

# Proposals for EVS Work (S4-100344)

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NTT Corporation  
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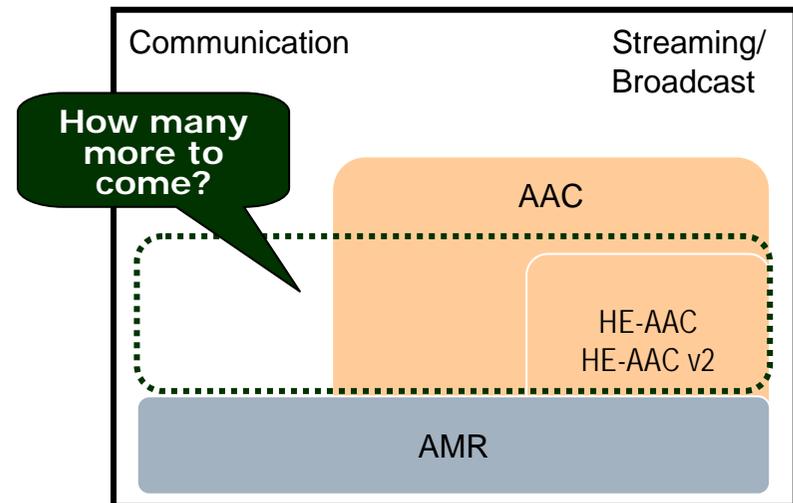
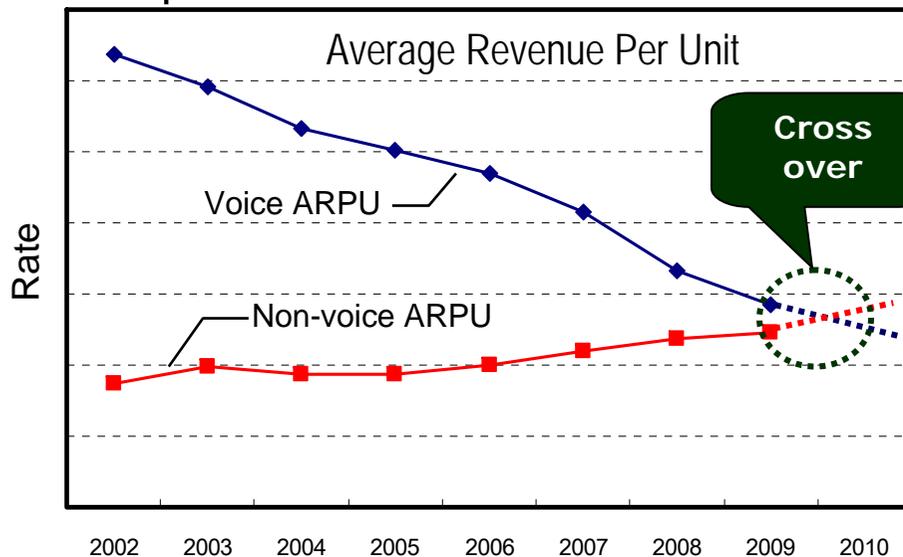
# Objectives

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- ◆ Revise some expectations towards EVS from the perspective of operators (NTT DOCOMO and NTT)
  - ◆ Propose some aspects for your consideration to help discussions on the detailed requirements
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# Background

1. Continually decreasing mobile voice traffic;  
Expected in near future: **Non-voice traffic > voice traffic**
2. LTE infrastructure = enhanced environment for richer multimedia services: **extended bandwidth and very low latency**
3. Already **numerous codecs** on a mobile handset, for speech/audio services alone



Current speech/audio codecs on DOCOMO handsets

# DOCOMO expects ...

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1. One codec that provides **high quality voice and non-voice signals**, combined or alone.
  - ❑ Quality of non-voice signals must not be compromised.
2. One codec that **adapts to LTE/LTE-Advanced characteristics**
  - ❑ Very low latency and high error robustness
  - ❑ Truly exploits the advantage of LTE
3. Mandatory audio codec to be **future-proof**
  - ❑ **Avoid multiple (mandatory) codecs** as much as possible
4. Bit-rate and computation complexity to be **comparable with existing codecs**

# The Rationale ...

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1. **Improve user experience** in daily telephony
  - ❑ Remains uncertain in Japan: popularity of text messaging
2. Expand telephony to **broadcast** usage
  - ❑ Handy for live reporting at TV quality, anywhere anytime; **anyone can be a TV reporter** (street corner reporter)
3. Expand the usage of **future video telephony** beyond head-and-shoulder-and-speech
  - ❑ **High quality non-voice** encourages sharing of live events/scenery → **boosts video telephony traffic**
4. Other non-voice
  - ❑ **Surveillance/remote monitoring**: environmental sound

**Stop the decline of and boost ARPU and MOU**

# Proposals for EVS work

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- ◆ Main target: high quality voice and non-voice signals, combined or alone.
  - Non-voice quality should not be compromised.
- ◆ Select a future proof codec
  - not to be easily replaced or challenged in near future.
  - Important to considers all potential codecs
- ◆ Avoid multiple speech/audio codecs
- ◆ Bit-rate and computation complexity should be kept comparable with existing codecs