SLIM: Selecting (human) Language for Internet Media
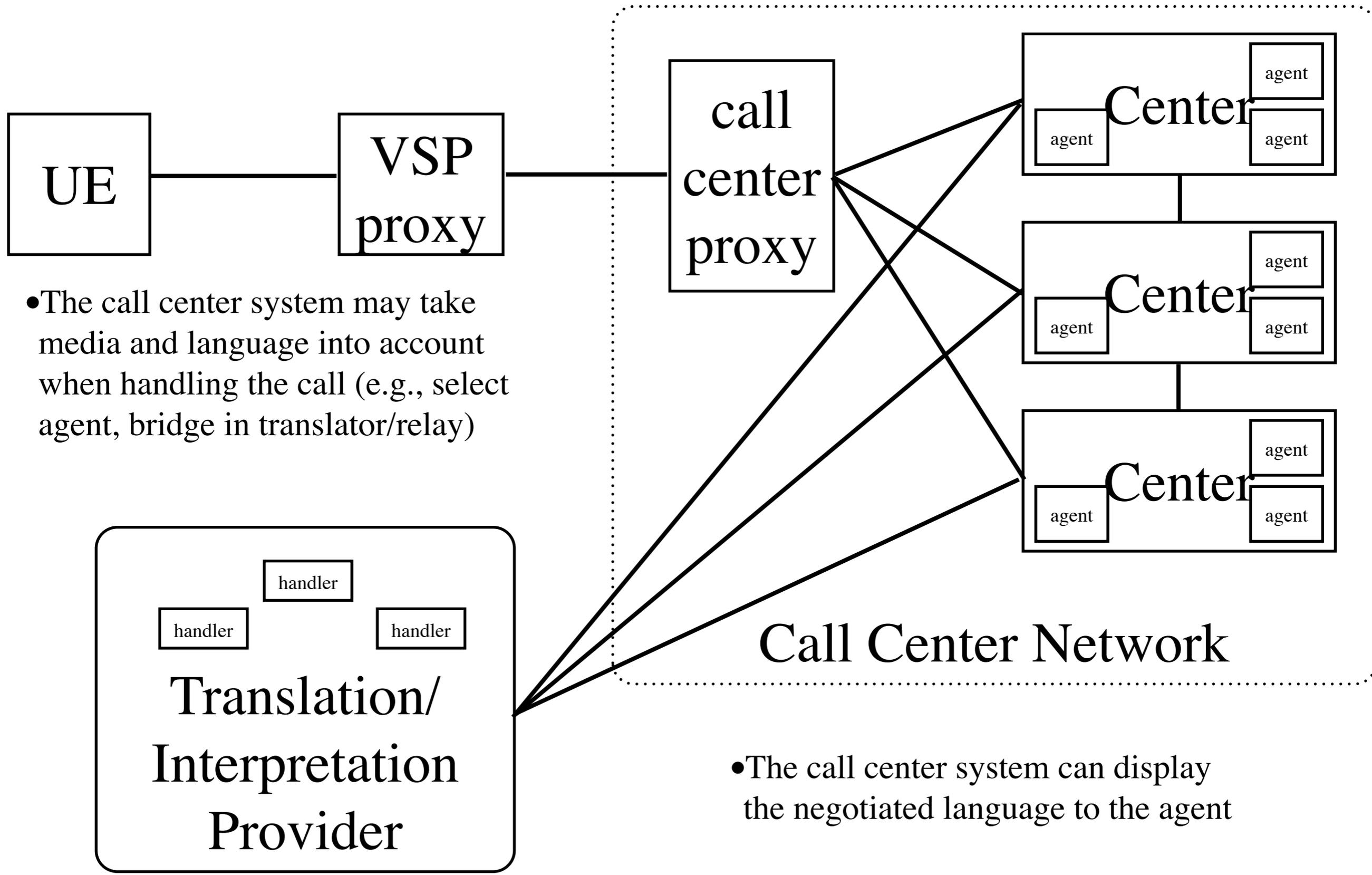
Real-Time Problem Space

draft-gellens-slim-negotiating-human-language-03

IETF 94 November, 2015   Slides v2

- Enable matching the caller's language and media needs with called party capabilities

- Language may be spoken, written, signed

- Especially needed without context/ understanding (e.g., not calling a friend)

- Canonical example: call center handling multiple languages, including sign language, via in-house attendants and/or external translators

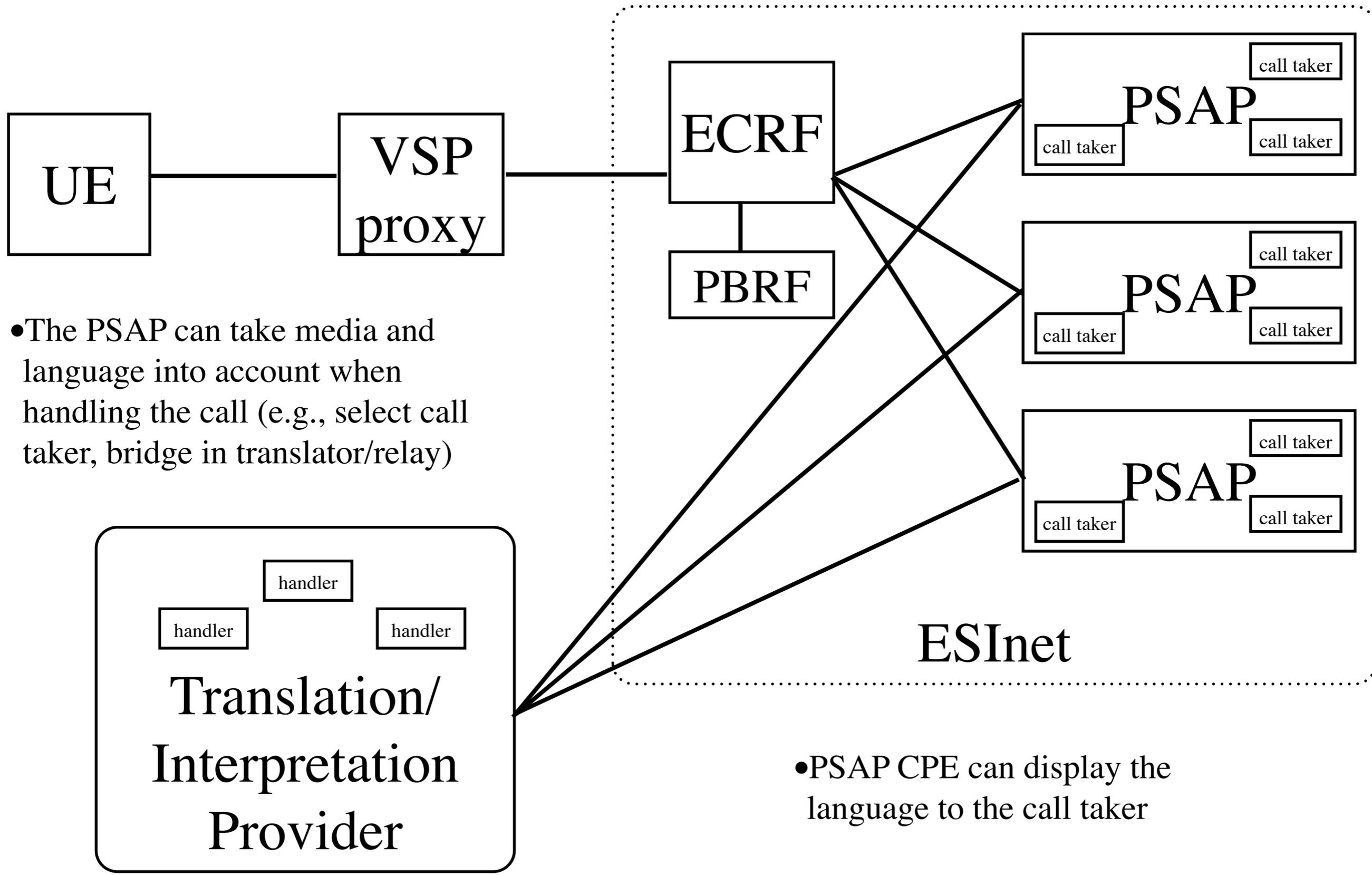 - Emergency calls are an important example of this kind of call center

- Human language (spoken/written/signed) can be negotiated in conjunction with media (audio/text/video)
- The user may use one or a set of languages, while the call center/PSAP supports a set of languages and media
  - Support may be native (e.g., call taker fluent in language, able to use media)
  - Support may require bridging in translation/interpretation/relay service
- Negotiation selects the user's most preferred language and media supported by the call center
- This is conceptually similar to the way other aspects of each media stream are negotiated using SDP (e.g., media type and codecs)
- Both sides are aware of what was negotiated

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UE — VSP proxy — call center proxy

agent Center agent agent
agent Center agent agent
agent Center agent agent

Call Center Network

•The call center system may take media and language into account when handling the call (e.g., select agent, bridge in translator/relay)

handler
handler   handler
Translation/
Interpretation
Provider

•The call center system can display the negotiated language to the agent

General Call Center Case

UE — VSP proxy — ECRF

ECRF — PBRF

PSAP (call taker, call taker, call taker)

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PSAP (call taker, call taker, call taker)

ESInet

Translation/ Interpretation Provider (handler, handler, handler)

- The PSAP can take media and language into account when handling the call (e.g., select call taker, bridge in translator/relay)

- PSAP CPE can display the language to the call taker

Emergency Calling Case

Proposal

- SDP stream attribute with list of RFC 5646 language tags in preference order

History

- This work has been in progress for years with considerable debate as to which level should negotiate (SDP or SIP)

- Extensive evaluation showed that no proposal was perfect but either could work

- At IETF 93, decided to split off routing from "labeling", hence this draft does not discuss routing

Draft Update

- Remove use cases (per IETF 93 face-to-face)

- Remove discussion of routing (per IETF 93 face-to-face)

- Draft ready for WG adoption and LC