



Bridging Standards and Deployments

Supporting the future generations

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5G-MAG Chair

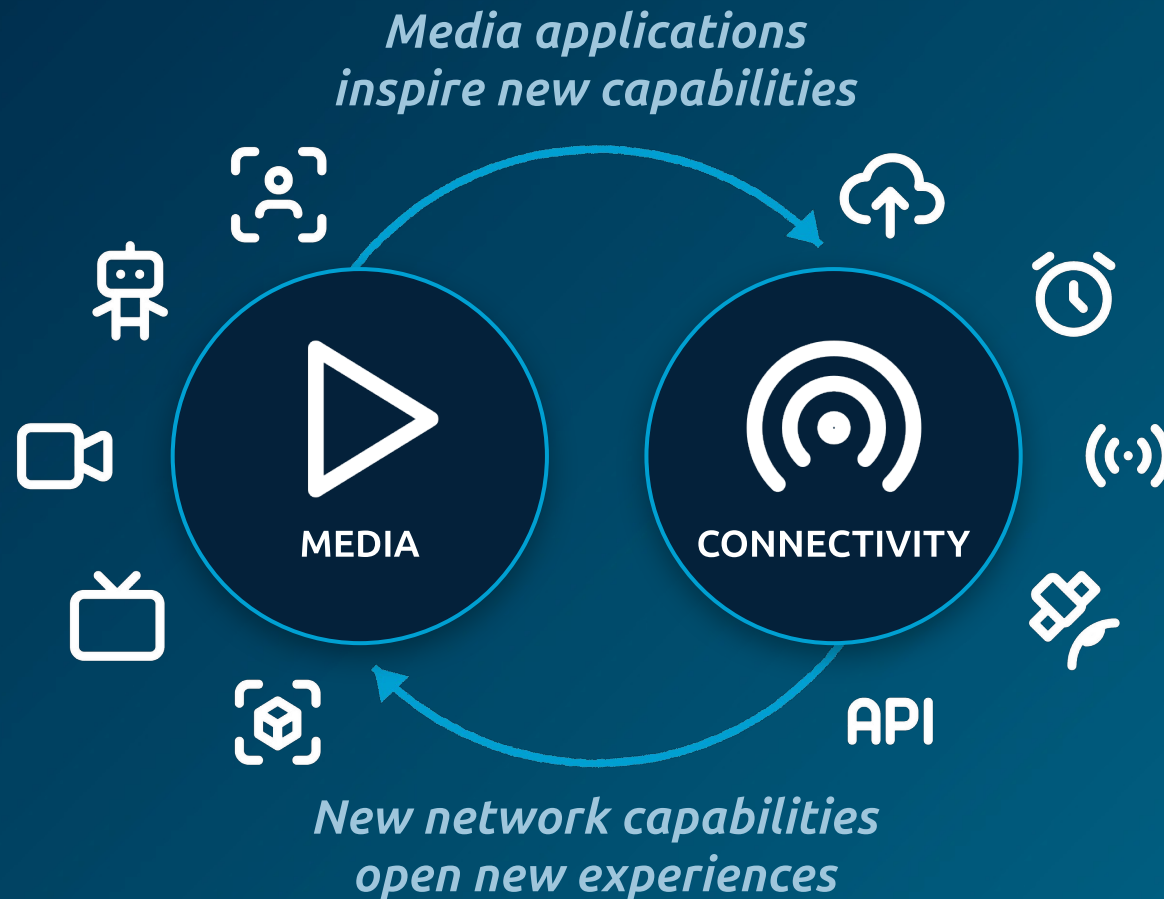


**STREAMING – PRODUCTION – BROADCAST – REAL-TIME COMMS – AVATAR – EXTENDED REALITY
5G/6G – NON-TERRESTRIAL NETWORKS – DATA COLLECTION – NETWORK APIs – COMPUTING - AI
CONNECTED DEVICES – VIRTUAL WORLD – VOLUMETRIC VIDEO – CODECS – PROTOCOLS - AUDIO**



Bridging standards and deployments - at the intersection of media and connectivity, for generations to come

-  Fast tech evolution
-  Global ecosystem
-  Built better together
-  Solution to pain-points

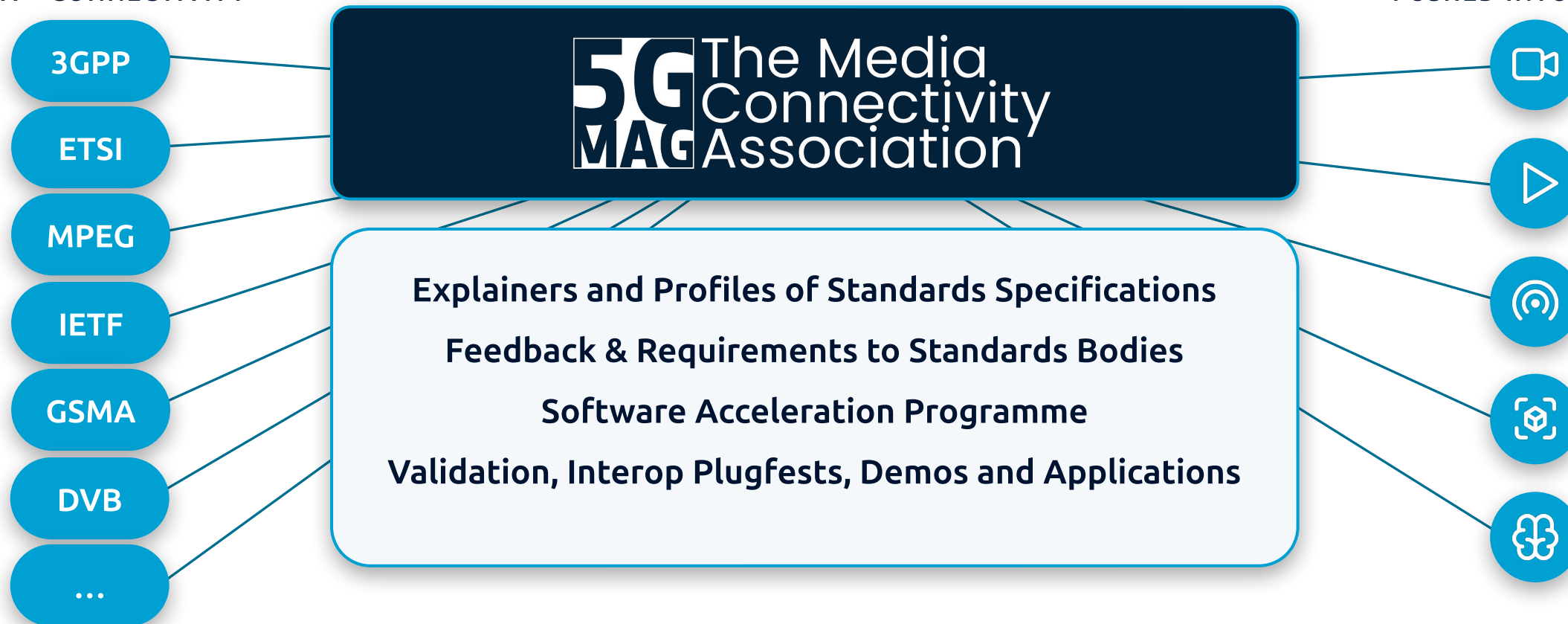


Connected Devices
Streaming Platforms
Next Generation Codecs
Internet-based Protocols
eXtended Reality
Wireless Video
Real-Time Comms
Data and Analytics
Content Production
Satellite
Network APIs
Artificial Intelligence
Quality of Service
Latency
Energy Consumption
Synchronization
Spatial Media

Four pillars — each lowering cost and accelerating time from spec to deployment

SPECIFICATIONS DRIVING
MEDIA + CONNECTIVITY

IMPLEMENTED AND
PUSHED INTO ACTION



Some examples of our current areas of work

The full track at www.5g-mag.com/tech



Content Delivery at Scale

5G Media Streaming
5G Broadcast
5G Multicast and Broadcast Services
DVB-I over 5G

Multimedia Content Delivery
UE Data Collection and Event Exposure
Real-Time communications
Non-Terrestrial Networks



Immersive Experiences and Spatial Media

XR and MPEG-I Scene Description
Volumetric Video with MPEG V3C
Avatar Communications on MPEG ARF



Media Production and Contribution

Non-Public Networks
Uplink Media Streaming
Time Sensitive Communications
Connectivity Quality APIs



Research on future media and connectivity tech

6G Networks
AI traffic characterization
AI/ML Services
Beyond 2D

Powered by tech from...



Explainers and Profiles of Standards Specifications

Understand it. Prove its value. Scale it



Specification analysis for
real-world applications



Making standards
actionable



Documentation and
explainer videos



Profiles and Blueprints

Turn standards into
implementation-ready
blueprints



Tech Documentation and Explainers

Understanding how
specifications support
application requirements

Examples of **Standards Development Organizations (SDO)**



Feedback & Requirements to Standards Bodies

Advancing standardization with implementation and experience-based feedback



Active engagement with standards bodies



Requirements based on application needs



Identification of bugs and enhancements



Requirements towards Standards Bodies

Supported by industry inputs, targeted workshop or surveys



Feedback, Requirements and Pain Points

Deployment experience and requirements submitted SDOs



Liaison Statements & Inputs to SDOs

Engagement in standards bodies on behalf of 5G-MAG members

Some numbers and examples of our work

The figure consists of four dark blue rounded rectangles arranged horizontally. Each rectangle contains a large white number at the top and a descriptive white text phrase below it.

Milestone	Value
specification issues corrected on feedback	+90
engagement as Market Representation Partner	3GPP
inputs and liaison statements to SDOs	+20
presentations at 3GPP requirements workshops	6



WHAT WE DO

The Media Connectivity Software Accelerator

Our work at a glance



Early feedback and
validation



Software projects
& Dev community



No duplication and
fast deployment



Open by design
and IPR-friendly



Reference Tools

Turn standards into open,
implementation-ready
code anyone can build on



Testbeds and Evaluation Tools

Reproducible test
environments and
benchmark frameworks



Application Prototypes

Use-case driven
implementations towards
real-world applications

A note on the Open-Source Software Licenses

Protecting IPR. Enabling industry collaboration

What is the License Model?

1. The 5G-MAG Public License v1.0, is a modified version of Apache 2.0 which allows:
 - **Free Non-Commercial Use:** You can freely use, copy, modify, and distribute the code for non-commercial purposes, including study, academic research, testing, and validation.
 - **Commercial Exploitation:** You are permitted to use the reference tools and software within commercial services, trials, and live deployments, but:
 - **FRAND Patent Licensing:** If you use the software commercially, the built-in patent clause ensures that any essential contributor patents are made available to you under **FRAND** (Fair, Reasonable, and Non-Discriminatory) terms.
2. Repositories with software derived from other licenses keep their own license according to their own terms.

How to Contribute?

1. Sign an Individual or Corporate Contributor License Agreement (CLA)
2. Anybody can become a contributor (no need to be 5G-MAG member to contribute code)
3. 5G-MAG members get priority in support from the 5G-MAG Project Office and additional development resources may be provided. 5G-MAG members define priorities and where to dedicate resources
4. Membership of 5G-MAG remains open to the industry to boost and scale your software project by joining forces.



Some numbers and examples of our work

The full track at developer.5g-mag.com

~15

project areas across
media and connectivity

+60

repositories, open on
github.com/5G-MAG

~10,000

clones: developers
pulling the code

Weekly

developer calls and
rolling releases

1

thriving **DEVELOPER COMMUNITY** of standards experts, developers and implementers

WHAT WE DO

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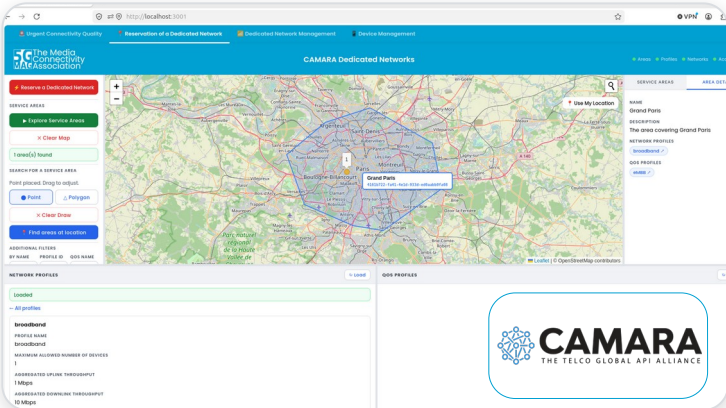
Reference Tools of 5G Media Streaming



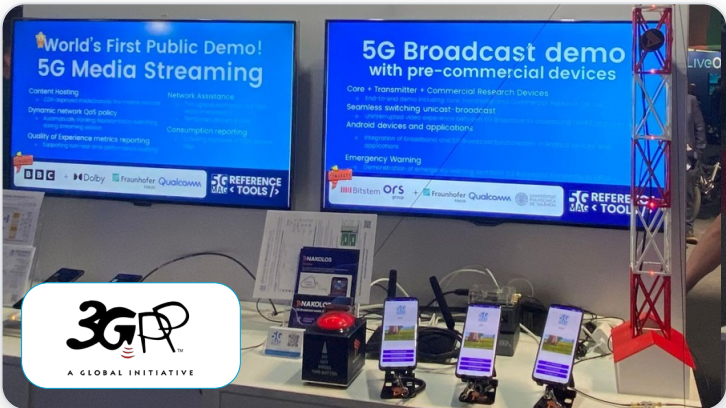
Reference Tools of MPEG-I Scene Description



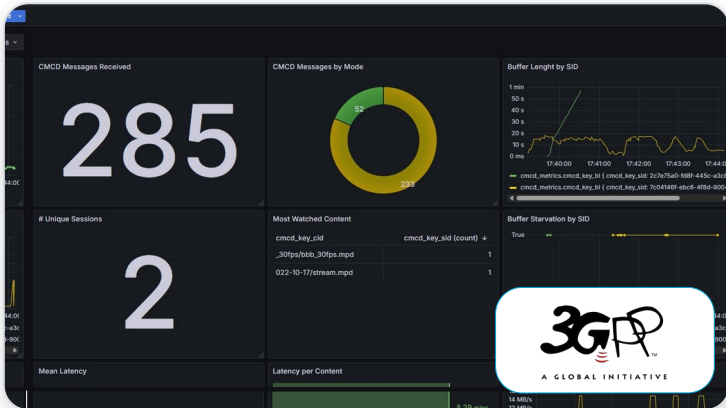
Reference Tools of MPEG V3C



Reference Tools of CAMARA Dedicated Networks



Reference Tools of 5G Broadcast



Reference Tools of UE Data Collection / CMCD

More information at developer.5g-mag.com

Validation, Interop Plugfests, Demos and Applications

Specifications to code. Code to deployments



Make value proposition tangible to the industry



Interoperability through early testing and plugfests



Supporting application development and trials



End-to-End Demos and Use Cases

User-facing demonstrations that abstract technical complexity



Interoperability Events and Plugfests

With shared code, so interop does not start from scratch at plugfests



Showcase at Industry Events and Trials

Promotion and demonstration of value, not just specs.

WHAT WE DO

Some numbers and examples of our work

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2

recurrent large events:
MWC Barcelona & IBC

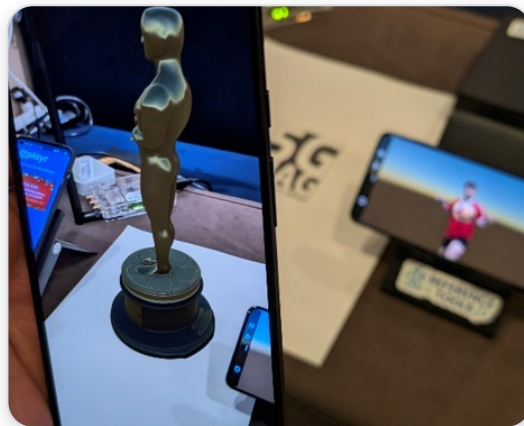


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yearly conference:
Future Media Townhall

+40

members and software
developers



+15

Spec-compliant
reference tools





**Join, collaborate, sponsor software
development & scale your projects**

www.5g-mag.com/membership

JOIN THE EFFORTS

Addressing industry pain points with open specifications

Bridging Standards and Deployments, supporting the future generations

Member-driven

project areas across
media and connectivity

Open

to the industry to
engage, collaborate

Agile

at the pace of
standards and market

Pragmatic

with actionable
activities & outcomes

2

WORKGROUPS focused on pragmatic work around **STANDARDS** and **DEVELOPMENT**

JOIN THE EFFORTS

What you get that you won't get alone

We offer a neutral framework to collaborate within minimal bureaucracy, focused on results.



Influence, not just adopt when too late

Shape the standards and technologies before others set them without you.



Early access to pre-public code

Access implementations before publication and be faster to market



Prepare for plugfests & interop

Test your implementation in advance and build reference vector traces.



Mutualised effort to grow your project

From idea to reference code to demo and trial, on shared effort.



Exposure at events, demos and trials

Build once, together, instead of funding the same work alone.



De-risk on deployments

Back technologies that actually get deployed, not specs that stall.

WHY JOIN

Membership information and Fee Structure

An association, a platform to collaborate, and a specific reason to be for each part of the media and connectivity chain.

Membership Fee Category LARGE	Annual Revenues > €1 billion	Annual Membership Fee € 15.000
Membership Fee Category MEDIUM	Annual Revenues €100 million - €1 billion	Annual Membership Fee € 10.000
Membership Fee Category SMALL	Annual Revenues €5 million - €100 million	Annual Membership Fee € 5.000
Membership Fee Category MICRO	Annual Revenues < €5 million	Annual Membership Fee € 2.000

Micro also includes: Universities, Regulators, Public research bodies, Institutions, NGOs, and non-for-profit organizations

Membership information, sponsorship opportunities, partnerships, questions on fees ? Please contact
Eva Markvoort at markvoort@5g-mag.com

JOIN THE EFFORTS

Our current membership





Join the effort

Help shape what connected media looks like next and scale your projects with the industry.

Become a member →

www.5g-mag.com/membership



GitHub



5g-mag.com