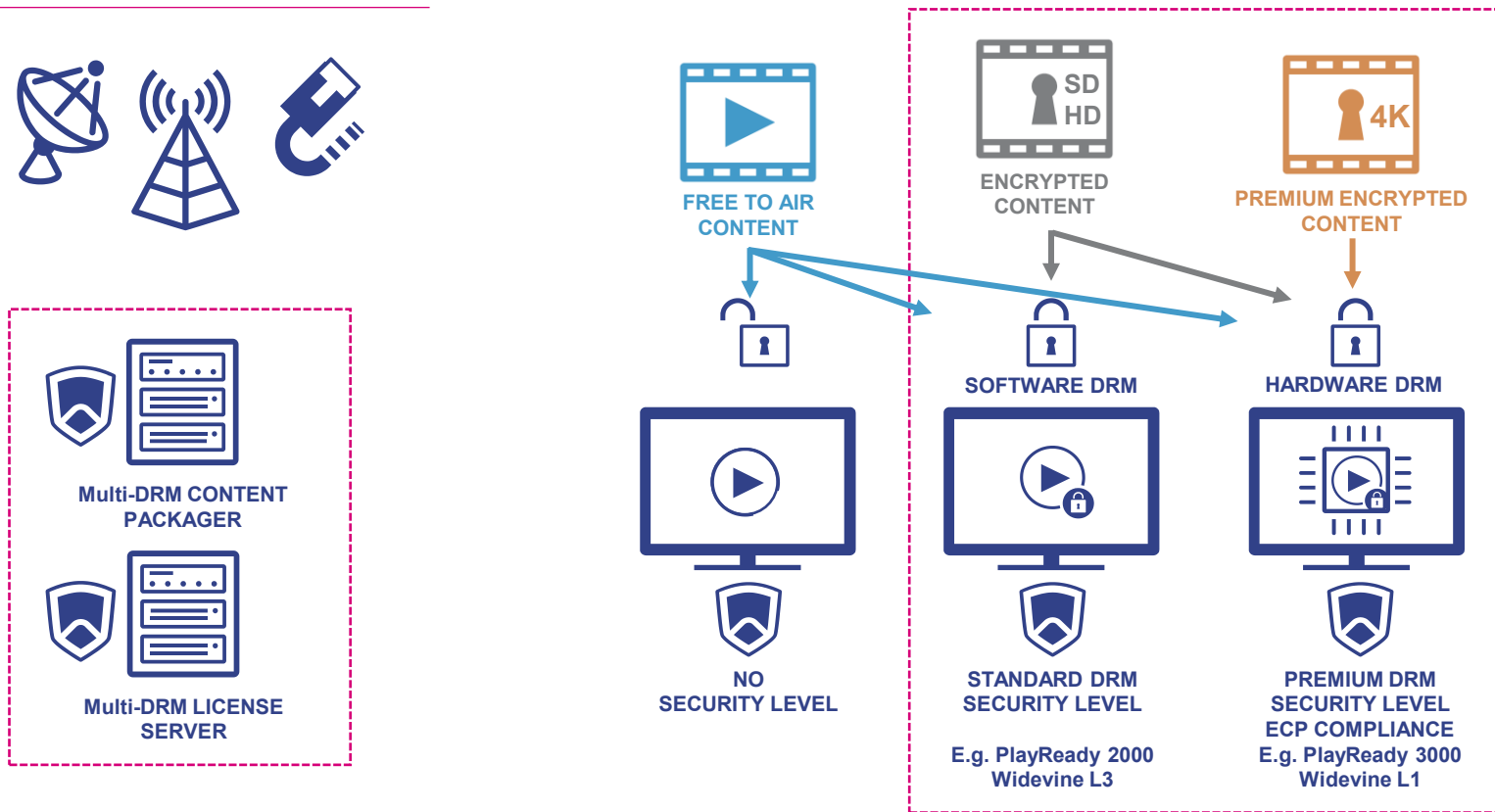




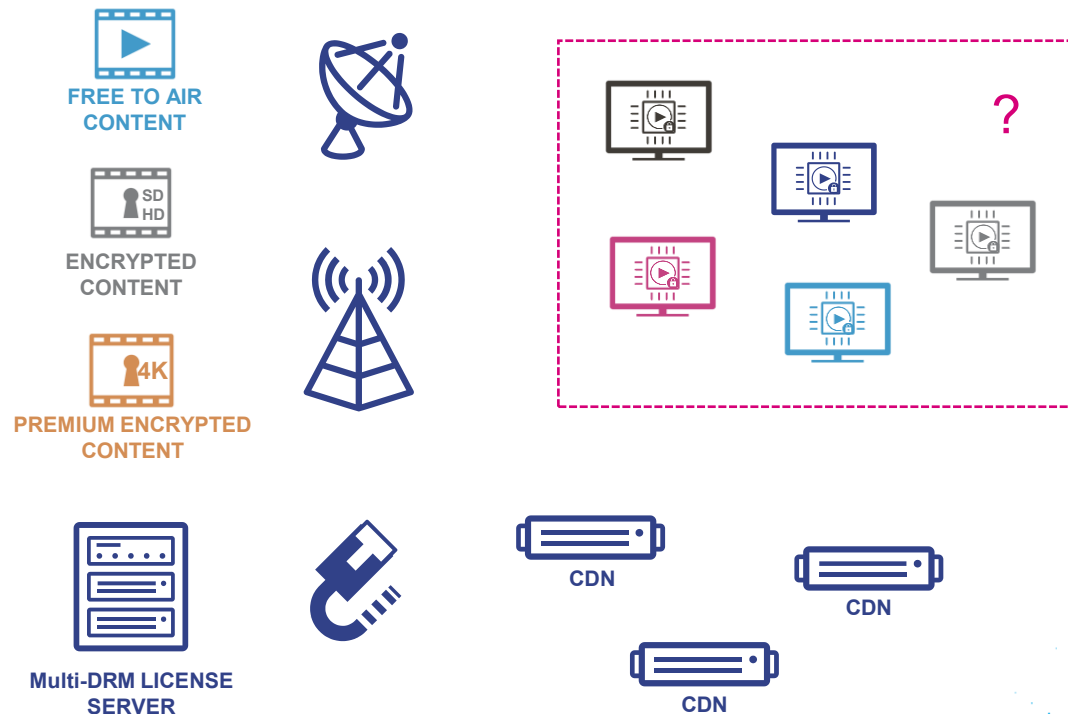
# Inside HbbTV DRM

Webinar, Oct. 29th 2025 – Thierry Thévoz – Nagravision

# DRM : Need is driven by Security Requirements from Content Owners



# DRM : Robust Integration & Validation is a Must to Ensure Compatibility & UEX



- DRM Support & Robustness Level
- DRM Support within HbbTV Browser
- OTT + DRM Performance & UEX in HbbTV (incl. decision to use EME/MSE or native player)
- User Enrollment and Authorization with DRM (handled by HbbTV application)
- DRM License Acquisition, Error Cases & Messages (handled by HbbTV application)
- Clear-Scrambled-Clear transitions (typ. for Ads)
- Key per track (different encryption key for SD/HD and 4K), Key rotation

# Real World Deployment : FIFA World Cup 2022

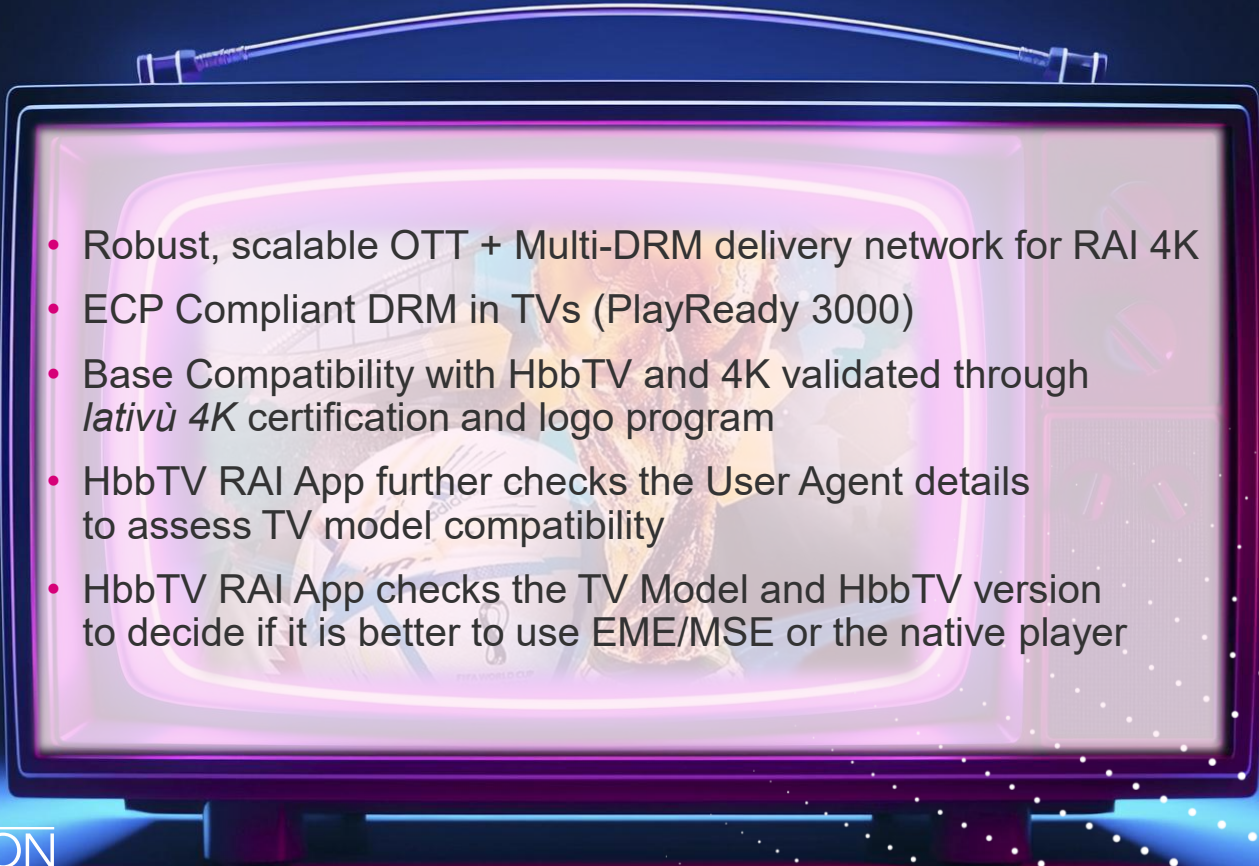




# Real World Deployment : FIFA World Cup 2022

- NAGRA selected by RAI through a public tender in Sep. 2022
- RAI expanded its 4K reach to DTT audiences through 4K NAGRA OTT Multi-DRM platform and HbbTV application
- Delivered on time for the 2022 World Cup - 4K OTT experience for Italian viewers
- 2025 marks 4 years of successful NAGRA-RAI collaboration with hybrid DTT broadcast & OTT, leveraging the capabilities offered by HbbTV
- NAGRA now supports Multi-DRM validation on HbbTV devices

# Real World Deployment : Key Factors

- 
- Robust, scalable OTT + Multi-DRM delivery network for RAI 4K
  - ECP Compliant DRM in TVs (PlayReady 3000)
  - Base Compatibility with HbbTV and 4K validated through *l'ativù 4K* certification and logo program
  - HbbTV RAI App further checks the User Agent details to assess TV model compatibility
  - HbbTV RAI App checks the TV Model and HbbTV version to decide if it is better to use EME/MSE or the native player

