ENTERPRISE VIDEO
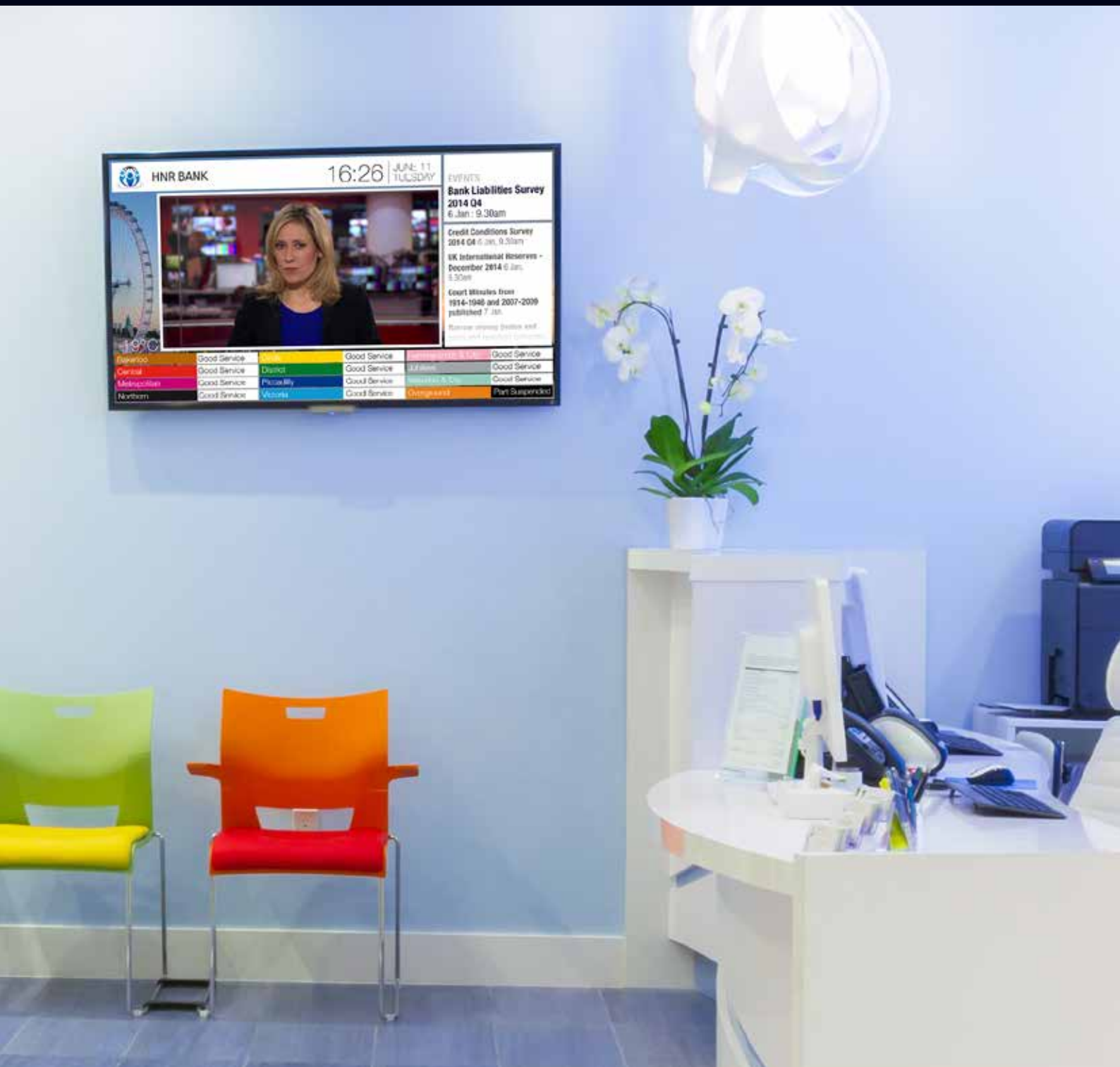## IPTV & SIGNAGE

What is IPTV?

IPTV technology lets you deliver broadcast-quality TV channels to any screen within your organisation using your computer network. Channels are received using your building's TV aerial or satellite dish which connects directly to server equipment in your comms room.

The server can be configured to receive only the channels you want, and deliver them over the network to the people you choose. Channels can be watched on a variety of devices including signage screens, computer desktops and mobiles.

Encoded Media uses network-efficient technologies which are able to deliver hundreds of channels to a potentially unlimited number of viewers without interrupting your existing network services.

About Encoded Media

For more than a decade, EM has developed market leading solutions for delivering video across networks. The company's products were originally developed for the financial industry, where reliability is paramount, and today offer unequalled levels of functionality and user friendliness. EM's products are now used daily by a wide range of organisations, from schools to multinational companies.
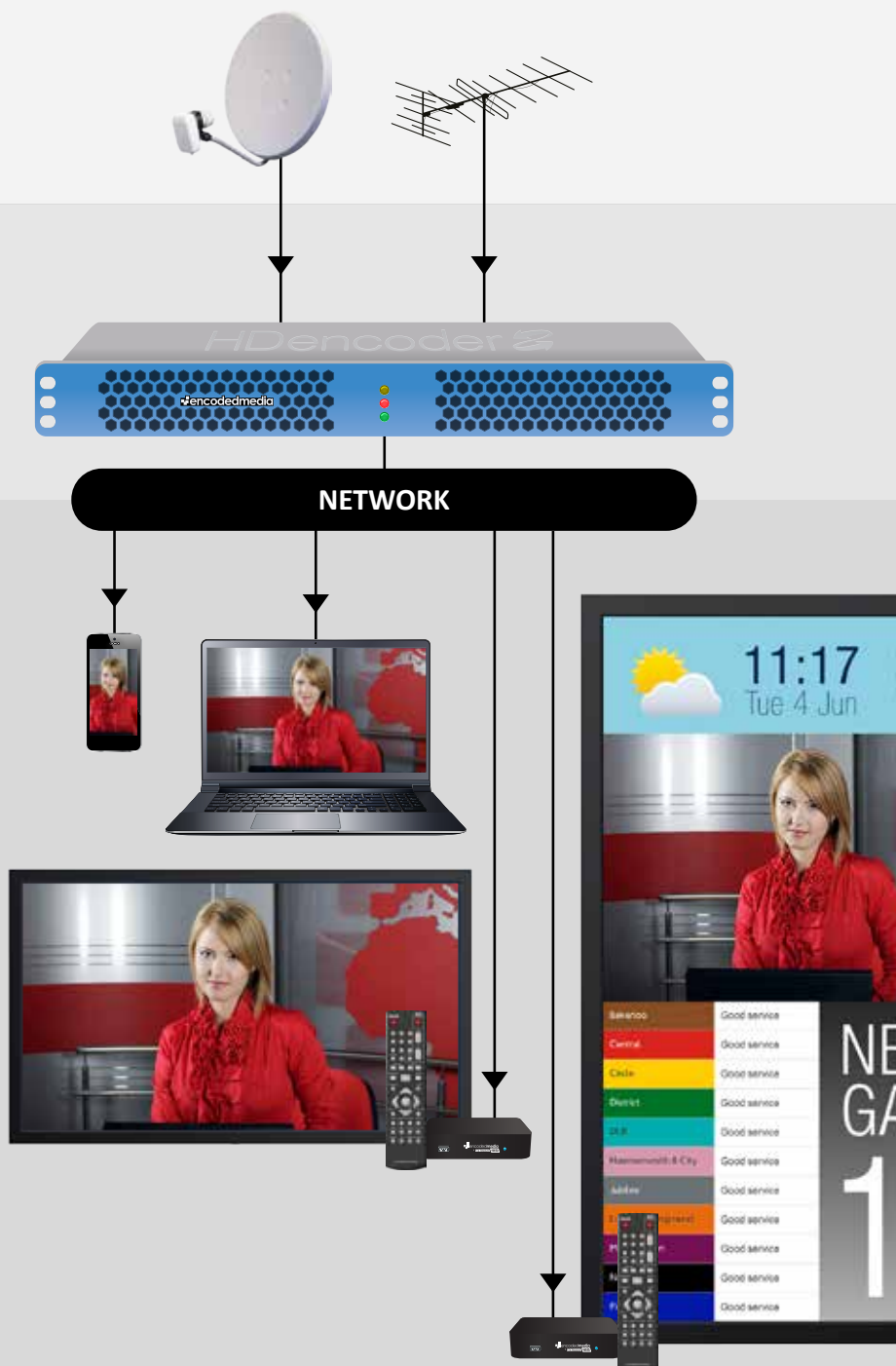
Products

TV Server and HD Encoder hardware
A range of products which receive channels from a TV aerial, satellite dish or local feeds (e.g. video cameras), delivering them onto your network.

IPTV Receivers
Small network devices delivering live and on-demand streams to physical displays such as LCDs, plasma screens, projectors, etc.

Playback apps
Software for Windows PCs allows authorised users to watch content directly on their desktop. Additionally, playback is supported on smartphones and tablets (Android, iPhone, iPad).

1. TV is received
Channels are received via a standard TV aerial or satellite dish

2. Content is distributed
The feeds from the roof connect directly to the Encoded Media TV Server, which delivers channels onto the network as low-bandwidth IPTV streams

3. Content is viewed
Users can watch the streams on a variety of devices and displays:

- TV screens
- Computers
- Mobiles
- Digital signage

NETWORK

TV Reception

Channels are received over the air using an aerial or dish on your building

Television broadcasts are received using a standard TV aerial or satellite dish located on the roof. This does not use your internet connection so does not consume bandwidth, nor does it pose a security risk.

Many buildings already have aerials and dishes installed for existing offices, communal areas or other commercial tenants. If your building has existing TVs, a short site survey can establish if the feeds can be split and shared for an IPTV system.

Authorised Encoded Media partners can advise on your aerial and satellite requirements, and can arrange installation where required. Our installers have experience of a wide range of building types, from listed buildings to skyscrapers, and can assist with questions regarding landlord and planning permission.

On average, installation itself takes half a day or less and can be done out of hours to minimise disruption.

Channel Distribution

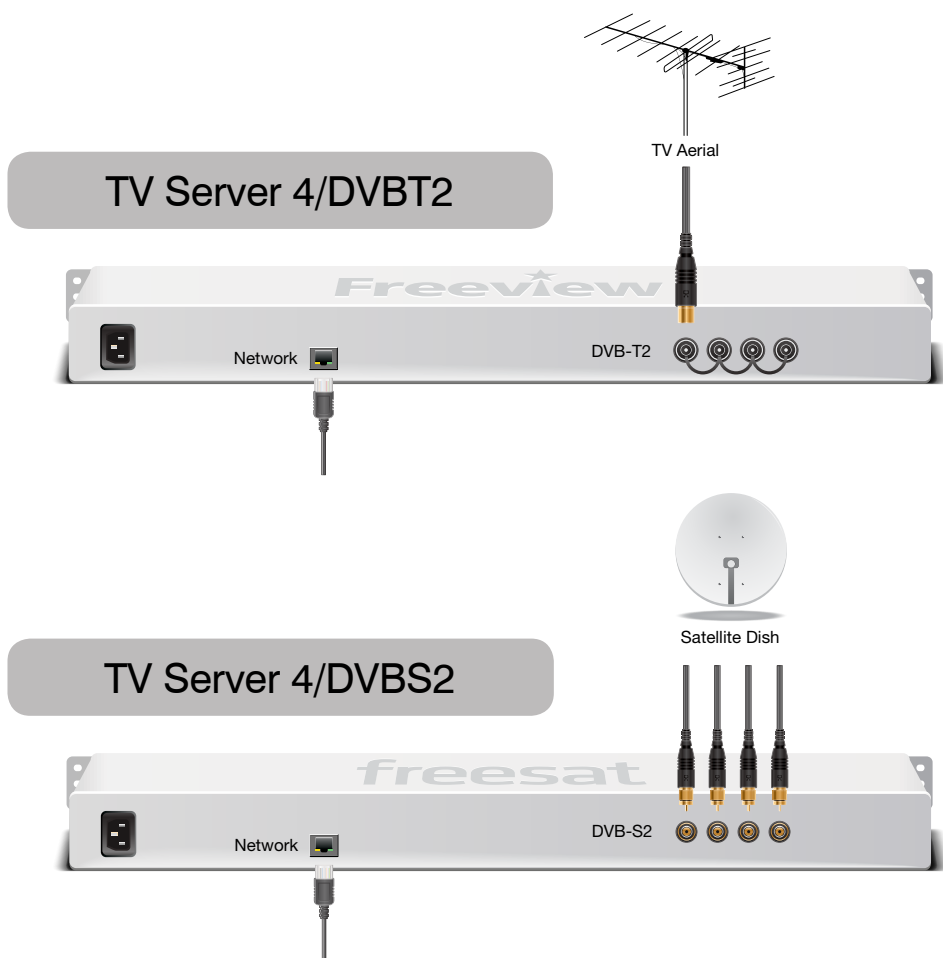## TV Server distributes television channels on your network in high definition

Feeds from the roof connect to TV Server equipment, typically located in your comms room.

TV Server is a range of hardware appliances that deliver live channels across your current IP network in full HD quality. This allows you to stream multiple channels from a mix of different sources, such as Freeview and Freesat.

TV channels for an IPTV system have traditionally been received by domestic satellite receivers, decoded and then re-encoded with greatly reduced picture quality.

But TV Server is different. With satellite and TV aerial feeds connecting directly to the appliance, the server keeps channels in their original digital format without decoding and re-encoding them. This results in broadcast-quality images, increased reliability, and more control of the channels on your network.

TV Server 4/DVBT2

TV Aerial

Freeview

Network

DVB-T2

TV Server 4/DVBS2

Satellite Dish

freesat

Network

DVB-S2

Channel Viewing

Once channels have been received by a TV Server, they are made available to any authorised user on the network and can be received in a number of ways.

On computer desktops

Encoded Media's desktop player allows users to view permited channels on their computer. The player has been designed to be familiar and easy to use, and works on all versions of Windows from XP onward. It can run full screen or be minimised into a corner so as not to intrude on other applications.

On mobile devices

Live television channels can also be viewed on smartphones and tablets. TV Server can create a number of different high-quality streams to deliver the most appropriate experience for mobile and remote users inside and outside your building.

On dedicated screens

Shared areas of the building can display television channels by using Encoded Media's range of IPTV set-top boxes. These small network devices enable standalone screens to receive the channels over the network without a PC. The boxes can be controlled locally with an infrared remote control, or centrally with Encoded Media's IPTV Managers software, which allows administrators to change the channel, volume, or even switch TVs on or off from anywhere on the network.
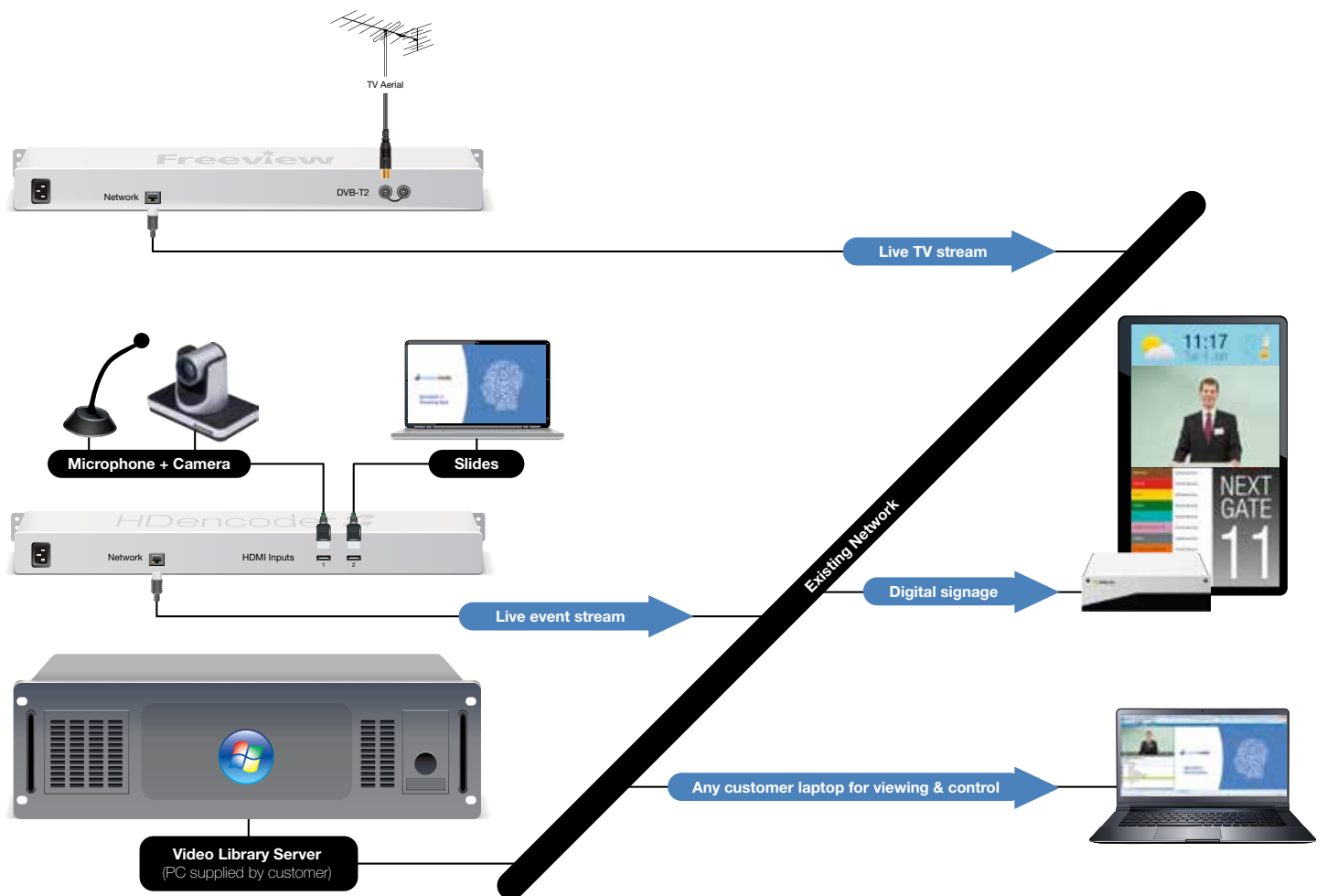

On your digital signage

Many digital signage systems are able to receive the IPTV streams directly from the network, and are able to incorporate live TV channels as part of the signage display.

The channels can be scheduled to display full screen at certain times, or as part of a signage zone to help draw attention to other elements on the page. Used in this manner, TV can become a valuable marketing tool for your organisation.

Because they use the network, signage players do not need individual TV cables or additional tuner hardware to display live TV.

This means if your organisation has multiple buildings, you no longer need to install separate aerials, dishes and cabling at each site. Your network can carry many channels at once, with each screen able to display any of the TV streams from the list of authorised channels.

TV Aerial

Freeview

Network
DVB-T2

Live TV stream

Existing Network

Microphone + Camera

Slides

HDencoder

Network
HDMI Inputs
1
2

Live event stream

Digital signage

NEXT
GATE
11

11:17

Video Library Server
(PC supplied by customer)

Any customer laptop for viewing & control

Company TV Channel

Use your IPTV system to start your own television channel

Create your own internal TV channel and deliver townhall meetings, announcements and other important events live to anyone, anywhere in your organisation.

Broadcast your company message across the network to computers, signage screens and mobile devices, ensuring that everyone is able to see it at the same time.
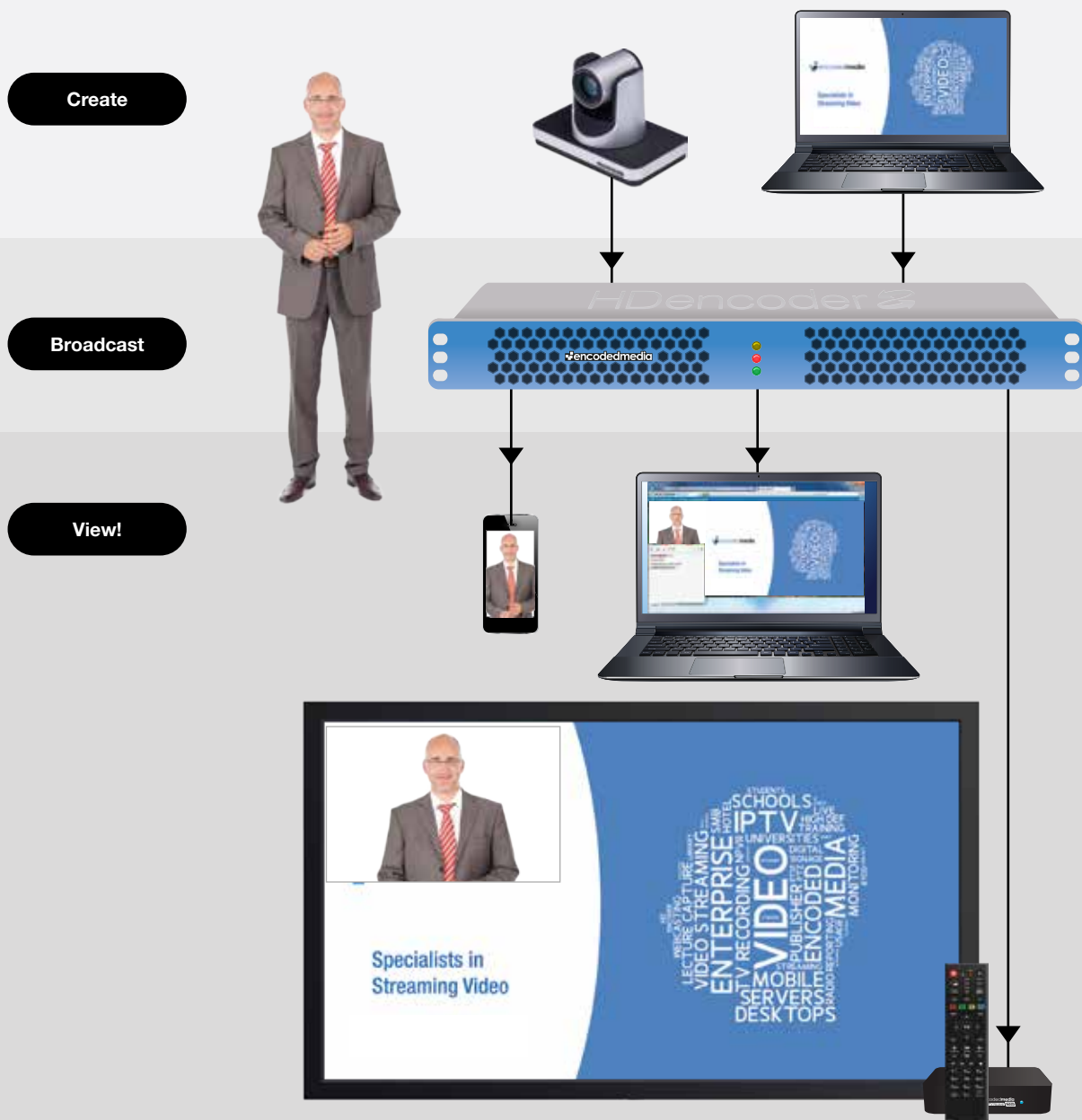
Connect a video camera to Encoded Media's HD Encoder device and your channel is ready to be received by authorised viewers anywhere on the network.

The HD Encoder will automatically record your broadcasts, allowing people who could not attend to watch it on demand.

Channels commonly streamed with EM

Below is a selection from the thousands of channels currently available in the UK.

Channel	Description	Freeview™	Freesat™ 28E
BBC One	General channel (UK)	✓ (mux 1)	✓
BBC TWO	General channel (UK)	✓ (mux 1)	✓
ITV	General channel (UK)	✓ (mux 2)	✓
Channel 4	General channel (UK)	✓ (mux 2)	✓
BBC News	24 hour news channel (UK)	✓ (mux 1)	✓
Sky News	24 hour news channel (UK)	✓ (mux 3)	✓
BBC Parliament	Live coverage of political events (UK)	✓ (mux 1)	✓
CNBC	Financial news (Global)		✓
Bloomberg	Financial news (Global)		✓
CNN	24 hour news channel (Global)		✓
Euronews	24 hour news channel (Europe)		✓
France 24	24 hour news channel (France)		✓
Al Jazeera	24 hour news channel (Global)	✓	✓
RT	24 hour news channel (Russia)	✓	✓
CCTV	24 hour news channel (China)		✓
JSTV	24 hour news channel (Japan)		✓
BBC Radio 1-5	General radio stations (UK)	✓	✓

Create

Broadcast

HDencoder

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View!

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of products at encodedmedia.com

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