



5G Media Action Group

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MEDIA ACTION GROUP

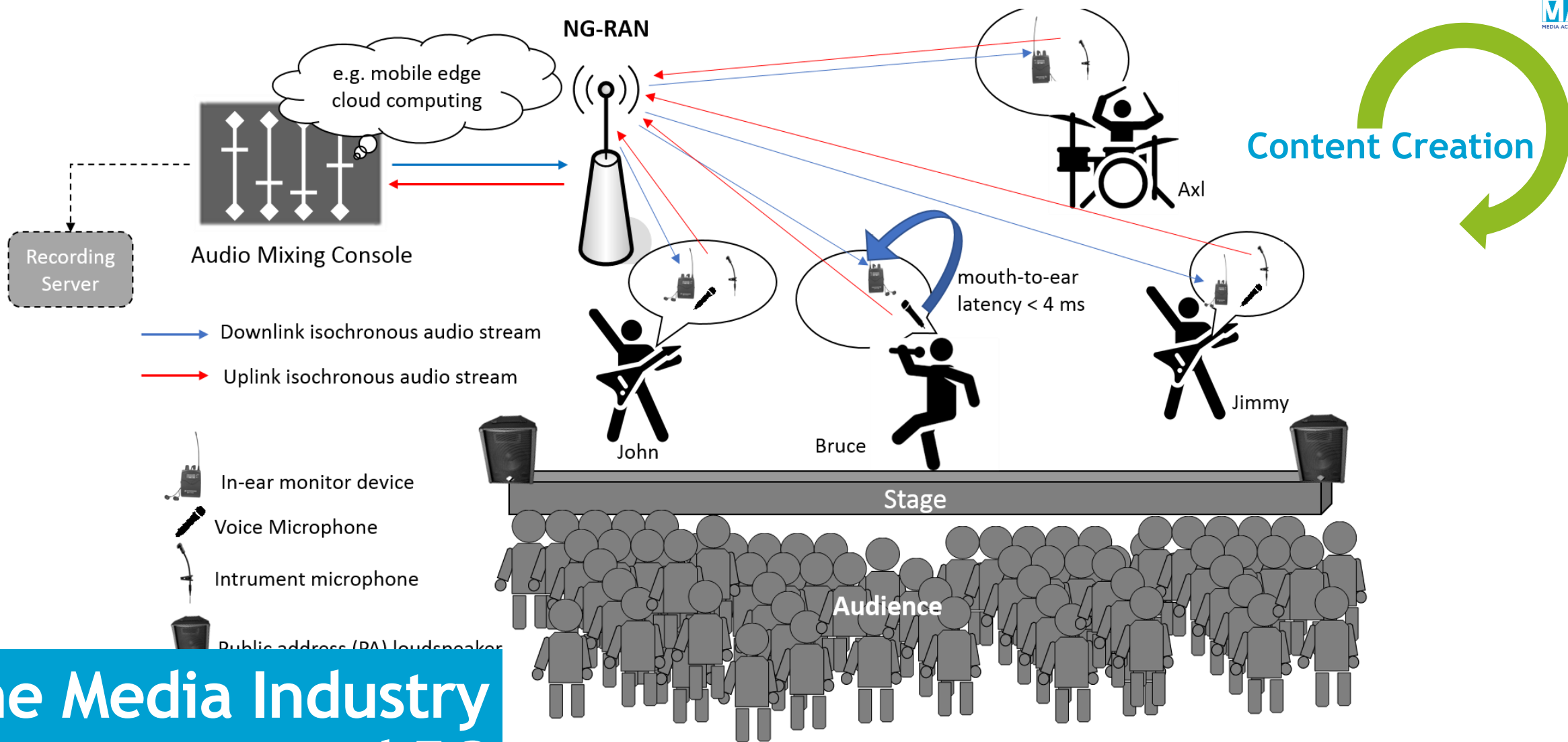
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Tech Talk «5G & Verticals»
1st December 2020



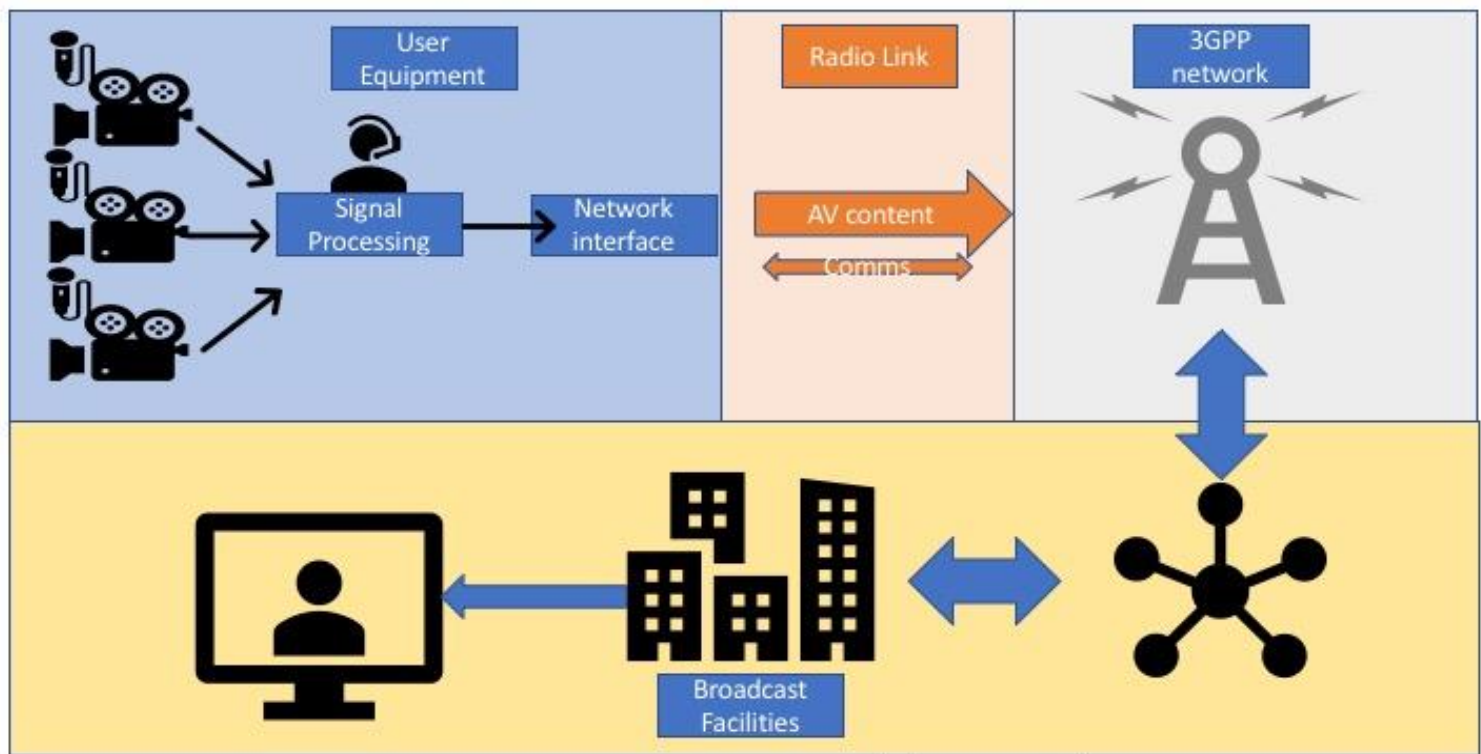
**The Media Industry
and 5G**

**Looking at opportunities across the
entire media value chain**



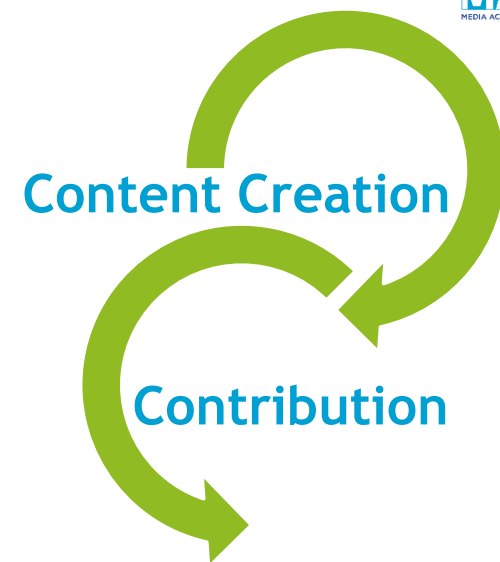
The Media Industry and 5G

Source: 3GPP TR 22.827 AVPROD

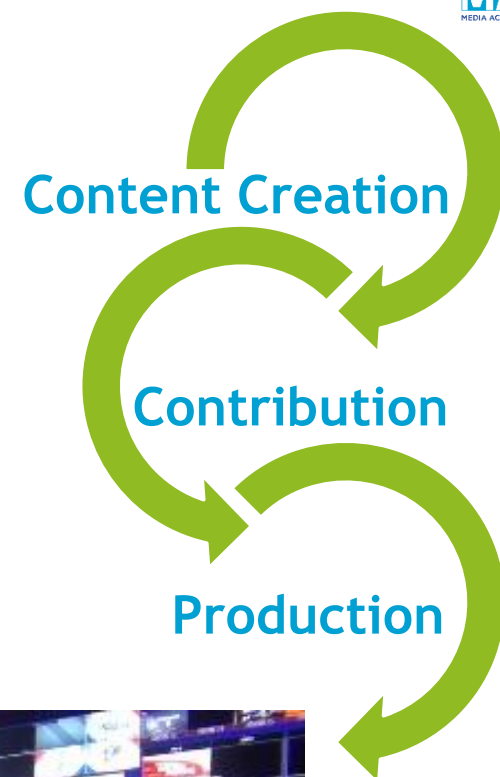


Multiple Camera Single source Use Case

Source: 3GPP TR 22.827 AVPROD



The Media Industry and 5G



The Media Industry and 5G



5G for Media Production

www.5g-mag.com/explainers



A NEW DIMENSION FOR REMOTE PRODUCTION

Higher **bandwidth**, low **latency**, **synchronization**, edge **computing** are key features for enhanced production workflows and flexible **wireless** deployments.



NEWSGATHERING & OUTDOOR BROADCAST

Quick response to events with a new approach to newsgathering and outdoor broadcast leveraging **network slicing** and the connection of media production equipment to **5G networks**.



NON-PUBLIC NETWORKS AND MEDIA CAMPUS

Leveraging the development of non-public networks to integrate **wireless production equipment** into **media premises**, **TV studios** as well as on **third-party networks**. **Security** over public and non-public networks is also a key **issue** for media production applications.

5G-MAG EXPLAINER

Non-Public 5G Networks for Content Production

Non-Public Networks (NPNs) are a feature of 5G technology designed for localized non-public networks. For media organizations, NPNs may offer the possibility of deploying fixed and nomadic networks where fixed networks would cover small areas like studios or extend to the entire premises of a so-called campus network.

What are Non-Public Networks?

Media production facilities are increasingly adopting IP-based infrastructure. The ubiquity of IP networks and technologies enables increasing efficiency and effectiveness in production, process automation and greater flexibility. Content production and contribution could leverage 5G as a highly reliable wireless technology to enhance existing or enable new workflows in the areas of newsgathering, remote production and live event coverage as well as in dedicated production facilities.

NPNs are a key enabler for the deployment of media production scenarios. They are currently standardized in 3GPP, with the first functionalities specified in Release 16. NPNs offer the possibility of providing 5G network services to organizations without entirely relying on public mobile networks. This latter may not be able to support certain applications, for example those requiring very low latency, robust services or business-critical data privacy – meeting such requirements may not be the business focus of public mobile network operators.

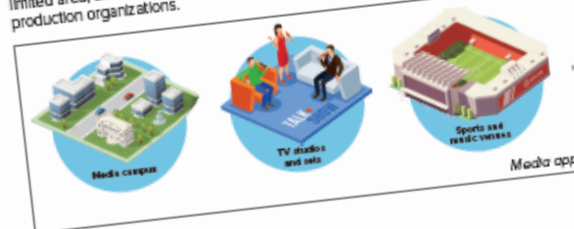
NPNs therefore enable the deployment of media production scenarios that may not be available on public mobile networks and are tailored to the needs of a specific industry. In this case media organizations enable a full degree of interoperability, NPNs should be connected to existing media production infrastructure.

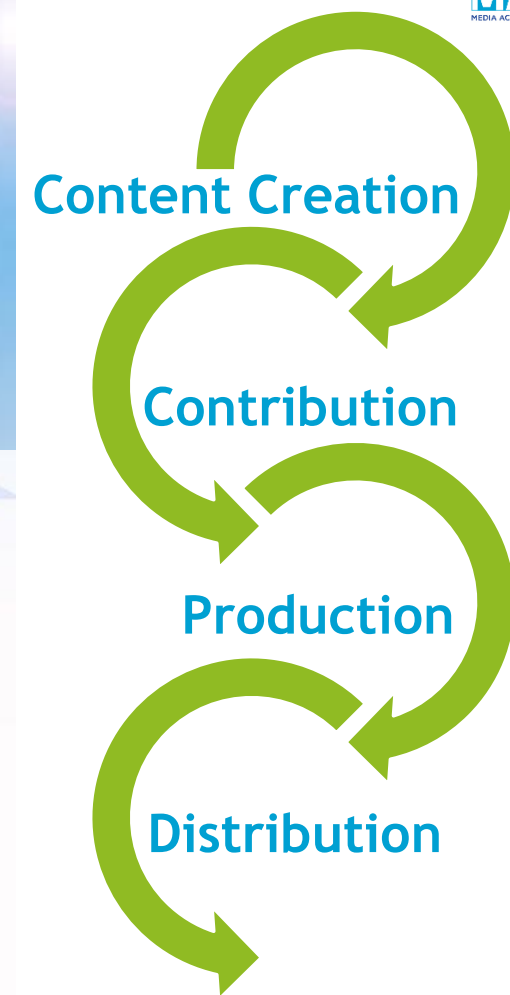
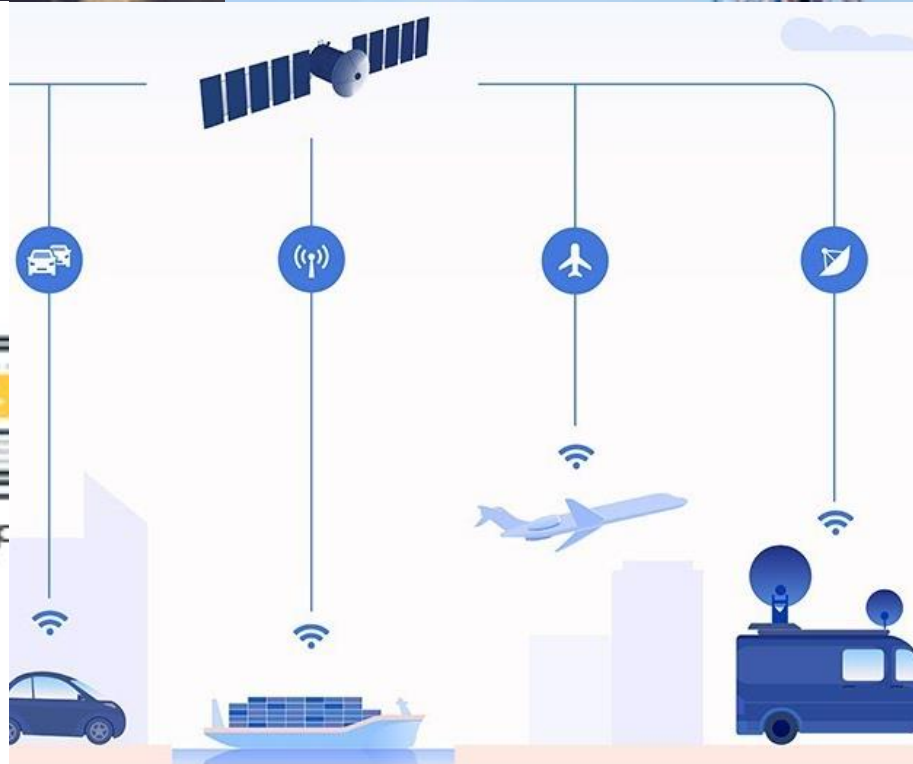
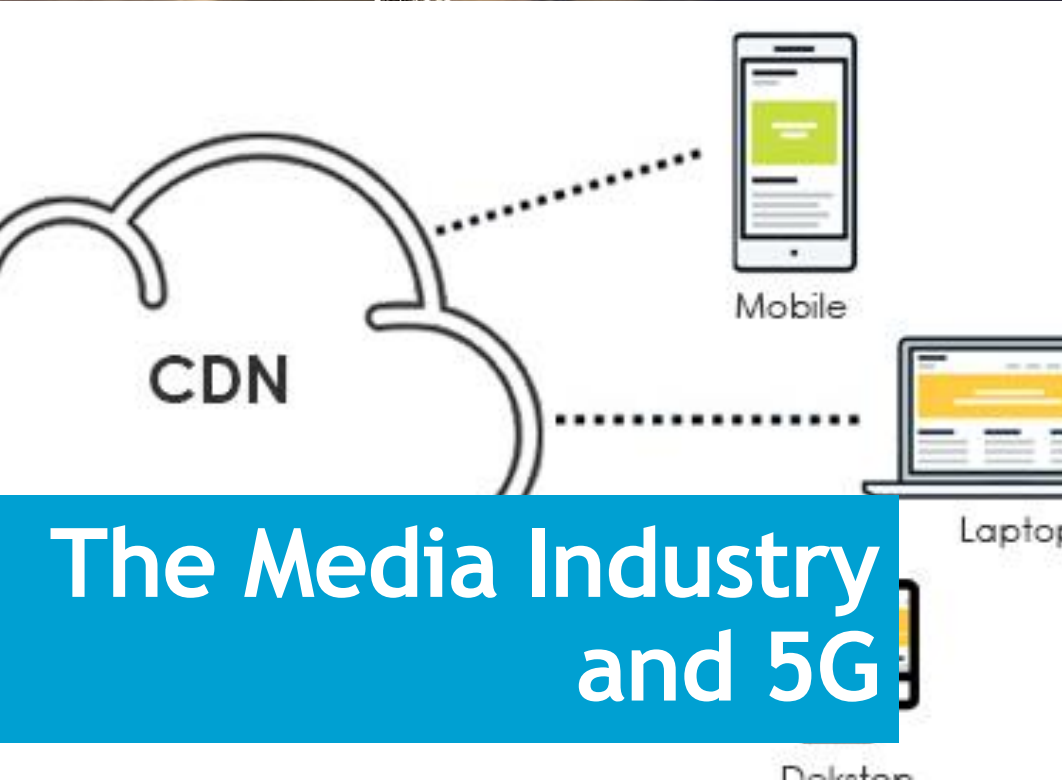
Applications for the media industry

NPNs may satisfy the demanding performance requirements of content production, such as low latency and precise synchronization, and with respect to security, privacy and liability, by being isolated from public networks, using dedicated resources and associated security credentials.

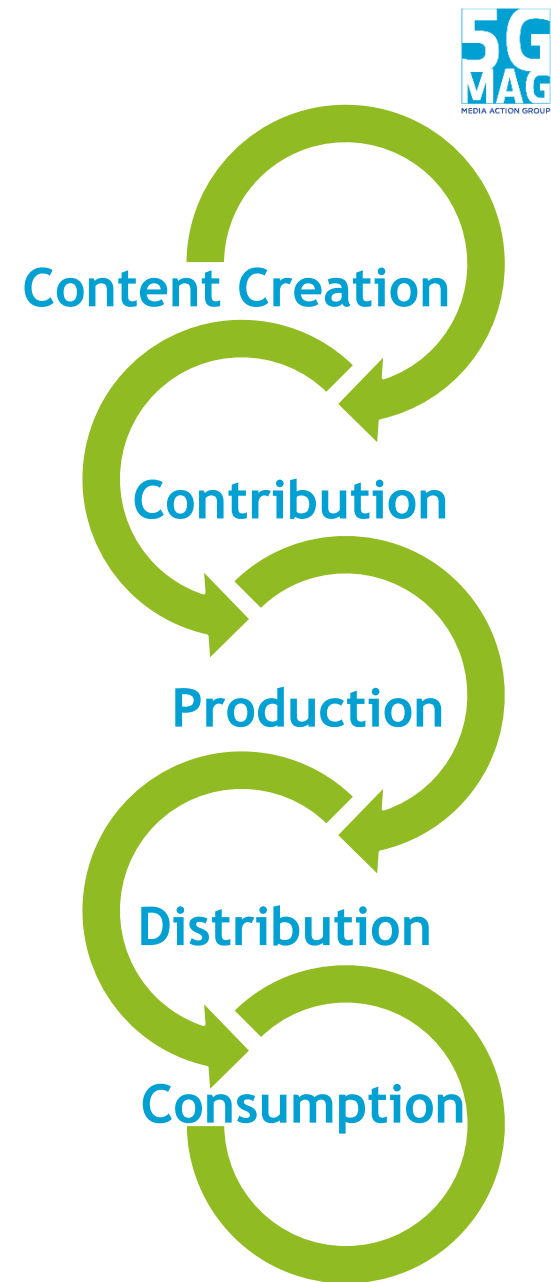
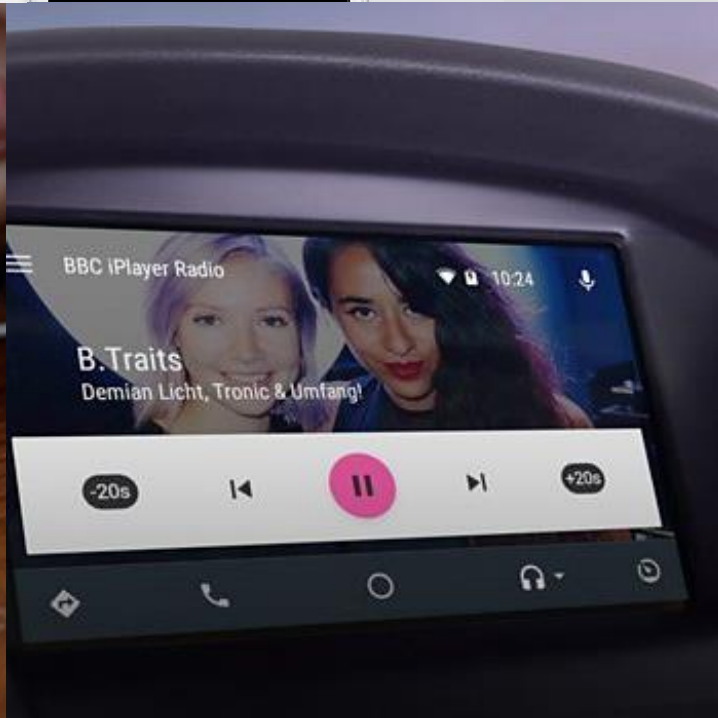
They may be deployed stand-alone or in conjunction with public networks. Different NPN deployment options may be suitable depending on the type and scope of the production events, production models and regulatory options.

NPNs can be deployed as temporary or permanent. Permanent networks may cover a limited area, as small as a small building or venue, or an entire campus used by production organizations.





The Media Industry and 5G



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5G for Media Distribution



SCALABLE DISTRIBUTION WITH UNICAST/MULTICAST & 5G BROADCAST

- 5G includes capabilities to address the lack of **scalability** for IP-based media distribution.

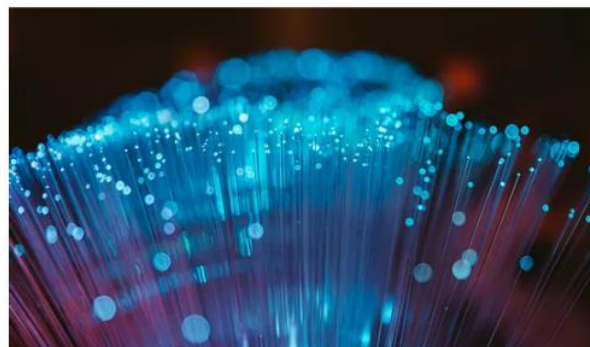
MOBILITY AND UBIQUITY FOR MEDIA SERVICES

- Distribution to **audiovisual content** with unprecedented **user device** reach.



TERRESTRIAL AND SATELLITE ARCHITECTURES

- Opportunities to integrate **terrestrial and satellite networks** for content distribution.
- **Cloud-based** architectures, software network functions for **cost-effective network** deployment.



EDGE CACHING, MEDIA NETWORK FUNCTIONS, NETWORK SLICING,...

- Exploring the **benefits** that the 5G **architecture components** may offer to improve media distribution.

Get involved !

5G-MAG brings a framework for collaboration towards deployment and implementation

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Many Thanks!

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