5G for Production

Ian Wagdin October 2021

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Make stuff

send stuff out

Move stuff around

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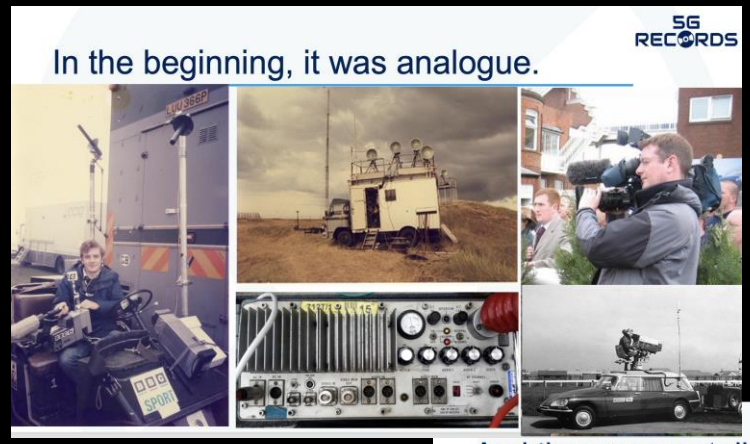
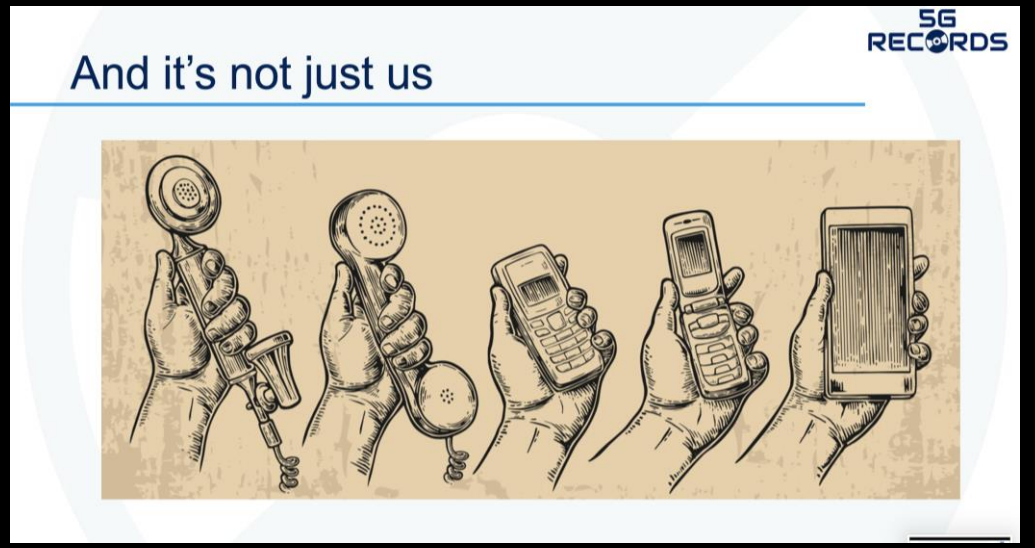
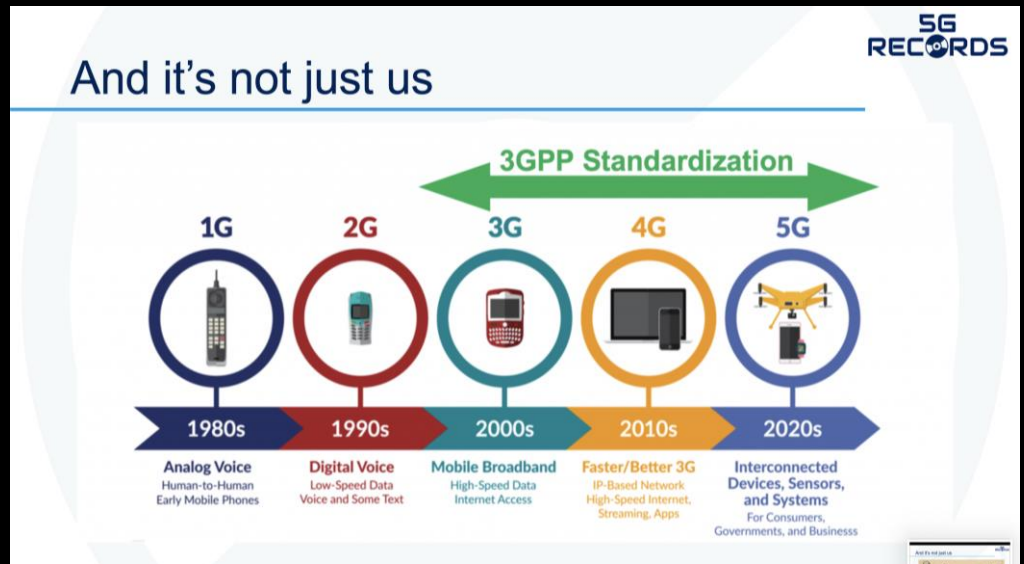
Why?


5G RECORDS
In the beginning, it was analogue.

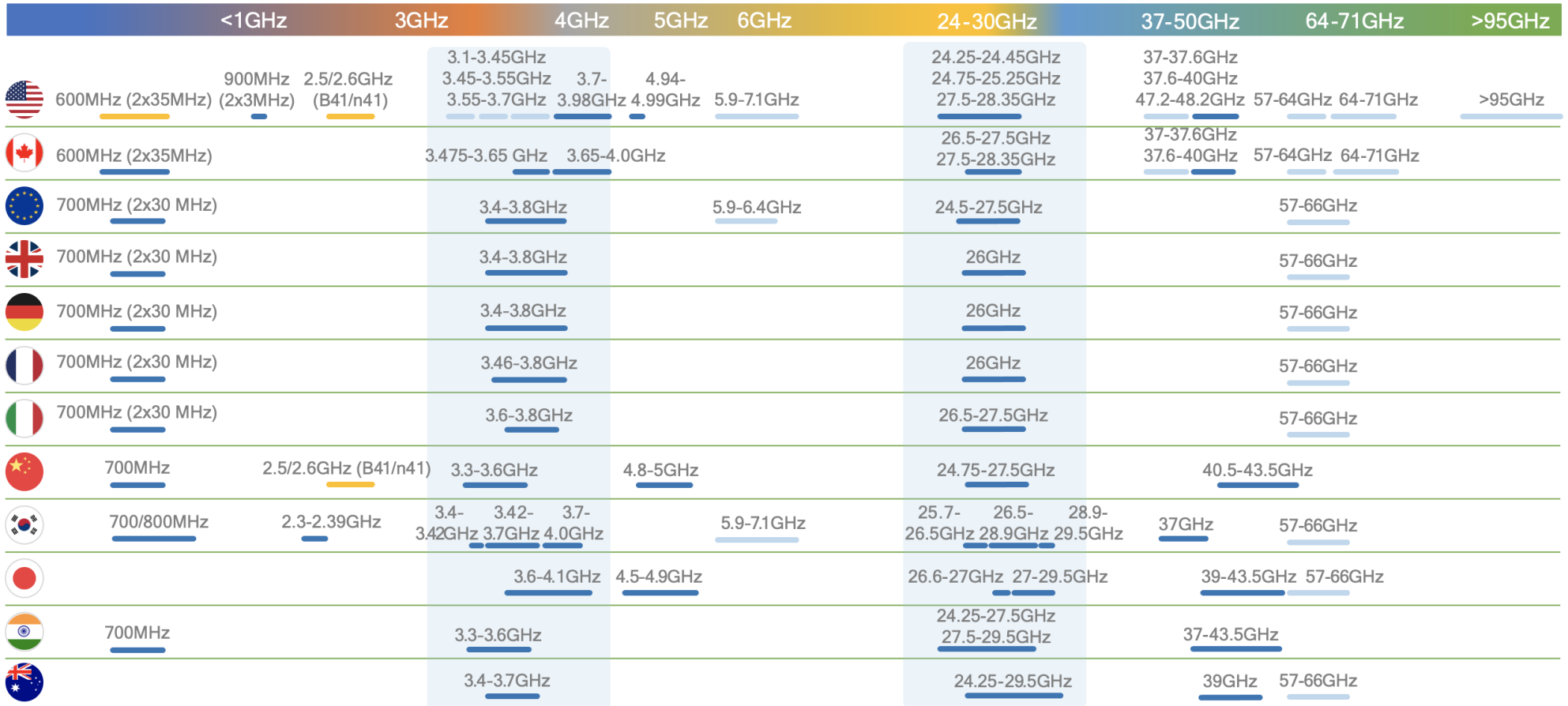
5G RECORDS
And then we went digital…..

And now we have IP


5G RECORDS
And it's not just us


5G RECORDS
And it's not just us
3GPP Standardization
1G
2G
3G
4G
5G
1980s
1990s
2000s
2010s
2020s
Analog Voice
Human-to-Human
Early Mobile Phones
Digital Voice
Low-Speed Data
Voice and Some Text
Mobile Broadband
High-Speed Data
Internet Access
Faster/Better 3G
IP-Based Network
High-Speed Internet,
Streaming, Apps
Interconnected
Devices, Sensors,
and Systems
For Consumers,
Governments, and Businesss

Why?



Global snapshot of allocated/targeted 5G spectrum

5G is being designed for diverse spectrum types/bands

New 5G band

Licensed

Unlicensed/shared

Existing band

Why?

Global snapshot of allocated/targeted 5G spectrum

5G is being designed for diverse spectrum types/bands

New 5G band

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Unlicensed/shared

Existing band

Standards and regulation

Tests and Trials

Partnerships

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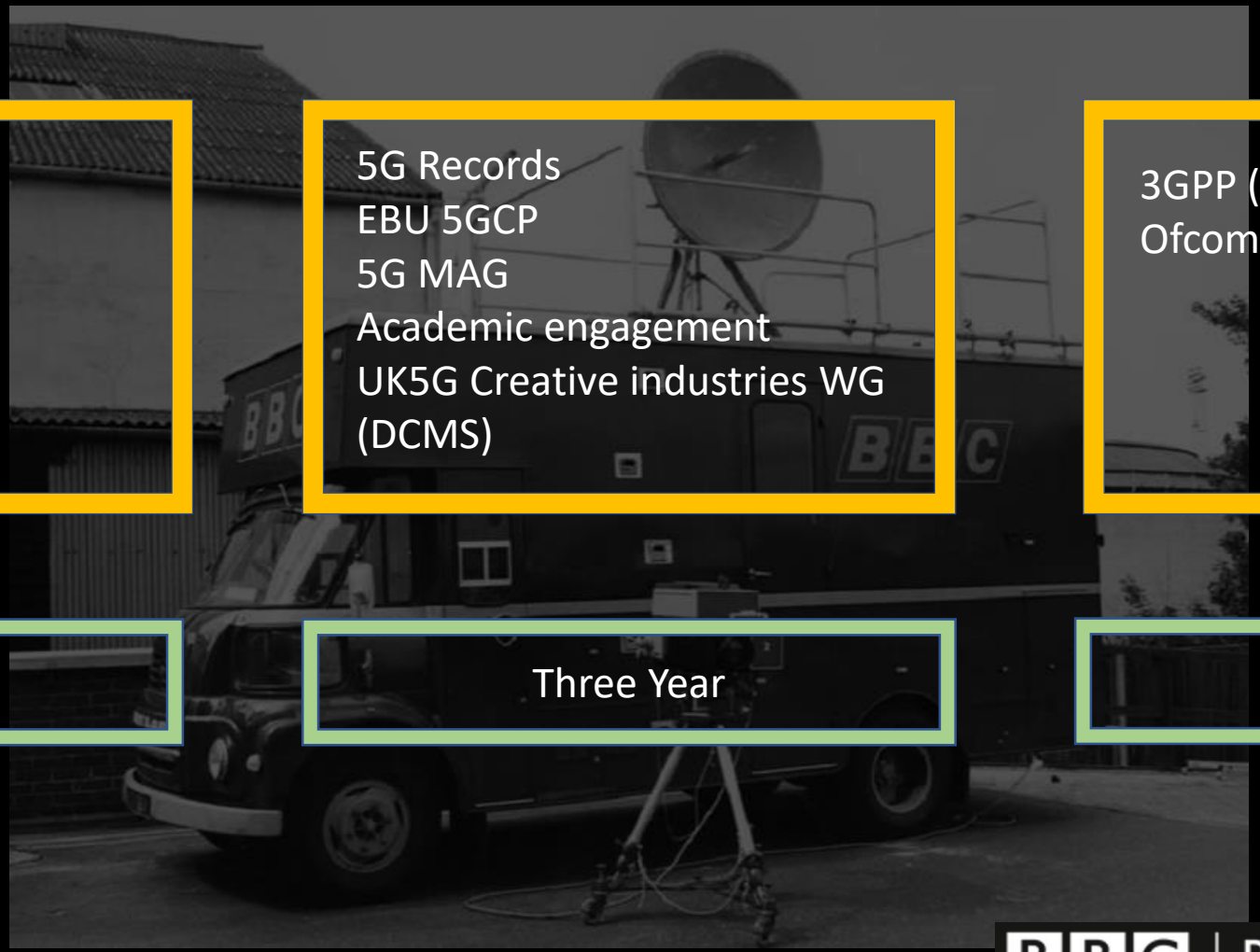
Activity Map



IBC Accelerators
Industry engagement
Tests and Trails

5G Records
EBU 5GCP
5G MAG
Academic engagement
UK5G Creative industries WG (DCMS)

3GPP (standards)
Ofcom

One Year

Three Year

Five Year

Industry Influencing and Governance

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Industry Influencing and Governance

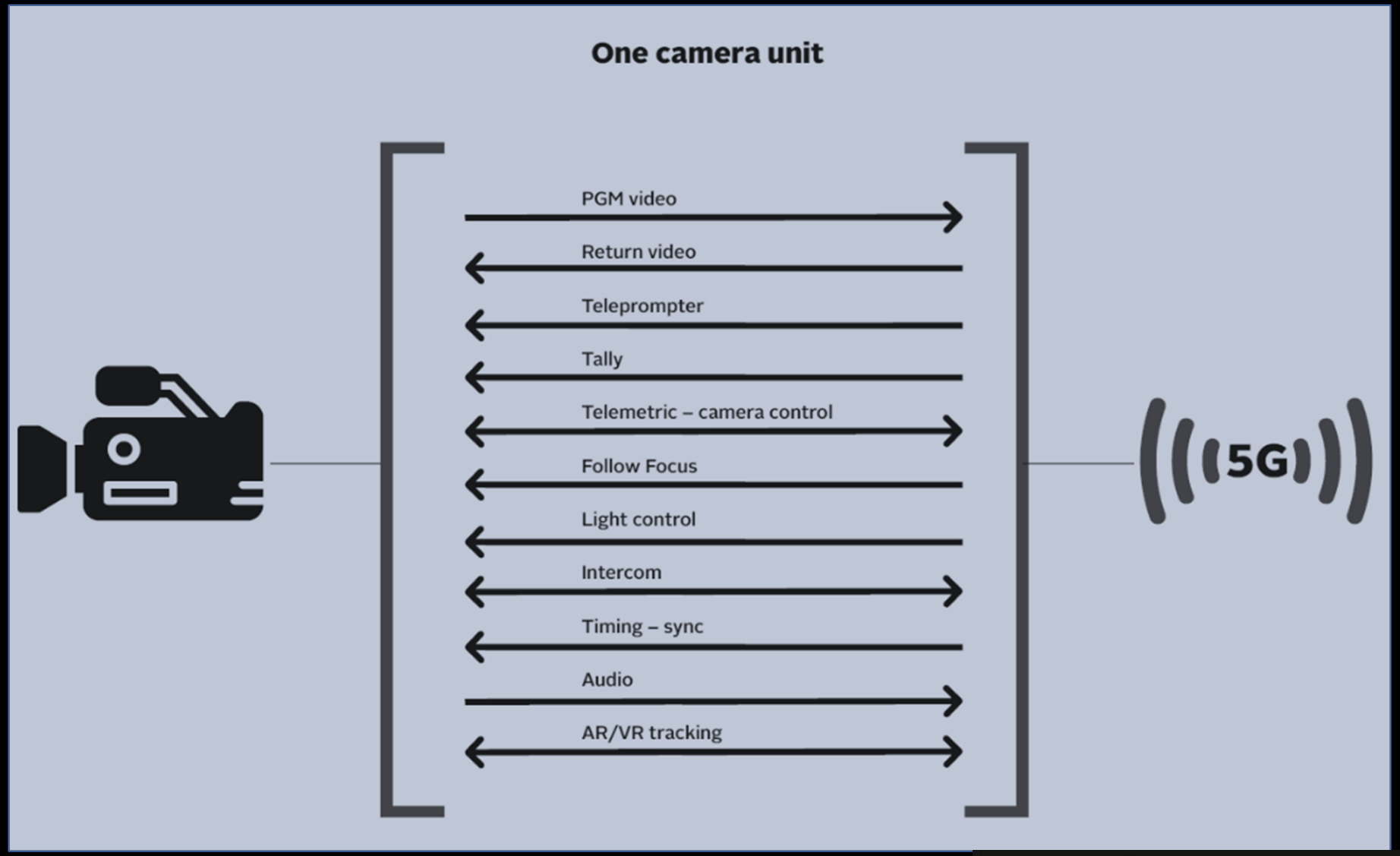
- 3GPP → ETSI → ITU (standards)
- 5G MAG (MRP), GSMA
- Engagement with telecoms industry
- Ofcom (Spectrum)
- Getting the landscape right

Production

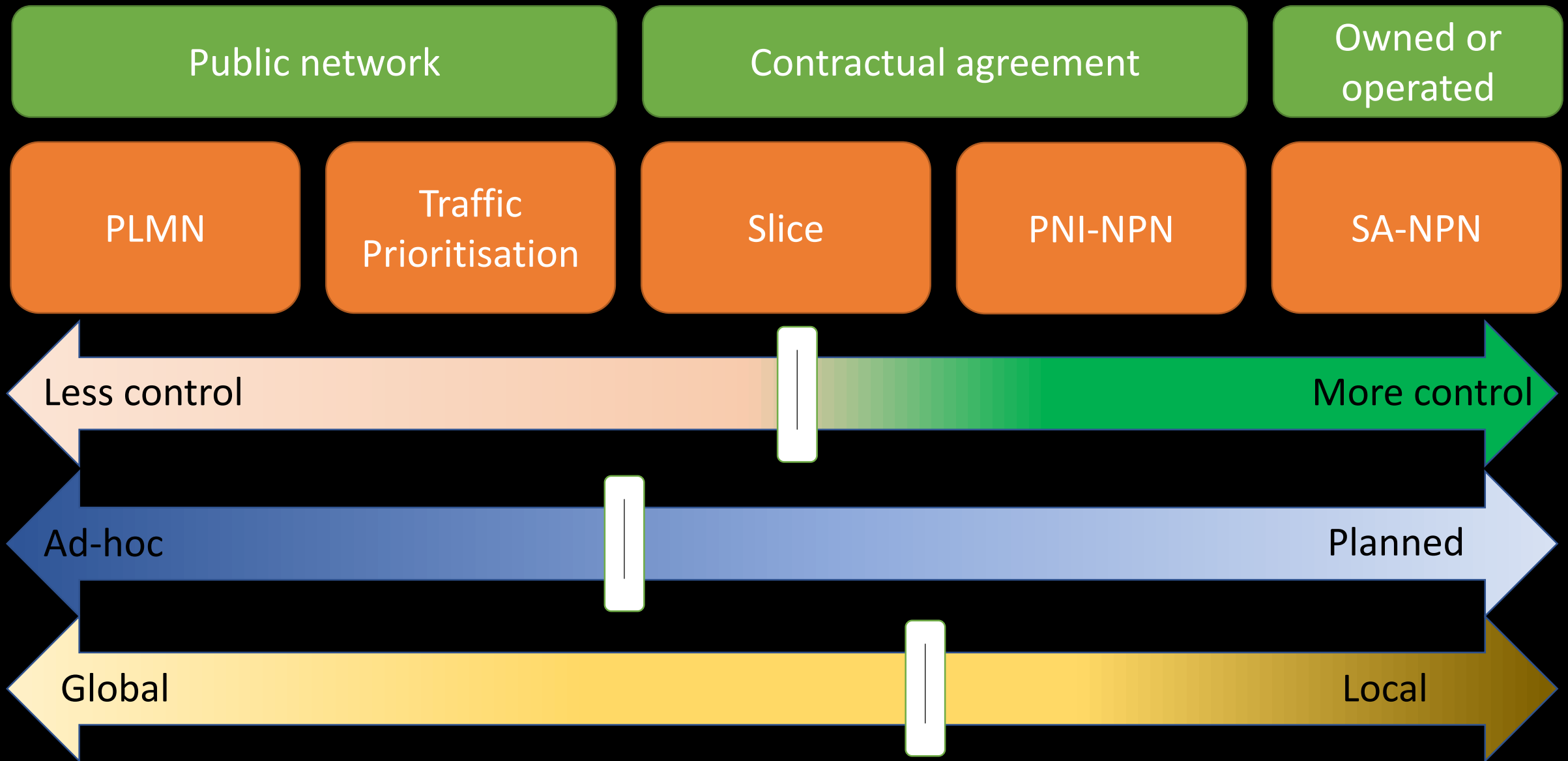
Production

- Throughput
- latency
- Timing
- Reliability
- Ad-hoc and nomadic
- Rural and remote support
- Types of network important

More efficient



It won’t be one size fits all



ProductionTests and Trials

Production Tests and Trials

- Non-public networks
- Codecs and transport
- Audio
- Timing
- Public networks
- Spectrum sharing

Projects and partnerships

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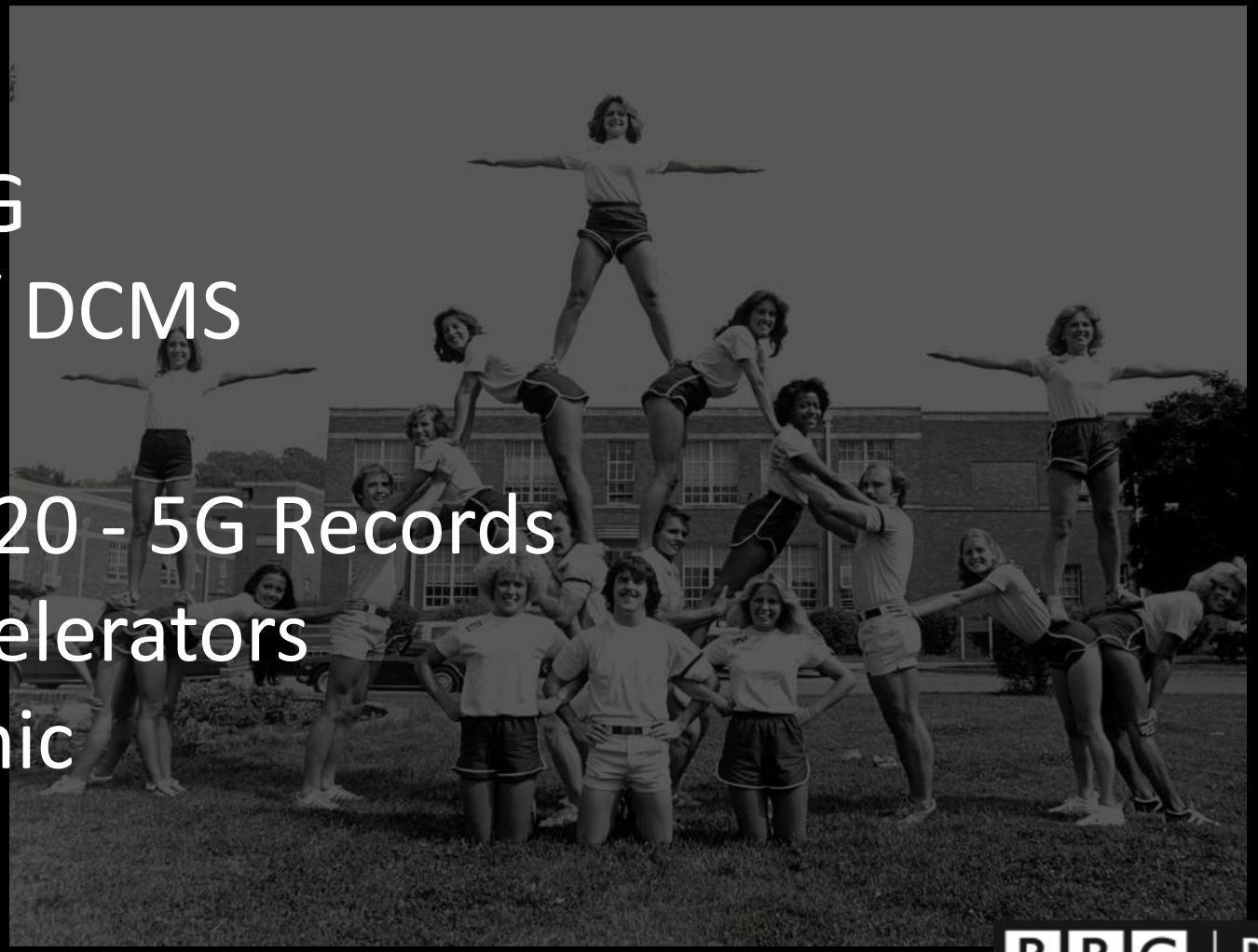
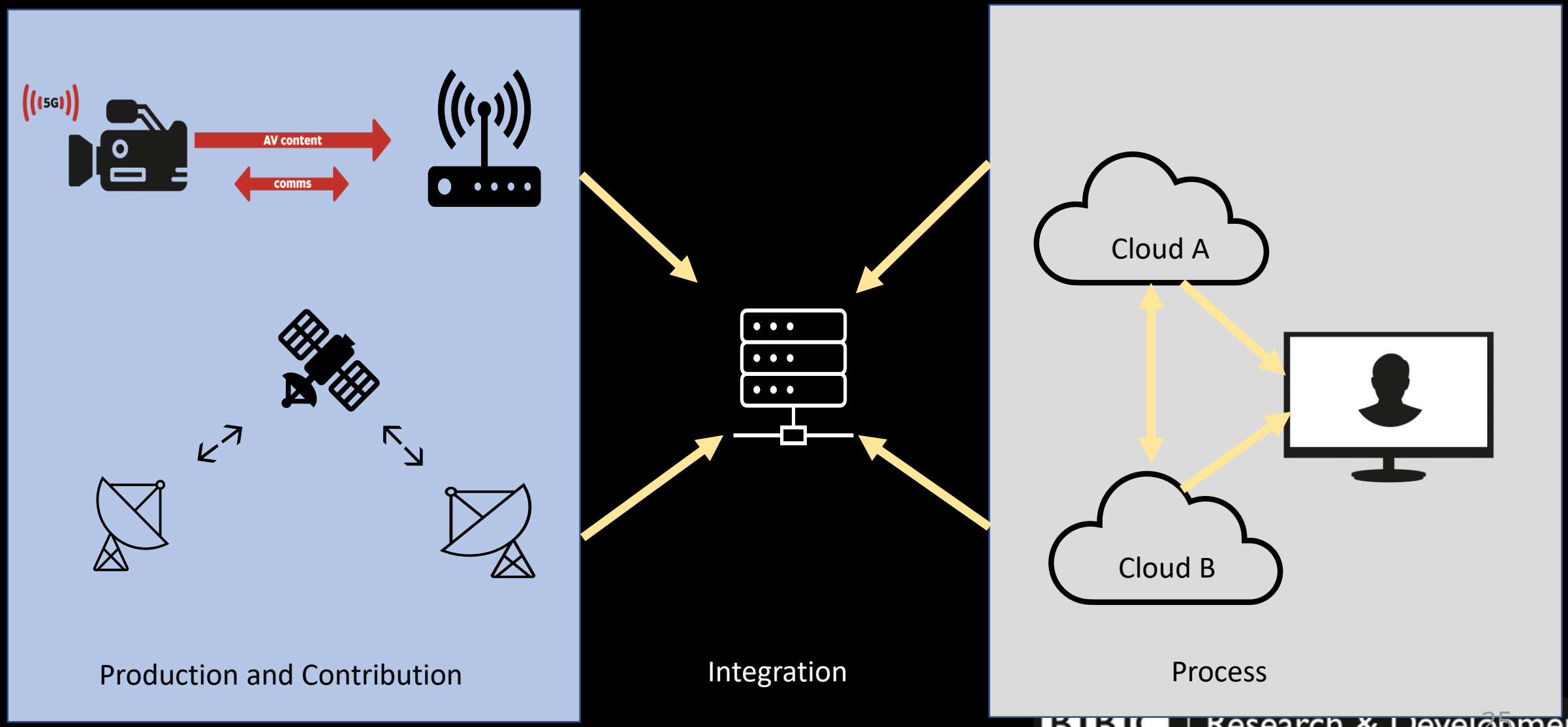
Projects and Partnerships

- EBU
- 5G MAG
- UK 5G / DCMS
- DTG
- EU H2020 - 5G Records
- IBC Accelerators
- Academic



Joining it all up



Thank You

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