Transcoding Interface Presentation (T2-020753)

Presentation about Transcoding Interface Standardization and an example

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Agenda

- Goal
- Proposed process
- Requirements
- Transcoding Services background
- Why standardize
- Draft Interface document
  - Interface principles
- Transcoding interface and MM7
- Conclusions

Goal

- Get support for standardizing a transcoding interface within 3GPP
  - MM9?
  - MMSC specification already mentions transcoding
    - 23140 (530)
      - 'Media type conversion'
      - 'Media format conversion'
- Get it into Release 6

Proposed Process

- Get Transcoding Interface support by T2 SWG3
  - Not necessarily *this* proposal…
- Send positive LS back to GSM Association and SA1
- If necessary, propose additional requirements to SA1
- Elaborate in T2 (SWG3)

-> Similar to MM7

Requirements

- Requirements expressed for transcoding
  - GSM Association
    - LS: T2-020629
- Requirement expressed for standardization
  - SA1
  - GSM Association (Operators)
    - LS T2-0200629
  - MMSC vendors
  - Transcoder vendors

Transcoding Services background

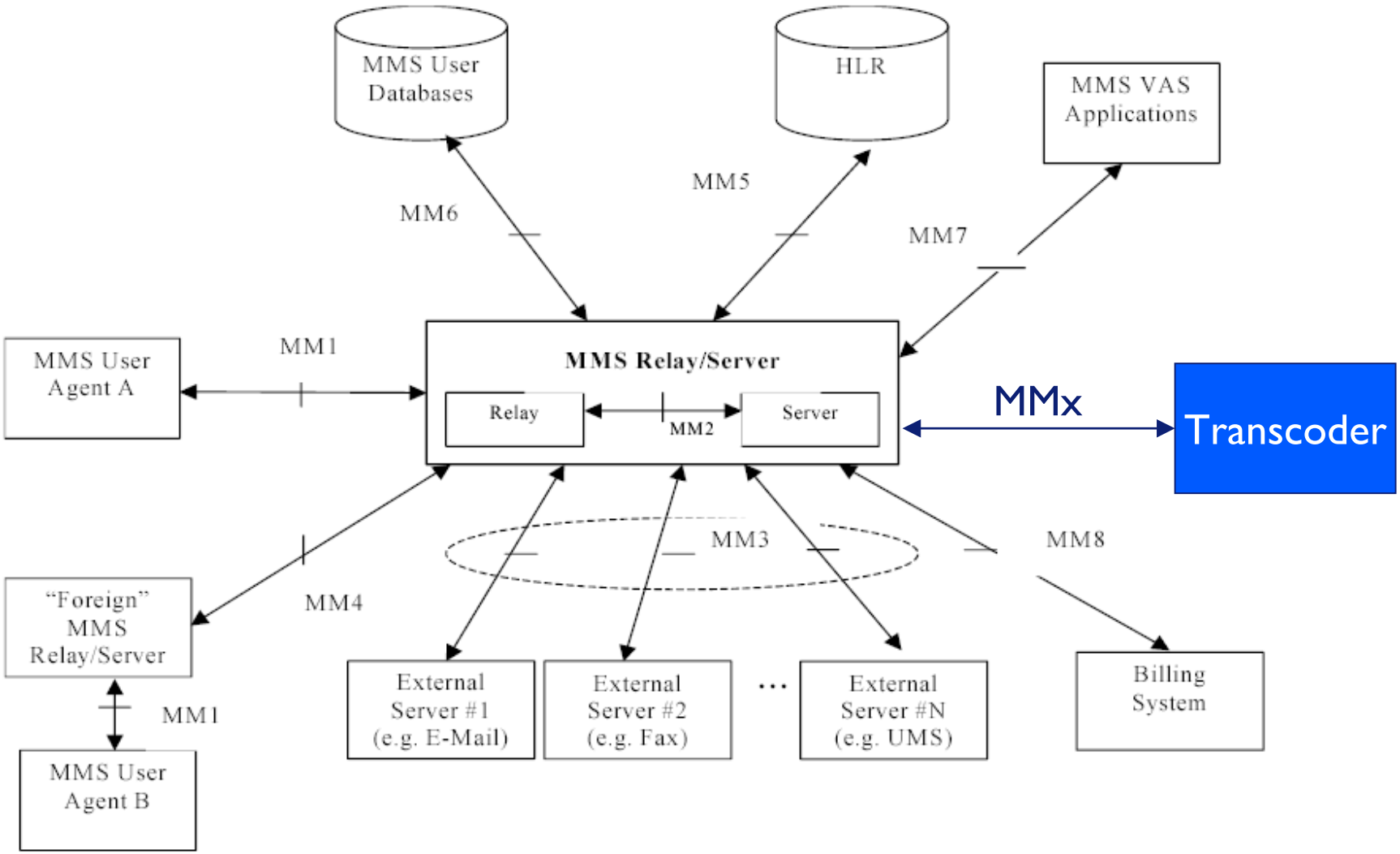
- Mobile multimedia is characterized by
  - Diversification of terminal media profiles
  - Diversification of media content profiles
  - Unpredictable network resources needed
- Transcoding
  "The adaptation of source media to match the destination profile"
- Transcoding services are needed for various applications
  - MMS, Media Download servers, Portals, rich-media games, et cetera

Transcoding Services

- Multimedia Transcoding
  - Adaptation of content to
    - Various media formats
    - Resolutions
    - Color depths
    - File sizes
    - Terminal specific implementations
    - Et cetera

Why standardize

- Central transcoding service may be used in support of all kinds of applications, including MMS
- Operator will gain from the general purpose platform with a generic interface
  - Get Best-of-Breed
- Standard interface will allow the transcoding platform to evolve into a general platform


MMS User Databases
HLR
MMS VAS Applications
MM6
MM5
MM7
MMS User Agent A
MM1
MMS Relay/Server
Relay
MM2
Server
MMx
Transcoder
MM3
MM8
MM4
"Foreign" MMS Relay/Server
External Server #1 (e.g. E-Mail)
External Server #2 (e.g. Fax)
...
External Server #N (e.g. UMS)
Billing System
MM1
MMS User Agent B

A sample interface document

- Joint CMG, Mobixell, Philips interface
- Royalty and IPR free
- Actively being used in the market
  - Trials, not commercial
- Time to start working on standardization is yesterday!

Interface Principles

- Transcoding control data is delivered in SOAP messages over HTTP
- Actual media parts are delivered in SOAP attachments OR external references (URL)
- SOAP and potential included media are wrapped in MIME
- Multiple transcoding requests can be put in one Transaction
- Supported Media cover Images, Audio, (Video,) Presentation
  - No streaming (yet)

Transcoding Interface and MM7

- Similarities
  (Implementation advantages)
  - SOAP over HTTP
- Differences
  (Raison d'être)
  - Parameters
  - Message versus Media level
  - Authentication?

Conclusions

- Informative presentation for T2 (SWG 3)
  - We welcome feedback!
- We are asking 3GPP (T2, SWG3) to define MM9(?) and start working on a transcoding interface standard

Thank you