: 0
```