

# SIPREC

## Recording Metadata for SRS (draft-ietf-siprec-metadata-03)

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On behalf of the team

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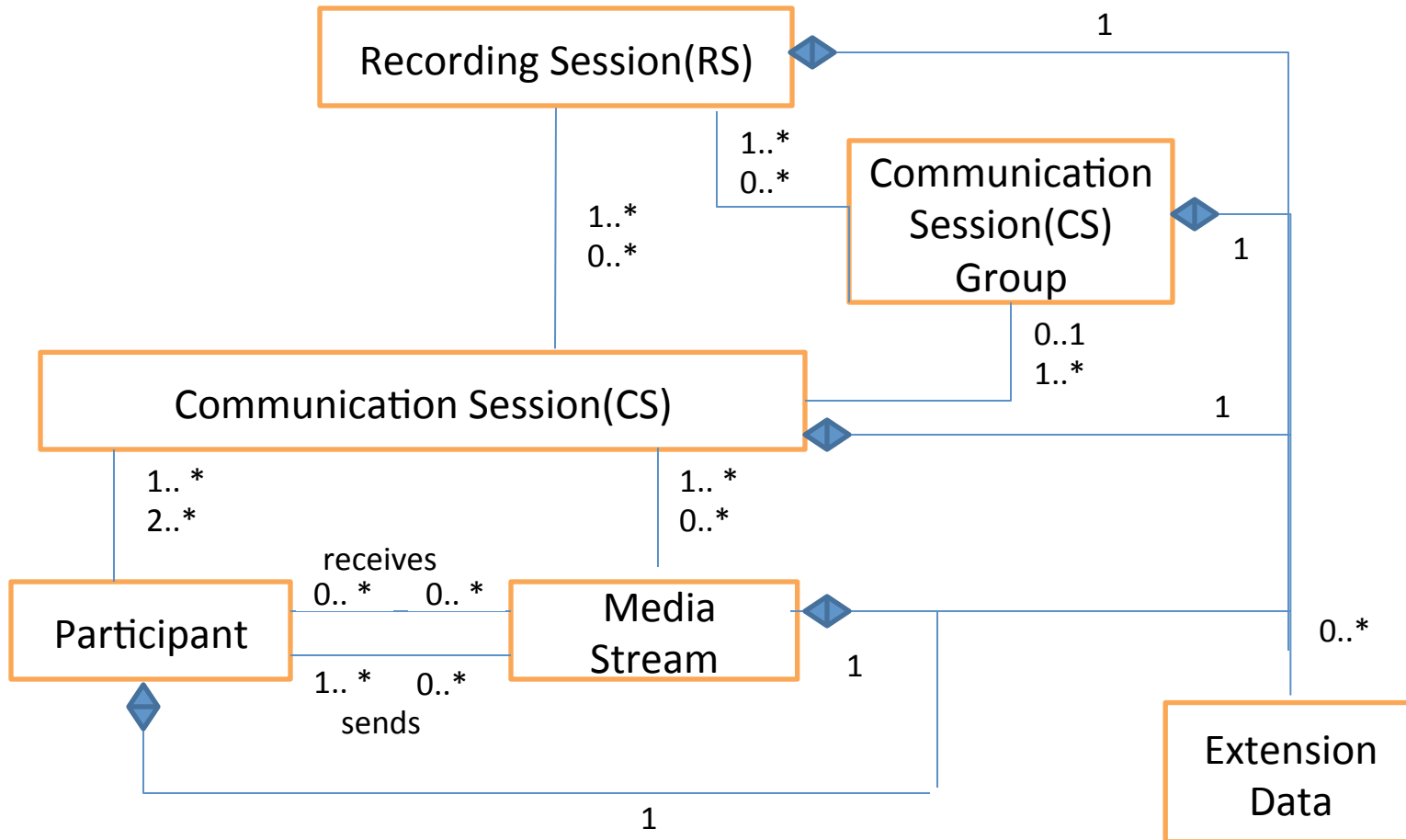
# Agenda

- Changes in draft-ietf-siprec-metadata from version 01.
- Discuss Open items in Metadata model
- Discuss open items in the format (XML)
- Next Steps

# Changes from Previous version

- The new version of draft has following changes (Most of which were agreed in last interim meeting and rest over mailer) :
  - Merged format (XML schema) with model
  - Modified the linkages between Extension Data class and other classes in the model to indicate that Extension data class is contained inside other classes.
  - Added a new attribute in MS class to describe the content of an MS based on types defined in RFC 4796 registry.
  - Modified the XML schema to show extension data element contained inside the other elements.

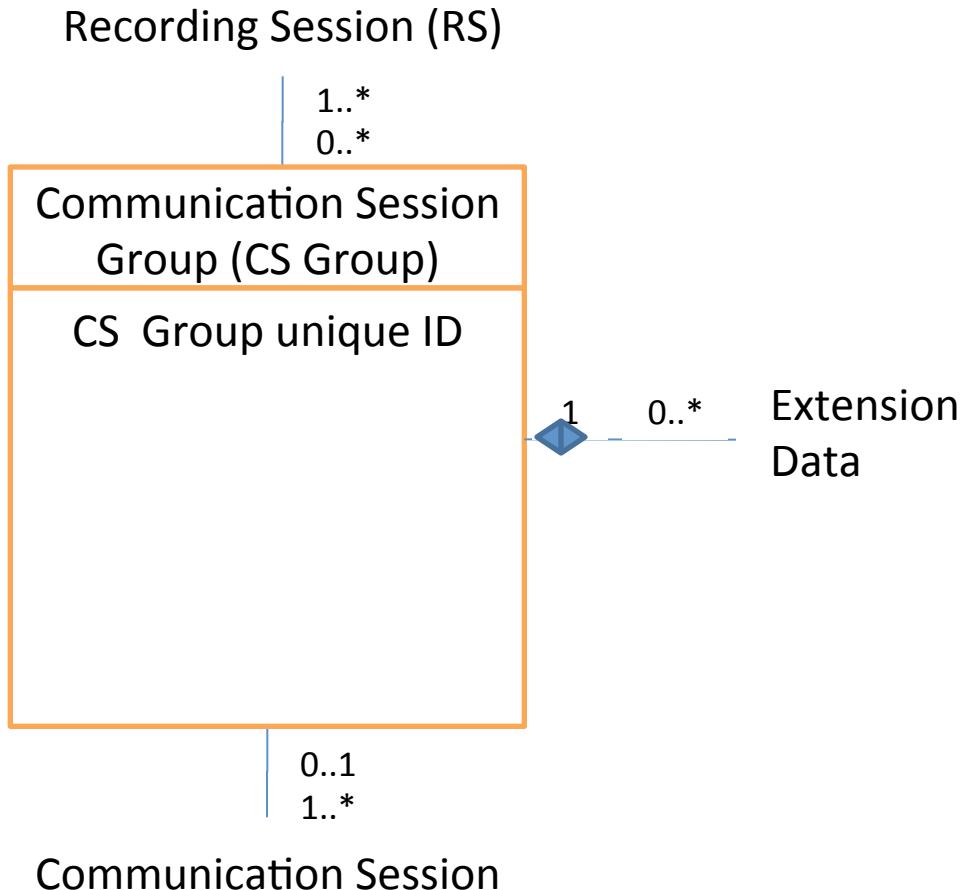
# Metadata Model



# Changes to linkages in the model

- As per the agreement in last meeting, Extension data for a class shall be sent with in the parent class to which it belongs.
- The linkages between Extension data class and all other classes has been modified to show the same.

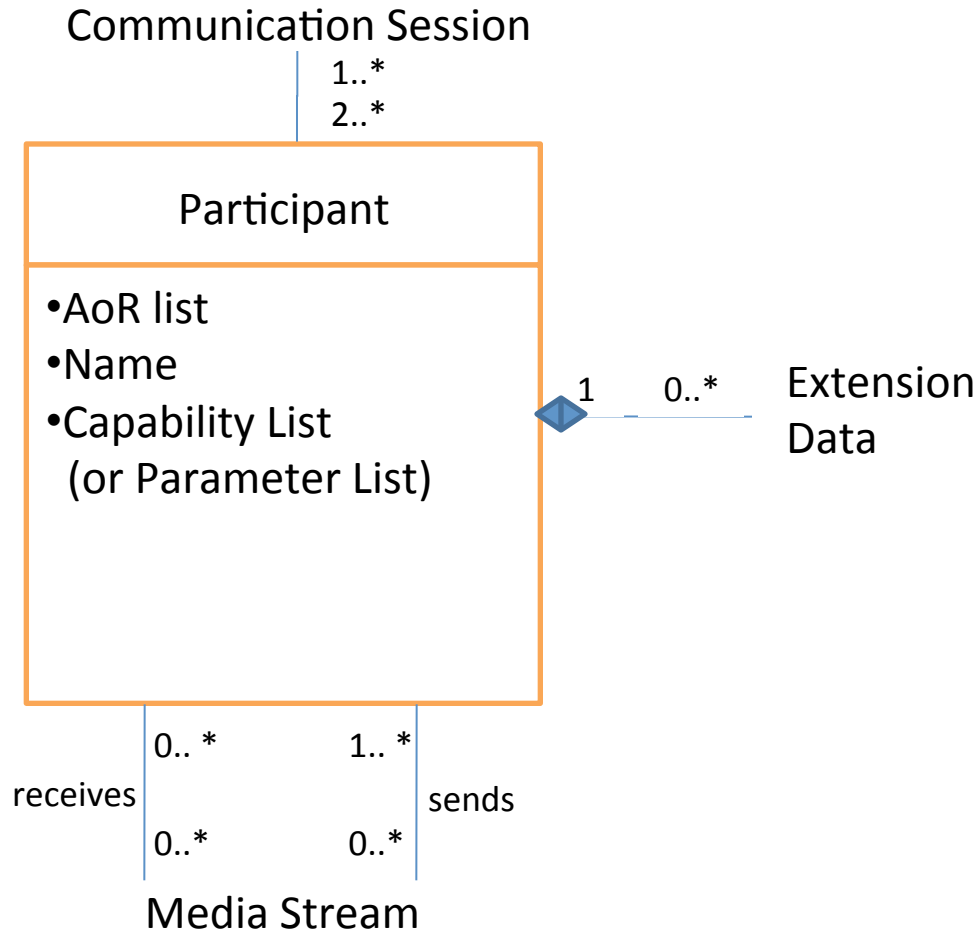
# Metadata Model: Communication Session Group



## Open Items:

- Any objection for addition of Optional associate/ disassociate time attribute ?
  - Associate-time for CS-Group shall be calculated by SRC as the time when a CS-Group is formed.
  - Disassociate-time for CS-Group shall be calculated by SRC as the time when CS-Group ends.

# Metadata Model: Participant



## Open Items:

- Participant lifetime is within the scope of CS or CSG ?
- Is Optional associate/disassociate time attribute needed?
  - associate-time shall be calculated by SRC as the time it sees a new participant added to CS
  - Disassociate-time shall be calculated by SRC as the time it see a participant stopping participation from CS
- How to handle capabilities?
- Allow Name per AoR?

# Metadata Model: Participant

- Recording Callee capabilities ( RFC 3840 defined capabilities)
  - Each participant shall have Zero or more capabilities
  - (Or include all Contact params, not just capabilities?)
  - How to represent in XML ?
  - A participant may use different capabilities depending on the role it plays at a particular instance. Metadata shall report the capability of the participant at that instant.
  - IOW if a participants moves across different CSs ( due to transfer e.t.c) its role may change and hence the capability used.
  - ISSUE: How to represent participant that is simultaneously in multiple CSs with different capabilities/parameters???



# Metadata Model : Participant

participant, since the sources of multiple AORs will typically provide multiple display names as well. So we could switch to a list of name/aor pairs, where the name is optional.

- Use-case where multiple names to single AOR may be present:
  - if there are two values in P-A-ID, they could each have a display name, and those could be different. And the From could also have a display name. If so, how would the SRC know which one to include ??
  - By making provision to provide one with each AOR the SRC is relieved of deciding which one is the right one and leave it for the SRS or even the person who later uses the recorded information, to decide which name(s) to chose. This gives a lot of flexibility.
  - Alternatively we can simply declare that the SRC

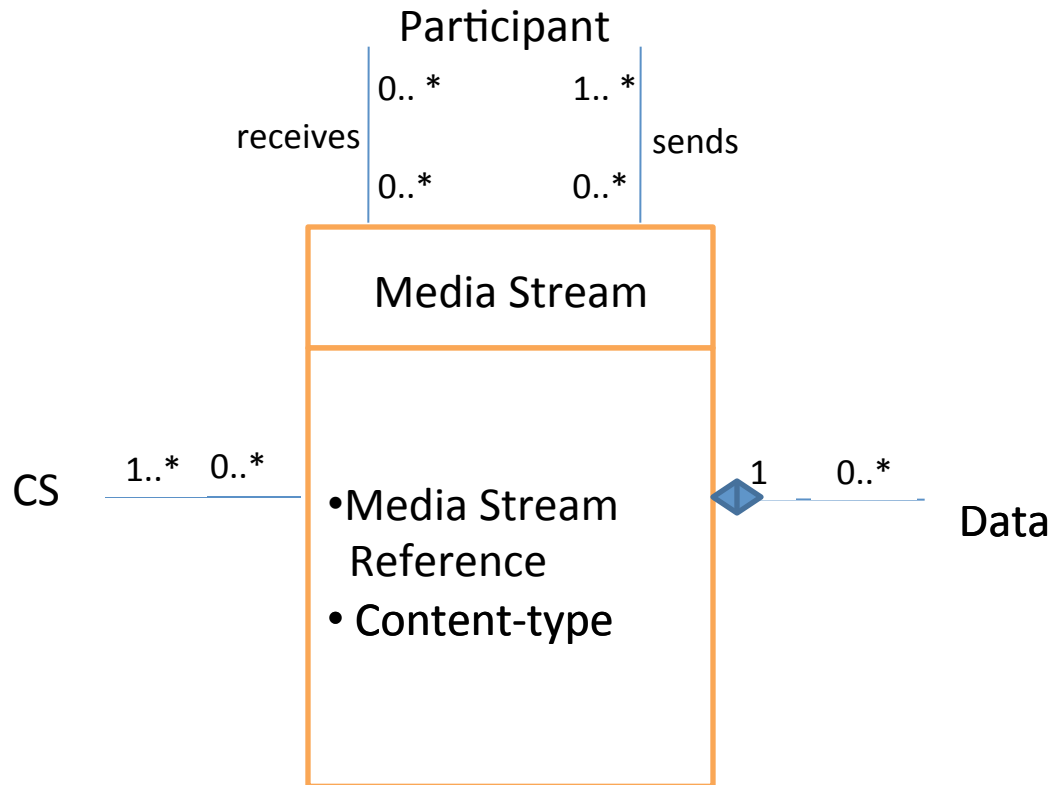
?

# Metadata Model: Participant

- Is there a need to know the linkage between the participants to its contributing media streams?
- NOTE: This is needed for only those cases where SRC acts as a mixer.

- RS SDP shall provide the information of SSRC/ SRC acts as RTP
- Participant shall provide the information of CSRC/ SRC (by means of new attribute).
- Having this info can allow the SRS to determine which participants are
- NOTE: Not all SRS elements have a capability for determination (by this ans of new attribute).
- Having this info can allow the SRS to determine which participants are

# Metadata Model: Media Stream



Added content-type attribute to describe the content of an MS based on types defined in RFC 4796 registry and represent the same in RS SDP.

- IOW no XML representation needed for content-type attribute.

## Open Items:

- What is Start/Stop time for MS and what is its scope?

# Metadata Model: Media Stream

contributes/ stops contributing to a MS and hence we may not need

Is this sufficient to indicate a participant has stopped sending a MS ? OR

- Some different MS is mapped to that m-line

from the m-line mapped to the MS class. Some cases include:

- The RS containing the m-line ends
- The dir attribute in m-line is set to inactive
- The RS containing the m-line ends
- The dir attribute in m-line is set to inactive

# Metadata model : Media Stream

sees the media for a participant for the first time ?

SRC). NOTE: a participant may re-start sending stream. How does an SRC know a participant cannot send again ?

- What is stop-time in case of mixed stream?
- Should start/stop ( or rather participant participation in a MS ) be an attribute of participant rather than MS class ?

# format options

- A generic URN, with added constraint that equality is based only on lexical equivalence (as defined in rfc 2141)
- UUID URN (rfc 4122)
- UUID encoded more densely than the UUID URN. (e.g. radix64 of the binary uuid form defined in 4122)
  - Based on the initial discussion on the mailer, there was an inclination for this approach.
  - How to represent radix in XML ? Use Big Endian notation ?
- Can we go ahead with Option 3 ? Most folks favor this from
  - Can we go ahead with Option 3 ? Most folks favor this from

# recv> element

recv> is not

present, it is assumed that all participants receive a stream.

- It has challenges to represent cases where a stream is not received by some participants of a CS [ e.g. whisper call, participants on hold during a call].
- A possible solution is to explicitly indicate <recv> element for each participant to give the list of streams received .
- Any objections to go with above approach ? Any other better way to represent the relation of stream received/not-received to a participant ?

# General Open items in metadata draft

- Use of RFC 2119 language in the metadata model

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RFC  
2119 language in the metadata

model

schema and simple language for text related to Model. Any issue? So each group, Media Stream

➤ Terminology usage in draft

- For XML schema we will retain the name “element” for each XML element (decision has been made) as metadata class and the linkages between them as “associations” or “composition”. We will change it to “class” as per UML 5.0.



# Next steps

- Close the remaining open items
- ~~Close the remaining open items~~  
➤ Address the terminology, normative language issues with draft
- Publish next version and ask for more review.