3GPP Release 17: 5G Media Streaming & 5G Broadcast
powered by 5G-MAG Reference Tools

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5G MEDIA ACTION GROUP

Mile-High Video 2023

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www.5g-mag.com

5G-MAG: MEDIA + ICT + COLLABORATION

5G Media Streaming
LTE-based 5G Broadcast
Dynamic QoS Policies
UE Data Collection and Reporting
5G Media Streaming over eMBMS
MBS User Services
Edge Media Processing
eXtended Reality

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Open Software Toolbox for
Connected Media Applications

Transforming open standards into services and applications

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Find information about 5G-MAG at 5g-mag.com/about

Why 5G-MAG Reference Tools?

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Developer Space

https://developer.5g-mag.com

Open Community of Developers

Open developers' community sponsored by 5G-MAG members

Reference Implementations

Reference implementation of 5G media platform components and features

Feedback to standards experts

Facilitating exchange between developers and standardization experts

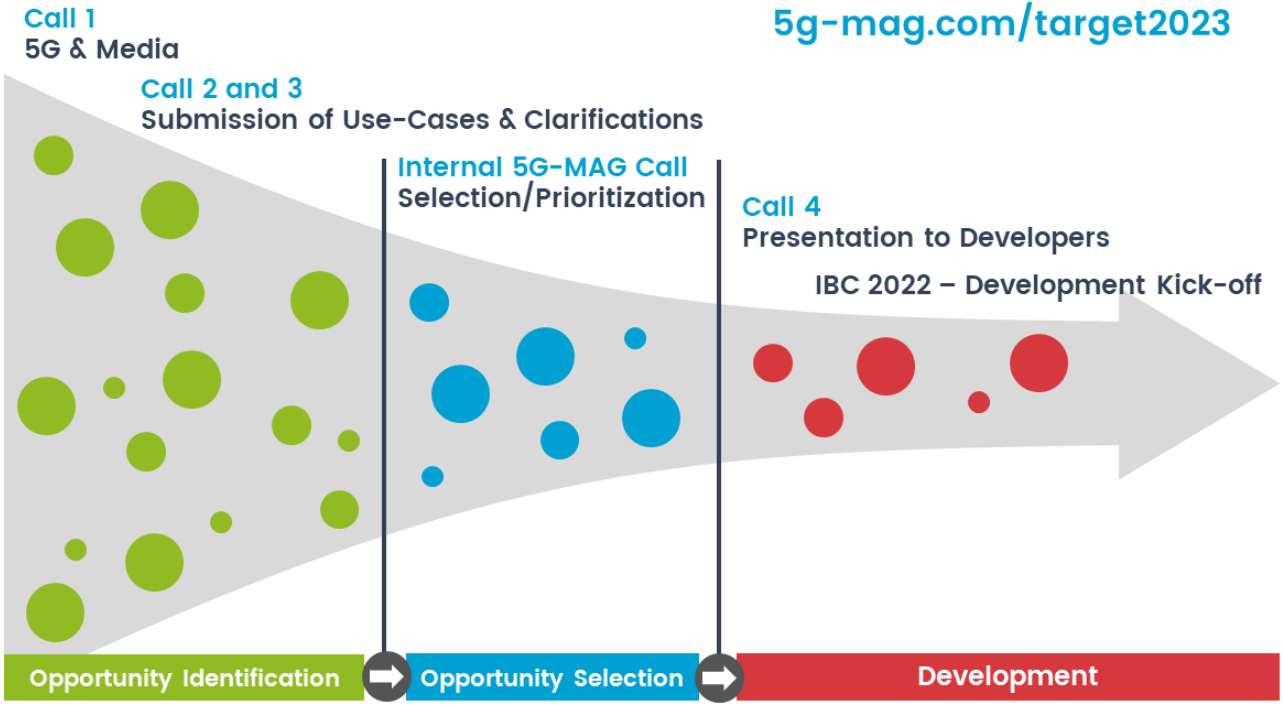
IPR-friendly License Model

Developed to foster contributions, demos, testing, commercialization

Current list of official contributors

BBC · Bitstem · Dolby · eurofins Digital Testing · Fraunhofer FOKUS · IDETOLÚ · ors group · Qualcomm · Universitat Politècnica de València

5G-MAG Target 2023 – Development Program



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Target 2023: Use-Case-driven implementations

- BBC: Reliable Video On-Demand over Mobile Networks with 5G Media Streaming
- BBC: Reliable Personalized Live Radio over Mobile Networks with 5MBS
- ORS group / Bitstem: 5G Broadcast On-Demand with 5G Media Streaming
- Dolby: Premium and Targeted Content Insertion with 5G Media Streaming
- Qualcomm: DVB-I over 5G Media Streaming
- Qualcomm: DVB-I Hybrid Service over 5G Broadcast and 5G Media Streaming
- Qualcomm: Emergency Alerts and Media Services through 5G Broadcast
- Universitat Politècnica de València: Contribution to LTE-based 5G Broadcast completion and Multicast-Broadcast Service (MBS) and satellite/NTN broadcast integration

Join the development efforts in 2023!

5G-MAG REFERENCE TOOLS
OTT Streaming

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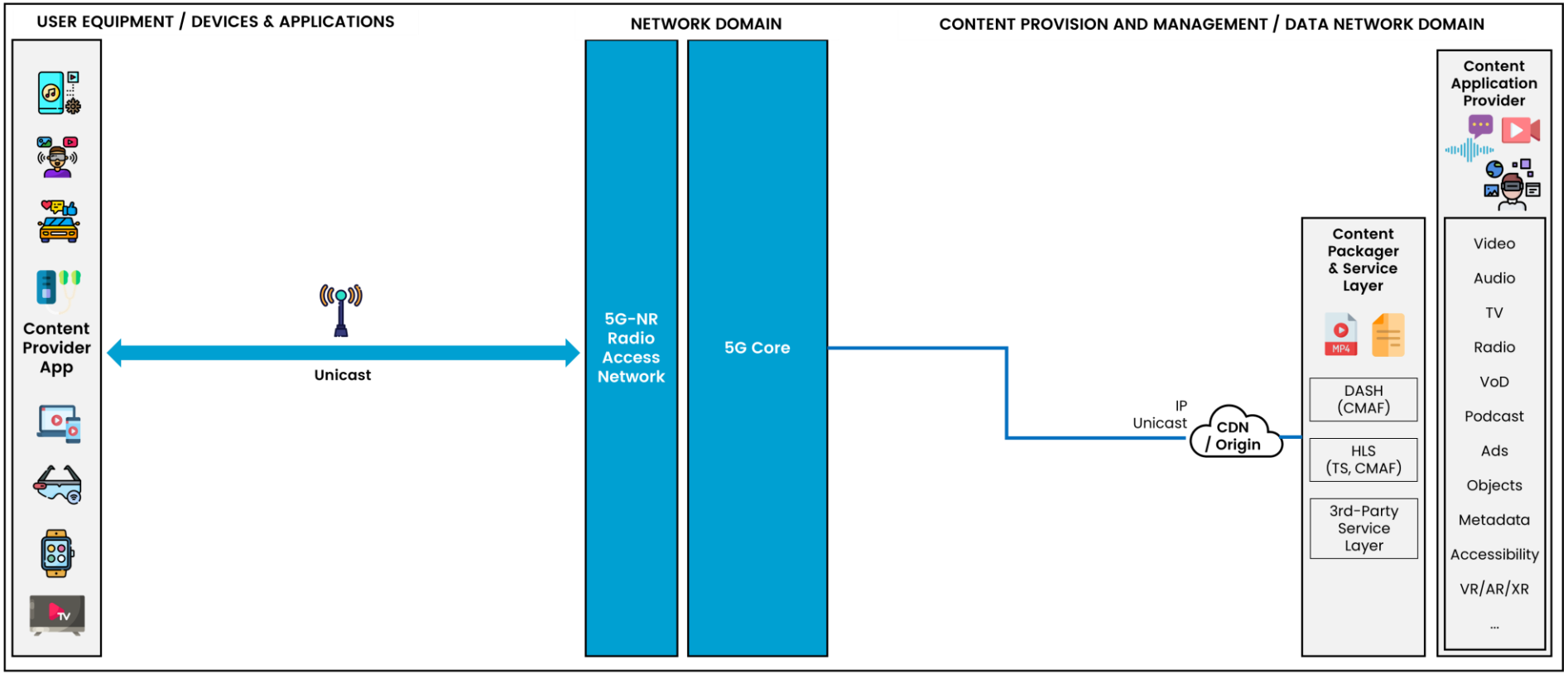

CLIENT-SERVER MODEL

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5G Media Streaming (3GPP Release 17)

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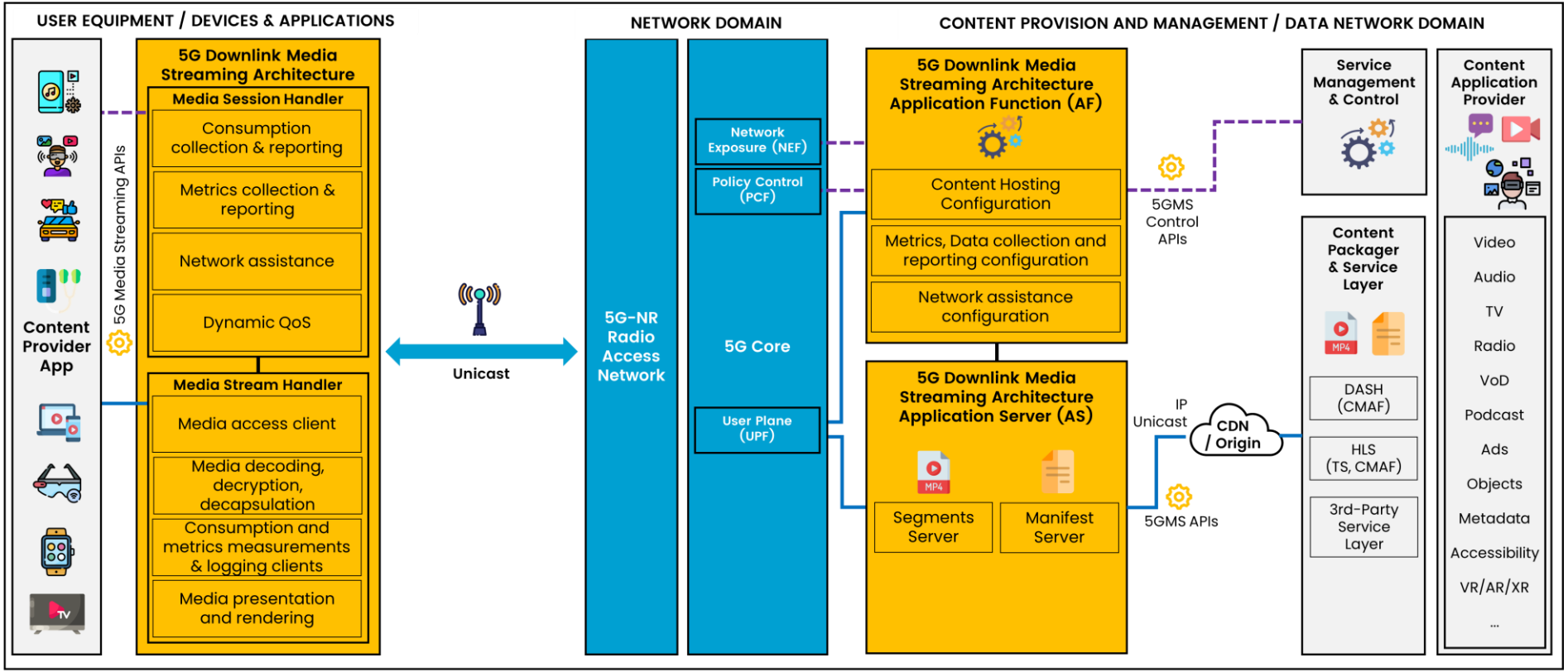

CLIENT-SERVER MODEL

LEGEND: 5G Media Streaming Architecture | 5G Core and Radio Access Network | External Functions

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LTE-based 5G Broadcast (3GPP Release 17) and OTT Streaming Services

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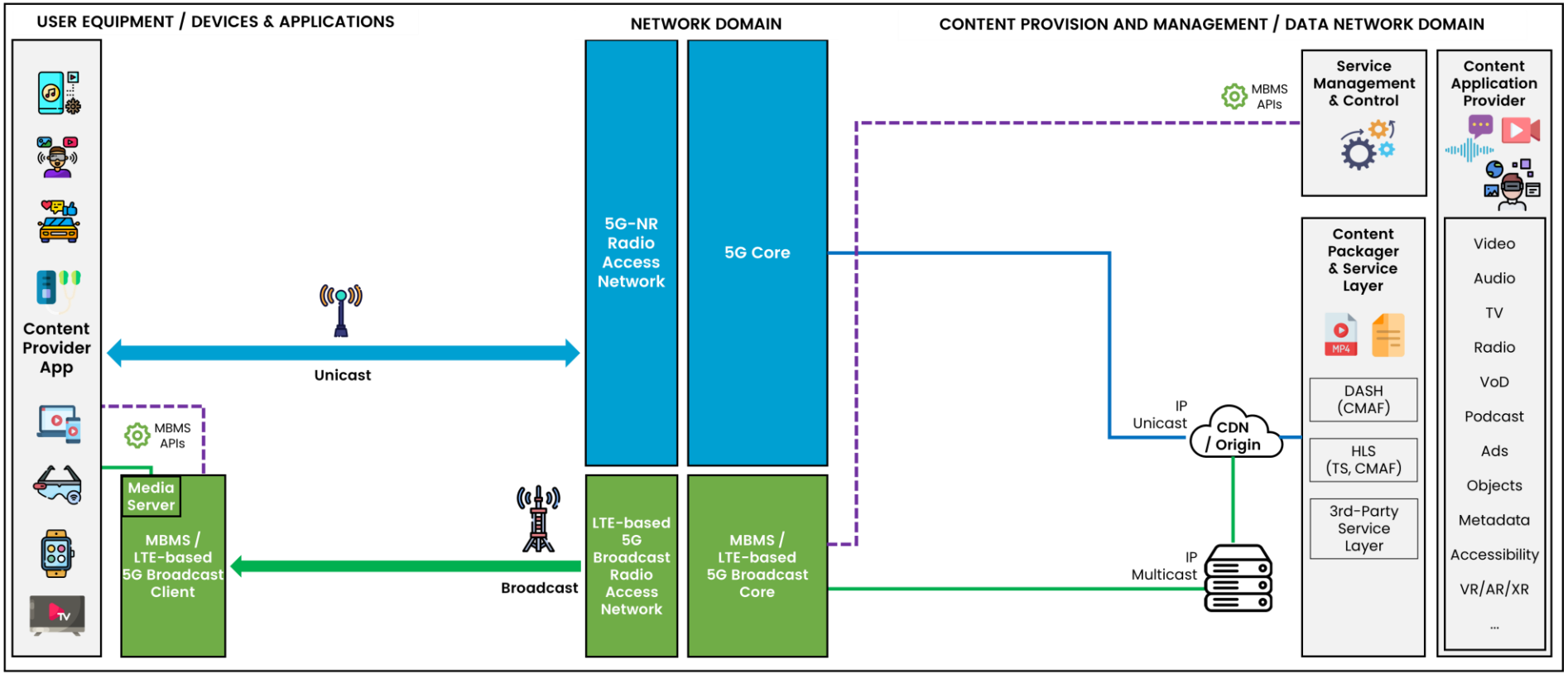

CLIENT-SERVER MODEL

LEGEND

MBMS / LTE-based 5G Terrestrial Broadcast | 5G Core and Radio Access Network | External Functions

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Hybrid Unicast 5G Media Streaming and MBMS/LTE-based 5G Broadcast (3GPP Release 17)

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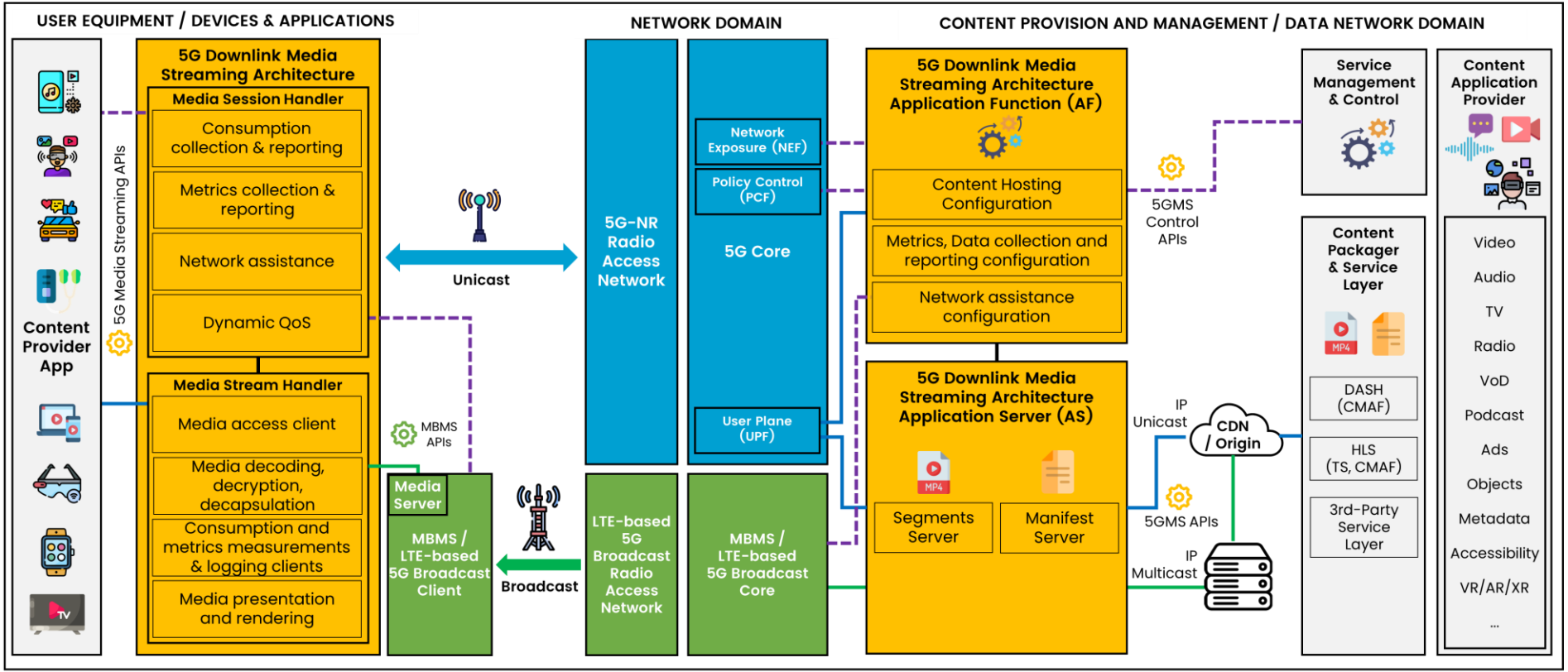

CLIENT-SERVER MODEL

LEGEND: 5G Media Streaming Architecture | MBMS / LTE-based 5G Terrestrial Broadcast | 5G Core and Radio Access Network | External Functions

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GitHub repositories and licences

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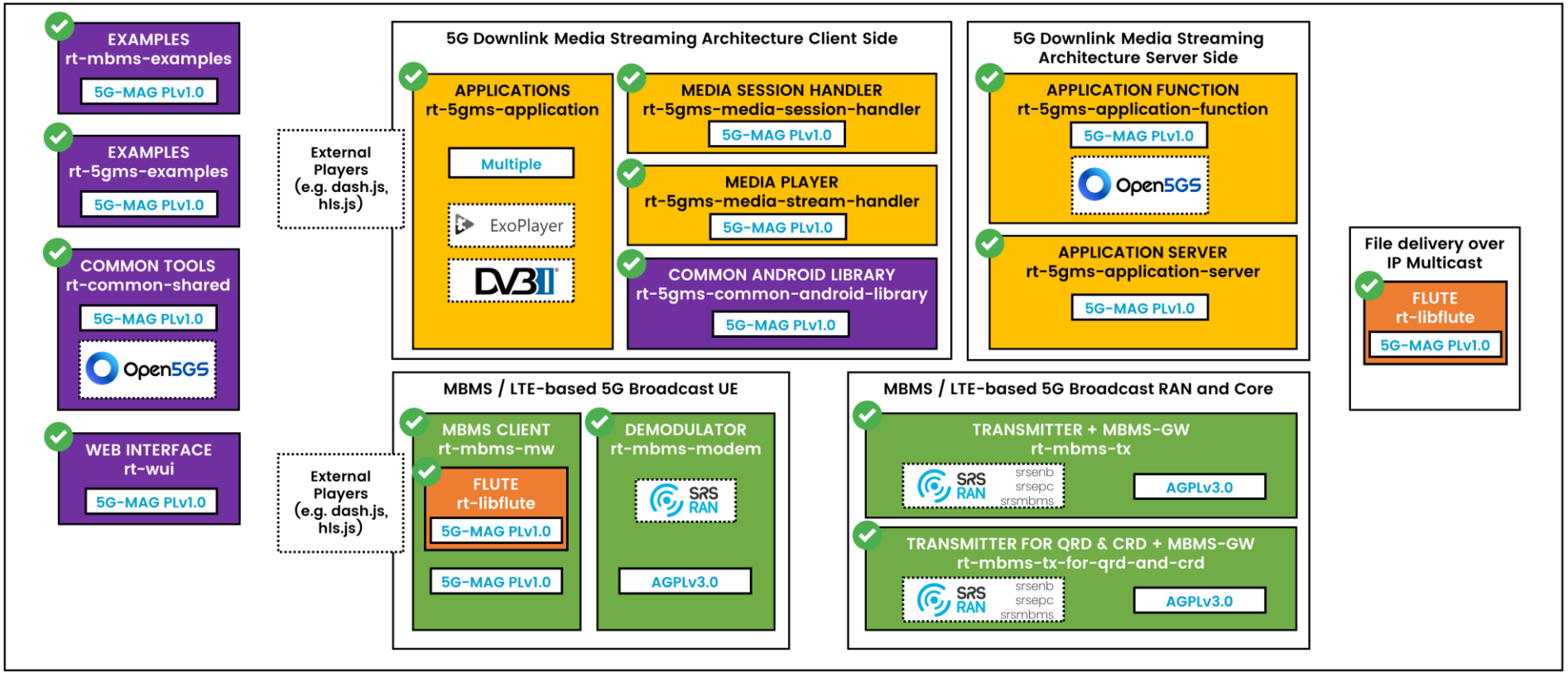

CLIENT-SERVER MODEL

LEGEND

5G Media Streaming Architecture | MBMS / LTE-based 5G Terrestrial Broadcast | Management & Auxiliary Components | Delivery Protocols | External Functions

Dependency | Code Licence | Public Release | Pre-release (members-only)

5G Media Streaming in the 5G-MAG Reference Tools

How to participate? developer.5g-mag.com

slack Discussions: https://5g-mag.slack.com

Groups Announcements: https://groups.google.com/g/5g-mag-reference-tools

JOIN OUR PUBLIC CALLS

- PUBLIC – Regular Telcos with Developers (Open)
  - Fridays - with three-week cadence: 13:00 – 14:30 CEST
- INTERNAL - Calls for contributors
  - Fridays - every other week: 13:00 – 14:00 CEST

GitHub Repositories, issues, etc: https://github.com/5G-MAG

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