



# NorDig-T Meeting Dolby AC-4

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Mark Pascoe

*Senior Technical Marketing Manager, Multiscreen Audio*

# Agenda

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NorDig Requirements

Outside the Codec

Accessibility Services in Dolby

ExCom Criteria



Either *DVB NGA codec*  
can fulfil NorDig HEVC  
receiver audio *codec*  
requirements.

Decode legacy codecs

Downmix to 5.1

Encode 5.1

Receiver mixing

# Dolby Audio: Not just a codec

# Dolby Audio in Broadcast Receivers





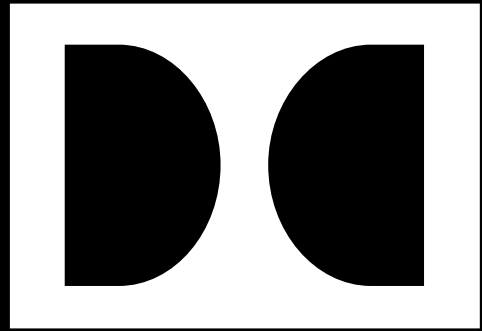
# AV Receivers



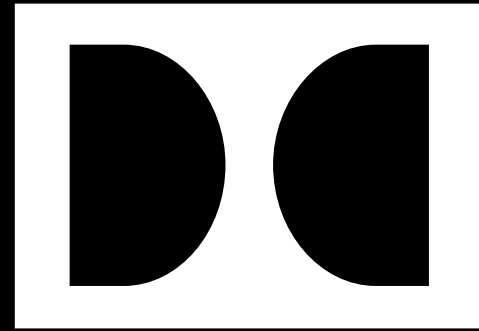
# Soundbars







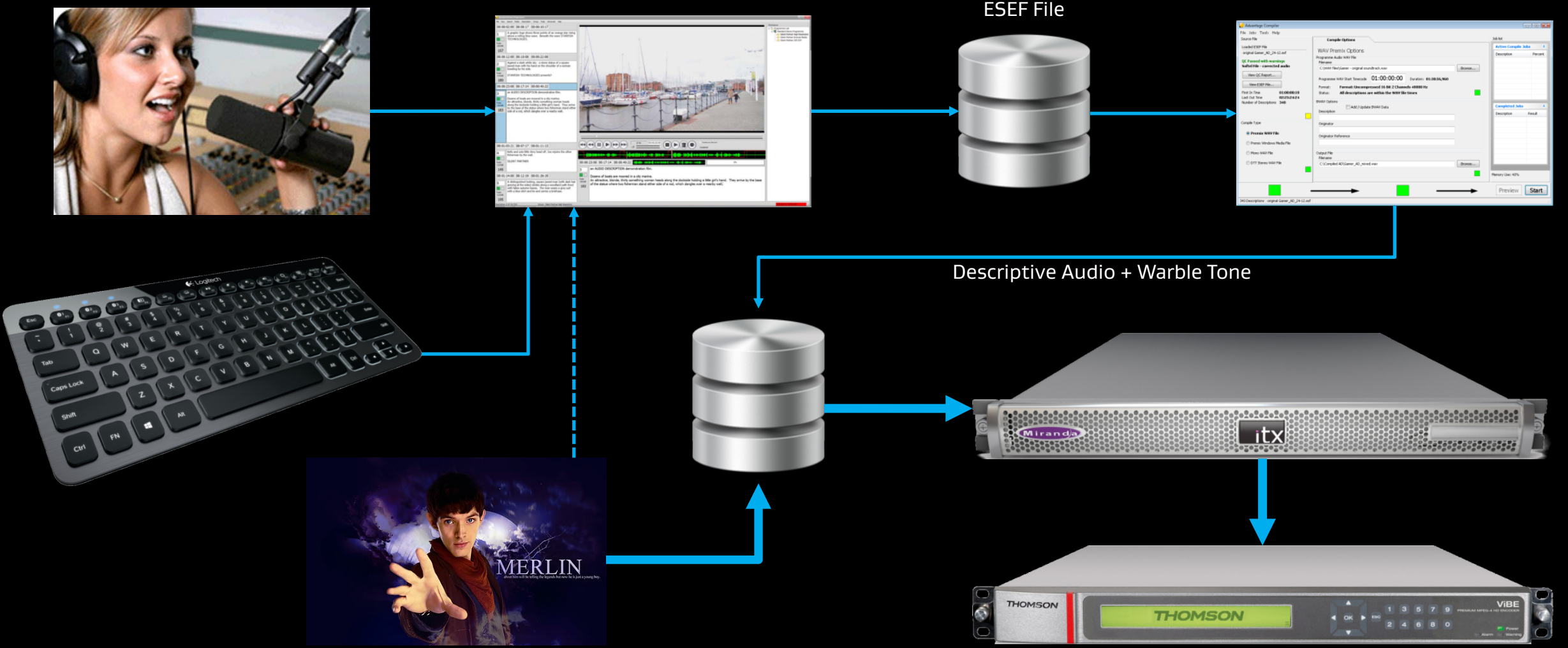
**DOLBY  
ATMOS**



**DOLBY  
AUDIO**

# AC-4 Accessibility Services

# Traditional Accessibility Service



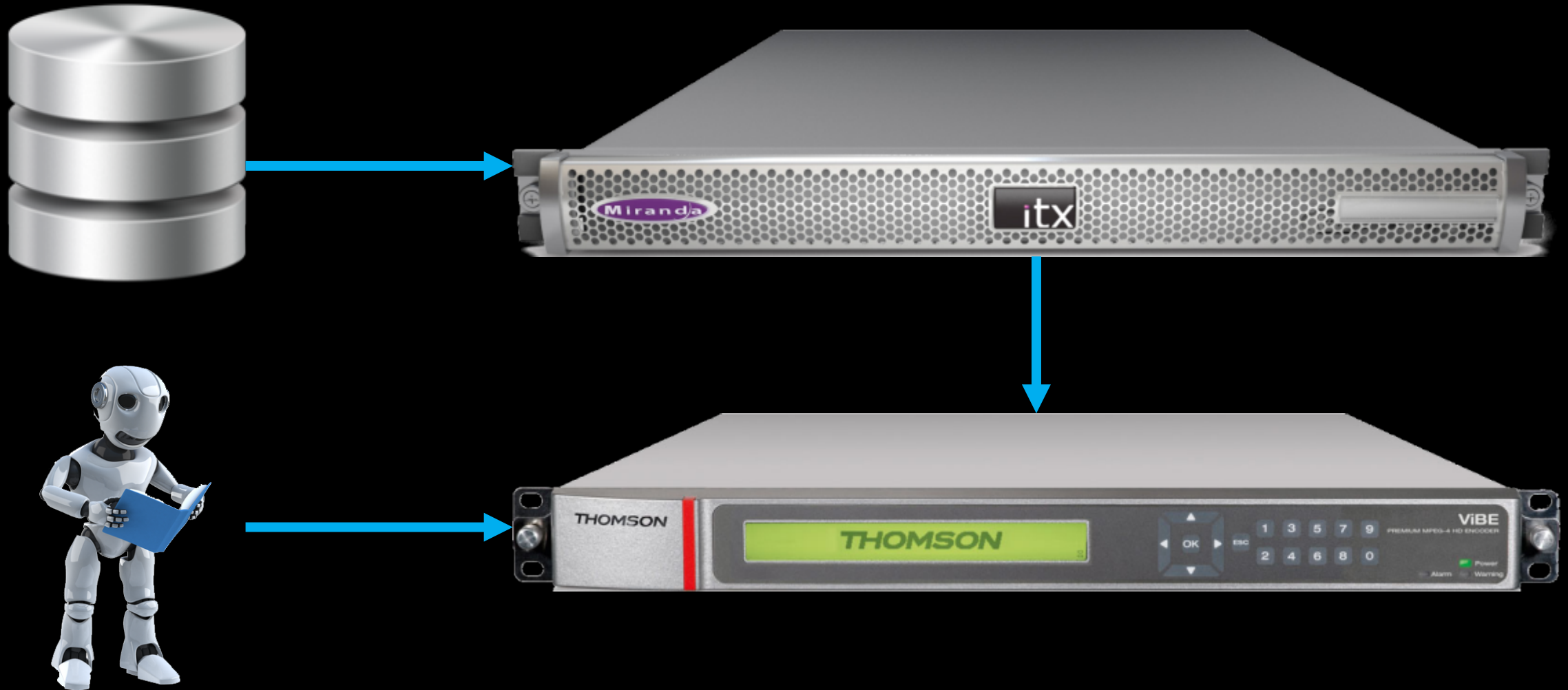
# Accessibility Service in Dolby Audio



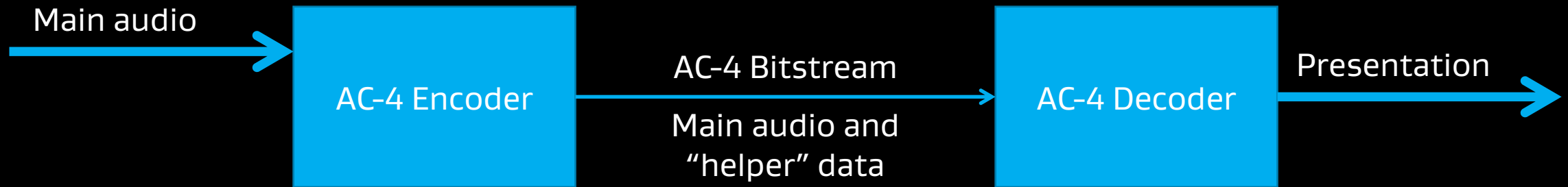
Addition of Descriptive Audio track in post production



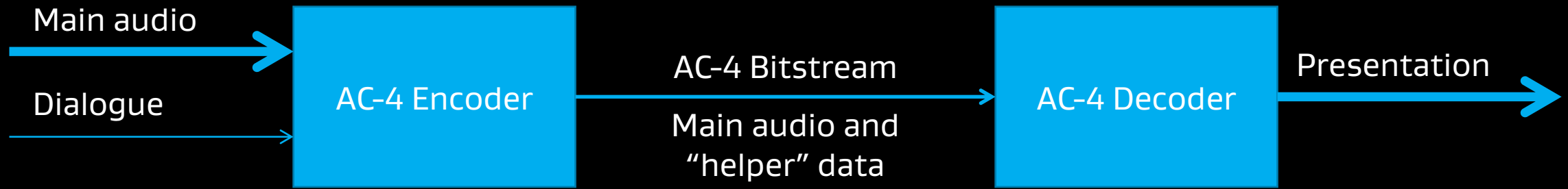
# Spoken Subtitles in Dolby Audio



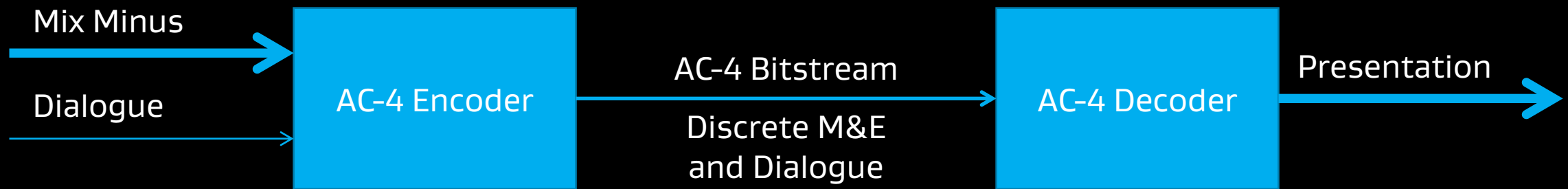
# Dialogue Enhancement – Existing Infrastructure



# Dialogue Enhancement – Efficiency



## Dialogue Enhancement – Wide Adjustment Range





# ExCom Criteria

# Price | Feasibility

## Price

*“Dolby AC-4 is competitively priced, with rates that are actually lower than the rates for Dolby Digital and Dolby Digital Plus.*

*Dolby only charges for one technology per device, which means that Dolby AC-4 effectively costs nothing in devices that include our existing technologies.”*

	Low Volume	Typical Volume	High Volume
Non-mobile devices	\$1.20	\$0.85	\$0.50
Mobile devices	\$0.50	\$0.25	\$0.15

Implementability

cādence™



# Implementability



**SAMSUNG**

**VIZIO**

**TPVISION**

**SAGEMCOM**

# Professional Partners



grass valley



## Trials

- French Open Tennis 2015/6/7
- European FTA satellite
- KQED-TV – ATSC 3.0 demonstration
- Fox Broadcast World Series in AC-4
- France, Spain and Poland – Ongoing trials



## Summary

- No additional royalty to be paid for the vast majority of receivers
- Re-encoding included in Dolby deliverable
- Implementations already available in market
- Intelligent encoders set a low bar for implementation of accessibility services
- Support from relevant encoder vendors
- Trial services on-air in brown-field DVB geographies



