



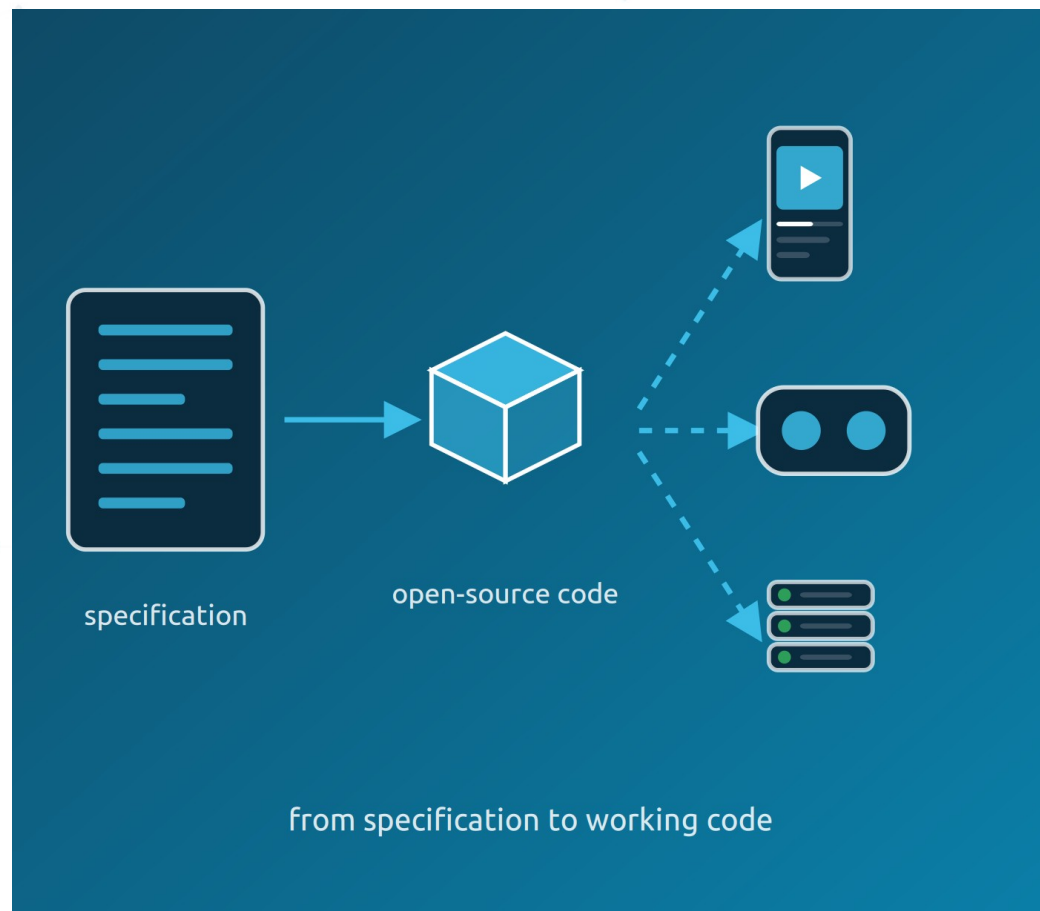
Learn more about the Media Connectivity Software Accelerator

Open-source tools, validators and testbeds turning specs into working code

OCTOBER 2026 – www.5g-mag.com

Specs into implementations, via open source

Open-source tools, validators and testbeds turning specs into working code



Standards validation

Interop, early prototyping and testing.



Ready-to-use code

For production environments and as benchmark.



Shared effort

Shared development effort avoids duplication across companies.



Transparency and trust

Collaborative enhancements.

Media Connectivity Software Accelerator



Early feedback and validation



Software projects & Dev community



No duplication and fast deployment



Open by design and IPR-friendly



Reference Tools

Open-source implementations of the specifications.



Testbeds and Evaluation Frameworks

Environments to measure or evaluate something.



Deployment Kits

Packages, images and apps to put into a product. Coming soon.

Enabling open-source software from the start of every project

TODAY: OPEN SOURCE AFTER THE FREEZE

WITH OPEN SOURCE FROM THE START

Evaluation

Duplicated prototypes. Each organisation builds its own to evaluate a draft; results differ and feedback is slow.

One shared baseline. Drafts are validated against running code before the freeze, while gaps are cheap to fix.

Interoperability

Late interop bugs. Testing starts from scratch at plugfests; errors, some in the specification, surface late.

Faster plugfests. Implementers start from the same code: shorter preparation, faster root-cause analysis.

Deployment

Slow deployment. Years can pass from a frozen specification to production-ready code; early adopters carry the cost alone.

Earlier deployment. End-to-end demos and trials run before commercial products, and feed evidence back into the standard.

1 Plan it at launch

2 Engage implementers during drafting

3 Make the value tangible

“Open-source software and evaluation platform: home and scope identified at launch.”

Collaboration in technology development

Technology development and deployment, with and for the developers



Supporting productisation

Prototypes, demos, trials, testbeds, ...



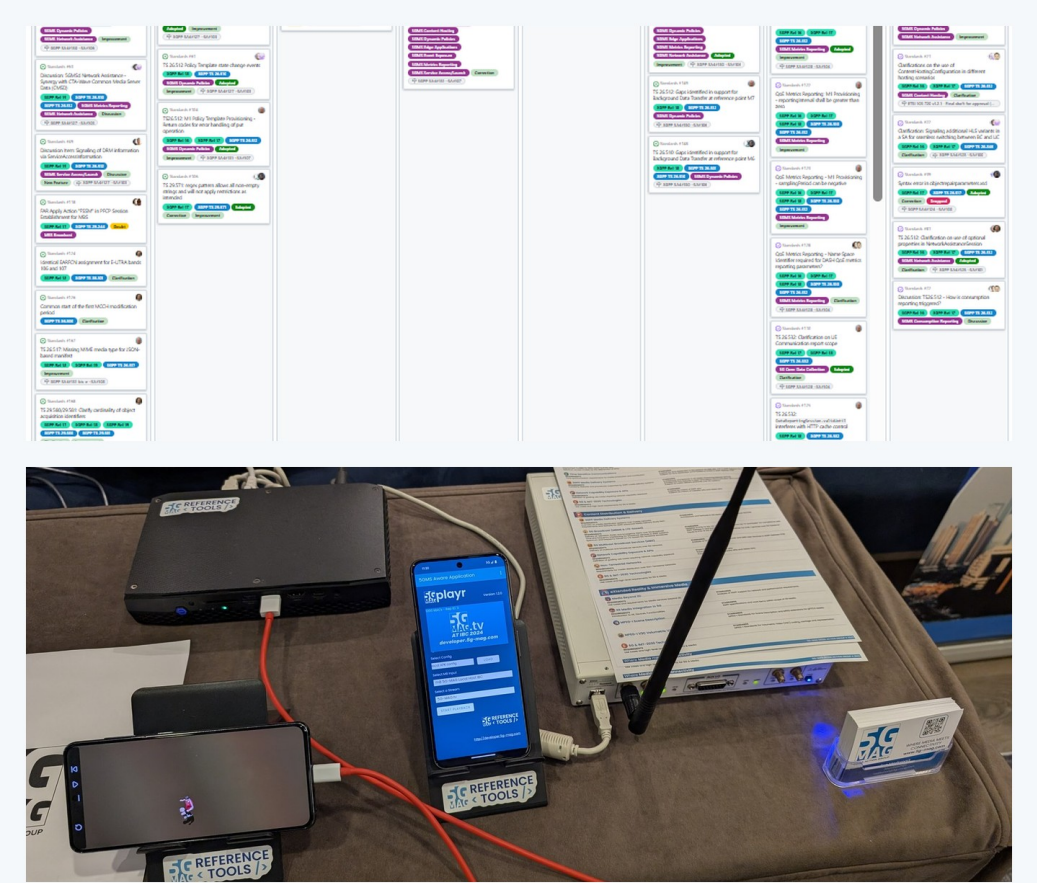
Standardisation feedback loop

Requirements and implementation feedback to standards development organisations (standards.5g-mag.com).



Open to contributions

Sponsored by 5G-MAG. No requirement to be a 5G-MAG member.



13 reference tools across 5 technology areas



Content Delivery and Streaming

- 5G Media Streaming (5GMS) Architecture
- UE Data Collection, Reporting and Event Exposure
- DVB-I over 5G Systems
- Content Delivery Protocols and Tools



Immersive Media

- XR/3D Scenes with MPEG-I Scene Description
- MPEG V3C Immersive Platform
- Dynamic Mesh Coding with MPEG V-DMC
- Conversational Avatars with MPEG ARF



Broadcast and Multicast

- 5G Broadcast for TV and Radio Services
- 5G Broadcast for Emergency Alerts
- 5G Multicast Broadcast Services (MBS)



Real-Time Communications (RTC)

- Real-time Media Communication (RTC) Architecture



Connected Media Production

- CAMARA Connectivity Quality Management APIs

Testbeds, evaluation frameworks and validators

Environments to measure or evaluate something, and tools that check conformance

TESTBEDS



6G AI Traffic Characterization

AI traffic profiling and 5G-to-6G migration testbed.

Testbeds and evaluation frameworks ›

EVALUATION FRAMEWORKS



AI/ML Evaluation Framework

Framework for evaluating AI/ML solutions in mobile media services.



Beyond 2D Evaluation Framework

Test and evaluation framework for immersive video quality assessment.

VALIDATORS



VOPS Conformance Validator

Conformance validator for the video operation points of 3GPP TS 26.265.

Validators ›

Developer Exchanges and Tutorials

Talks by the developers, one per project, with their authors; step-by-step tutorials are on each tool's page

DEVELOPER EXCHANGE REFERENCE TOOLS 5G Media Streaming - Latest Additions AUTHORS Daniel Silhavy (Fraunhofer FOKUS)  The Media Connectivity Association	DEVELOPER EXCHANGE REFERENCE TOOLS GPAC FLUTE support AUTHORS Sohaib Larbi (Motion Spell)  The Media Connectivity Association	DEVELOPER EXCHANGE REFERENCE TOOLS 5G Broadcast supported by 5G-MAG Reference Tools AUTHORS Klaus Kühnhammer (Bitstem)  The Media Connectivity Association
DEVELOPER EXCHANGE REFERENCE TOOLS Connecting MBSTF to the MBS System AUTHORS Josep Ribes Rodriguez-Moldes (ITEAM-UPV)  The Media Connectivity Association	DEVELOPER EXCHANGE REFERENCE TOOLS XR Player supported by 5G-MAG Reference Tools AUTHORS Imed Bouazizi (Qualcomm)  The Media Connectivity Association	DEVELOPER EXCHANGE REFERENCE TOOLS V3C Immersive Platform - Support for MPEG Haptics AUTHORS Bart Kroon (Philips)  The Media Connectivity Association
DEVELOPER EXCHANGE REFERENCE TOOLS Introducing the Avatar Real-Time Communication Project AUTHORS Nils Duval (Motion Spell)  The Media Connectivity Association	DEVELOPER EXCHANGE REFERENCE TOOLS Initial steps exposing APIs to AI systems through the MCP AUTHORS Aarón Montilla (ITEAM-UPV)  The Media Connectivity Association	DEVELOPER EXCHANGE REFERENCE TOOLS UE Data Collection, Reporting and Event Exposure AUTHORS Richard Bradbury, Dev Audsin and David Waring (BBC)  The Media Connectivity Association

Community, maintenance and support

OPEN AND ACCESSIBLE TO ALL



Working group WG DEV

The members' workgroup for development and ecosystem, with weekly calls for 5G-MAG developers.



Friday's Public Call

Regular public calls for all: the last Friday of the month, 13:00 CET/CEST.



Slack

Fast communication with developers: the 5G-MAG Dev Community on Slack.



Mailing list

News and announcements, with releases and news, on Google Groups.

MAINTENANCE AND SUPPORT



Coordination, testing and support

By Daniel Silhavy, Nils Duval and the 5G-MAG Project Office, in coordination with the contributors.



Support for contributors

Guidelines and documentation; issue tracking, PR processing, roadmaps; dashboard, on-boarding.



Integrity and deployability

GitHub Teams, 3GPP SA4 Standards Team; write and early access; CI/CD, Dockerisation; REST API collections.



Resources and visibility

GitHub resources, documentation, tutorials; promotion, visibility, attribution; additional resources.

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:** use, copy, modify and distribute for study, academic research, testing and validation.
 - **Commercial Exploitation:** use the software in commercial services, trials and live deployments, but:
 - **FRAND Patent Licensing:** essential contributor patents are made available under **FRAND** (Fair, Reasonable, and Non-Discriminatory) terms.
2. Repositories with software derived from other licenses keep those licenses.

How to Contribute?

1. Sign an Individual or Corporate Contributor License Agreement (CLA).
2. Anybody can contribute: no 5G-MAG membership needed.
3. Members get priority support from the Project Office, and define where resources go.



Growing community of developers

Organisations contributing to the Software Accelerator. We remain fully open and welcome more contributors joining efforts.



BBC



Big Blue Marble



Bitstem



Dolby Laboratories



EBU



Ericsson



Fraunhofer FOKUS



Huawei



idTOLU



InterDigital



iTEAM-UPV



Motion Spell



Nokia



Philips



phine.tech



Qualcomm



Resillion



Sofia Digital

Software Accelerator in numbers

19

projects across media
and connectivity



68

project repositories,
public and early access

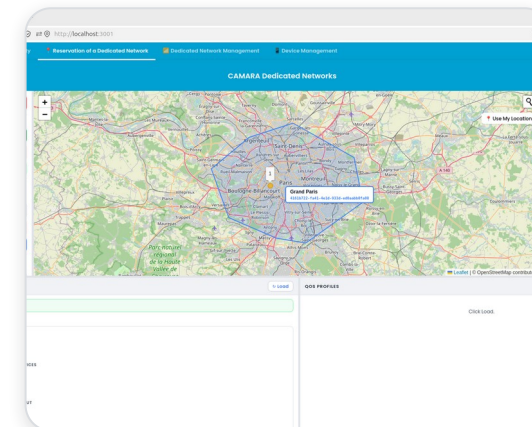
+20,000

clones: unique cloners
per day



Monthly

Dev Public Call and
rolling releases



JOIN THE EFFORT

Get involved

Ways to work with us, member or not



Bring your topic or project

Don't see your topic here? Bring it, or your project, as a member.



Early Access

Request access to Reference Tools and Testbeds still in development.



Contribute code

No membership needed: sign the CLA and open a pull request on GitHub.



Join the developers

The Dev Community on Slack and the Reference Tools mailing list.



Stay informed

Email updates, the 5G-MAG Magazine and The Handshake podcast.



Follow us

News on LinkedIn; talks and demos on YouTube.



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