



**Doc T-22/21-1**

KBS (Korean Broadcasting System)  
KOBA 2022 KBS Exhibition Booth Introduction  
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## **ABSTRACT**

The first KOBA Show (Korea International Broadcasting, Media, Audio & Lighting Show) exhibition was held in 1991 for the improvement of broadcasting culture and the development of media, sound, and lighting industries. And in 2022, the 30th exhibition was successfully held in COEX, Seoul. The exhibition was held for the first time in three years due to COVID-19, KBS showed UHD IBB Service, UHD Multimedia Emergency Alert Service, Broadcast -Telecommunication Digital Convergence Network, Advanced TPEG - Broadcast RTK Service and VERTIGO(AI-based production solutions), and got a good response from the visitors.

### **1. KOBA SHOW 2022**

- 1) 30th Korea International Broadcasting, Media, Audio & Lighting Show
- 2) Exhibition Venue : COEX Exhibition Center, Seoul, KOREA
- 3) Exhibit Dates : 29th Jun ~ 01 July, 2022
- 4) Slogan : Media, Waves of Innovation
- 5) Visitors : 32,895(3days)

### **2. KBS Exhibition Booth**

#### **2.1 Purpose of the exhibition**

- Promote the KBS's latest technologies & researches and UHD services to policy makers of government and visitors
- Making a good impressing on public broadcasting through exhibition & demonstration of viewer-centered broadcasting technology service
- Contributed to the development of the broadcasting industry through participation in international broadcasting equipment exhibitions



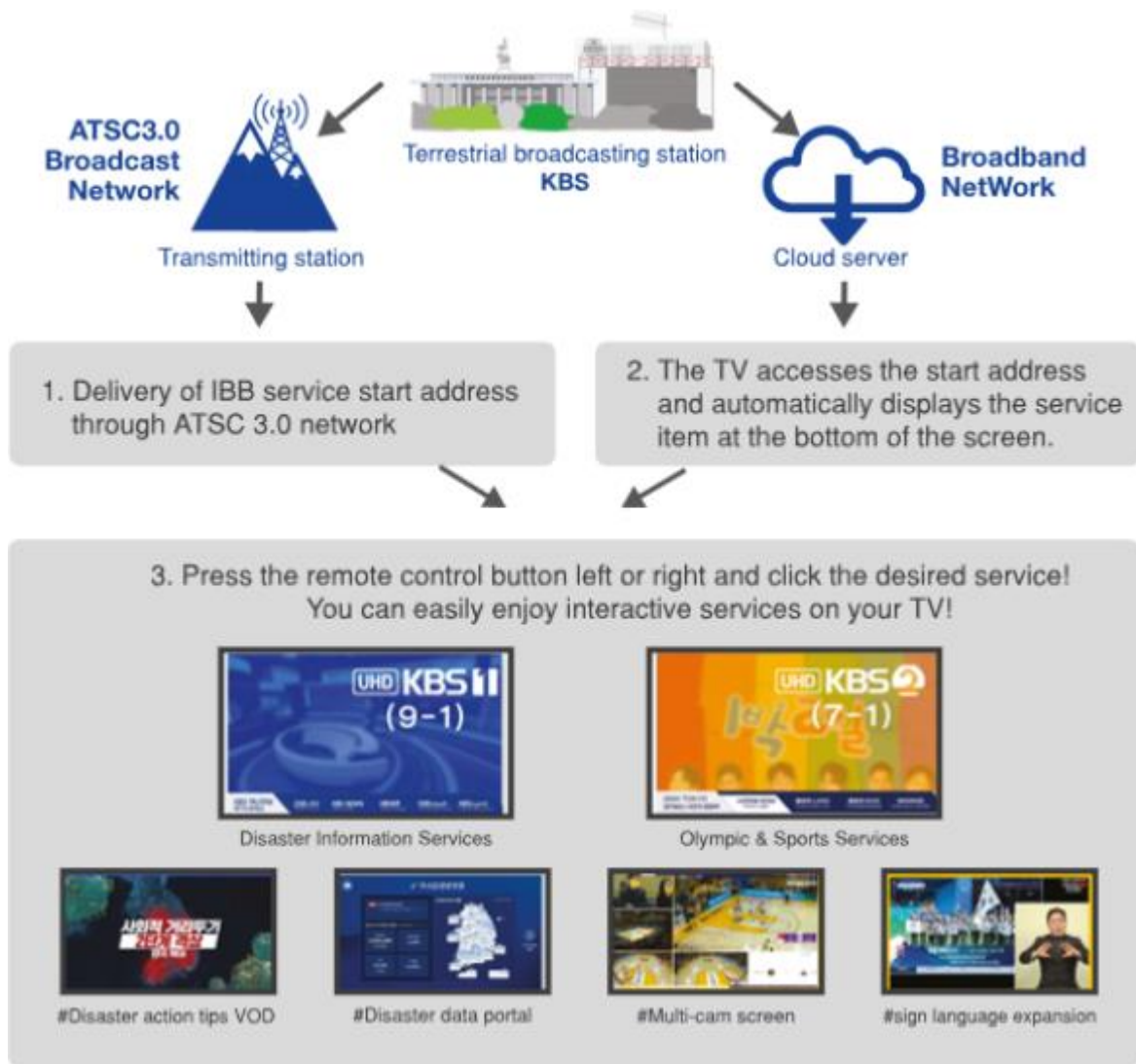
## 2.2 Items of the exhibition

### UHD IBB Service

KBS offers a variety of supplementary services with ATSC 3.0 UHD broadcasting. And IBB service is the most efficient way to provide services by Integrating Broadcasting with Broadband networks.

As AST packet of ATSC 3.0 signal sent with UHD IBB service URL, UHDTV accesses services over the Internet and displays them on screen. Then Viewers can simply explore a variety of contents with a simple remote control operation.

They can watch UHD channels, mobile HD channels, and visible radio channels through UHDTV. Viewers can feel a completely different viewing experience from DTV



### UHD Multimedia Emergency Alert Service

UHD EAS(Emergency Alert System) through the integrated warning gateway system provides multimedia public warning messages including VOD and SNS information for TV and mobile terminals.

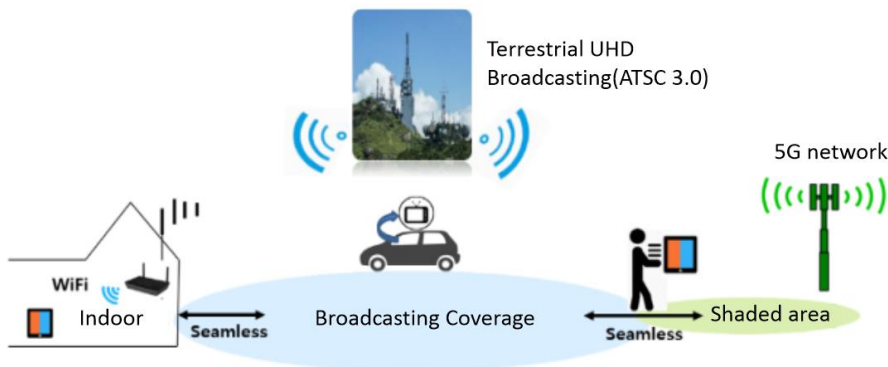
- Emergency information can be delivered using a stable UHD broadcasting network.
- Fast alert using wake-up signals.
- Expansion of Emergency information delivery media such as outdoor electronic advertising boards and public transportation system.



### Broadcast -Telecommunication Digital Convergence Network

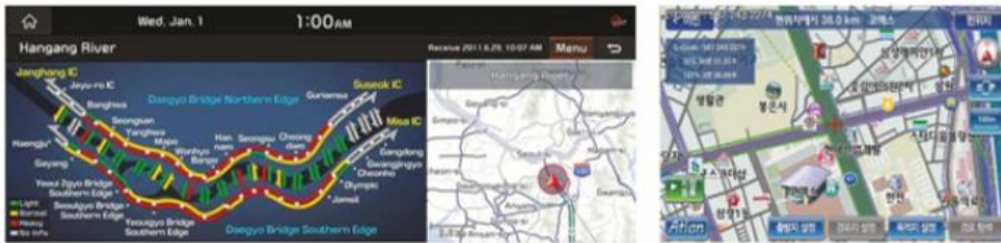
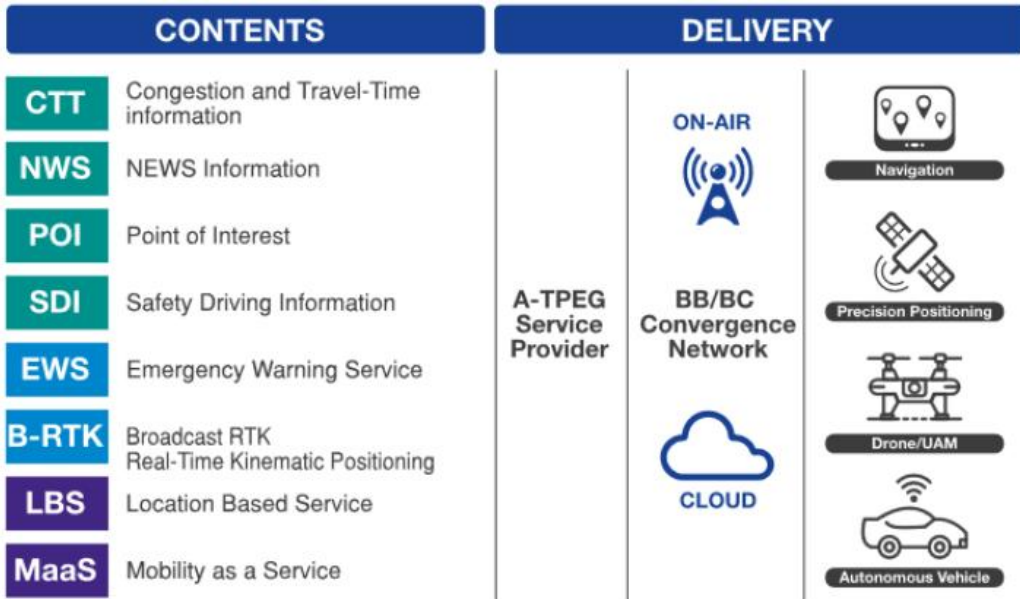
The digital convergence network is a future network technology that combines the advantages of a broadcasting network (ATSC3.0) and a telecommunication network (5G/WiFi) to reduce broadcasting shaded area, expand content reach, and improve reception quality.

- Combining the advantages of broadcasting network and telecommunication network, viewing UHD/FHD anywhere shaded area.
- Supports broadcasting network mode (OTA), telecommunication network mode (OTT), convergence mode (OTT+OTA).
- Optimal network, optimal quality automatic connection for viewers.
- Automatic connection even if the broadcast frequency changes while on the move
- Broadcasting network reduces shaded area, telecommunication network reduces traffic



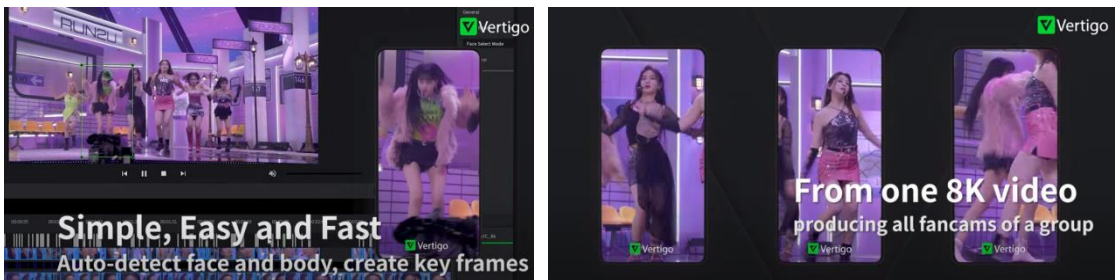
## Advanced TPEG - Broadcast RTK Service

Advanced TPEG(Traffic information provision) service through the UHD additional service, various data services such as traffic congestion information, accident information, construction information, news and RTK(precise location correction information) are provided for vehicles in operation and mobile terminals.



## VERTIGO

VERTIGO is a solution that can create reframed videos for each person by automatically tracking people using AI technology for human recognition in ultra-high-resolution videos up to 8K quality. VERTIGO enables automatic broadcast production with a small number of cameras without a cameraman in a panel-starred program.



Real-time person recognition AI technology automatically reframes images by person from



foreground shots and Person tracking AI engine specialized in studio production. It is equipped with an AI engine based on deep learning to track people. Tracking sensitivity varies depending on the degree of movement, similar to the movement of the actual camera. And VERTIGO Enables efficient studio creation. Only One high-resolution camera replaces up to four HD cameras and that can eliminate the difficulty of arranging panel-specific cameras in a narrow studio

