MEDIA TECHNOLOGY & INNOVATION

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tech-i

New tech and a new **direction** for Ireland's RTÉ

Plus

- **Sveriges Radio tests Neo, a smarter way to search the news**
- **MXL – the new interoperability layer for media infrastructure**
- **Aino Olsen on ensuring a flexible future at Danmarks Radio**

and more...

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Issue 64 • June 2025

Cover story: The EBU Technology & Innovation Summit 2025 will be hosted by RTÉ in Dublin on 5–6 June. Delegates will have a chance to see first-hand how the Irish broadcaster is transforming, with important new infrastructure projects and new facilities, like the visual radio studio pictured on our cover. See pages 10–11 for more on RTÉ's New Direction strategy.

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Applying the M.A.R.S. strategy to modern media production

Antonio Arcidiacono, Director of Technology & Innovation, EBU

The M.A.R.S. strategy that we have been developing at EBU Technology & Innovation is a framework to ensure media infrastructure is adaptable, robust, and future-proof, both financially and environmentally – **Multilayer**, **Anywhere**, **Resilient**, and **Sustainable**. While our first white paper on M.A.R.S. focused on media distribution, the same principles are now being applied to media *production*, where we anticipate a major shift in how production facilities will operate.

The Dynamic Media Facility (DMF) is at the heart of this transformation. The continued exponential growth of computing power in the IT industry creates a significant opportunity for more agile, flexible, and cost-effective media production, fully aligned with our M.A.R.S. strategy:

- Multilayer: DMF allows seamless switching between local servers, private data centres, sovereign national clouds and public clouds. Thanks to standardized interfaces, all production elements – video, audio, metadata, scripts – are universally accessible and managed through a shared layer, regardless of where they are hosted.
- Anywhere: collaboration is enabled across geographies. Remote teams can edit and update content in real time or asynchronously, with changes synchronized automatically. This reduces errors, avoids duplication, and increases responsiveness while eliminating costly, custom-built sharing solutions.
- Resilient: with built-in support for both local and remote cloud environments, DMF provides system-level redundancy. If a failure occurs, another system can immediately take over. In the event of a crisis, operations can be relocated to other facilities or regions, ensuring business continuity and reliable delivery.

Antonio Arcidiacono

- Sustainable: DMF supports scalable infrastructure. When extra capacity is needed, like for big live events, resources can be ramped up temporarily, rather than maintaining idle capacity year-round. Indeed, idle resources can be shut down to save energy and reduce the need for cooling. This approach supports long-term sustainability and facilitates integration with emerging technologies.

Importantly, DMF also fosters innovation and collaboration. By moving live production into the IT domain, it becomes more accessible to new generations of engineers already familiar with IT systems. And moving into a more uniform server room filled with off-the-shelf servers instead of having specific boxes per function will simplify the physical maintenance of the production infrastructure, allowing more focus on creativity and content development.

And there's more: as soon as the captured image has been moved from the lens into this type of infrastructure, we can leverage all the benefits of AI in live production, with services such as metadata generation, subtitling, translation, aiding sports commentary and much more.

EUROPEAN MEDIA CLOUD?

The resources used for DMF could be on-premises or in the cloud, even using resources from another EBU Member, assuming production schedules allow. Workflows could also be redistributed to align with different time zones of partner organizations. Because these models are independent of physical infrastructure – dematerialized (see page 8) – scaling out to public cloud platforms is entirely feasible. All of this opens the door to long-term visions like a European media cloud, where resources would be shared at scale for mutual benefit.

In alignment with the M.A.R.S. strategy, DMF also strengthens the link between production and distribution. Once content is completed, it can be automatically adapted and distributed across platforms – broadcast, online, mobile, and satellite – within the same system. This ensures a consistent and high-quality viewer experience.

A central enabler of DMF is the Media eXchange Layer (MXL), a foundational layer for how media assets are exchanged between media functions. Implementing MXL will require coordinated efforts among the entire media community. We are proud to be working on this with the Linux Foundation and North American Broadcasters Association (NABA), paving the way for a more agile, open, and future-ready media ecosystem.

Read more about MXL on pages 8–9 and about the Linux Foundation on page 17.

Need QC? Join QCi!

Wouldn't it be great if your QC report were stored in a standardized, machine-readable form that could easily be annotated? Maybe it would even live alongside the content in question throughout its lifetime? What if such a format already existed and had support from established companies in the industry?

The EBU Quality Control Implementers Group (QCi for short) was launched through a webinar at the end of April. In it, some of the founder members of the group talked about the work that had already been done to enable a report to be generated in one tool and then passed seamlessly between other tools, with clarifications and annotations added along the way.

The webinar, with presentations by Andrew Dunne (BBC), Laurence Stoll (Marquise Technologies) and Fereidoon Khosravi (Venera Technologies),

is available to watch on demand here: https://tinyurl.com/ebuqci

The new QCi group is open to everyone who has a need for QC. Find out more and join the group here: https://tech.ebu.ch/qci

David Wood honoured by DVB Project

Tomas Hercog

David Wood with Remo Vogel, Munich, March 2025

The DVB Project has awarded Honorary Fellowship to David Wood, recognizing his outstanding contribution to digital broadcasting. Having held several positions during his long career at the EBU, David played a key role in the founding of the DVB Project in 1993 and was instrumental in developing standards like DVB-S and DVB-T.

Joining the EBU in 1980, David had previously worked for BBC and the Independent Broadcasting Authority, where he was part of the team that developed Teletext. He is a well-known figure across many international organizations. He led the ITU groups that prepared the recommendations for digital television, HDTV, and UHDTV. In DVB, too, he led work on developing specifications for UHD and 3DTV.

Honorary Fellowship is the DVB Project's highest honour, given to individuals who have made significant and lasting contributions. Presenting the award to him at DVB World 2025 in Munich, DVB's chair Remo Vogel saluted David's dedication to advancing broadcasting technology which, he said, continues to inspire the industry.

NMOS, Network Technology and Media Cybersecurity: three good reasons to visit Geneva in June

Reflecting the many synergies across their respective programmes, this year sees the EBU's Network Technology Seminar and Media Cybersecurity Seminar held during the same week in Geneva, and immediately preceded by the NMOS Hands-on Workshop.

NTS (17–18 June) focuses this year on the Dynamic Media Facility, highlighting the upcoming release of the Media eXchange Layer (MXL) bootstrap code and reflecting the industry's shift towards agile, interoperable infrastructures. The programme includes presentations, tutorials, and workshops on DMF, MXL, timing, infrastructure design, and media sovereignty.

The final day of NTS will overlap with the first day of MCS (18–19 June), an event that will delve into the latest cybersecurity trends, from protecting live media events to tackling emerging threats like AI-driven attacks, offering insights from experts representing ITU, ENISA, BBC, and others.

Earlier that same week, the NMOS Hands-on Workshop (16 June), co-organized with AMWA, provides practical experience with Networked Media Open Specifications (NMOS), which are essential for creating connected, flexible, and interoperable media environments.

The hands-on approach of the workshop will allow attendees to understand the real-world application of the standards, bridging the gap between theory and practice.

See: https://tech.ebu.ch/events

The state of HDR reference monitors – what we learned

Simon Thompson (BBC)

The EBU Video Systems and Workflows group recently finished the third session of UHD HDR monitor testing. These monitor test sessions allow EBU Members to make purchasing decisions with clear knowledge about the current state of the market. They also help identify follow-up work the EBU may wish to undertake.

Across the three sessions, we have seen a wide range of monitors at different price points, using a range of display technologies, and from a multitude of manufacturers, including newer entrants to the broadcast market.

One issue we have seen is that many implementations either had incorrectly calculated key parameters (e.g., gamma) or they had inferred that limitations in terms of luminance were required when they were not.

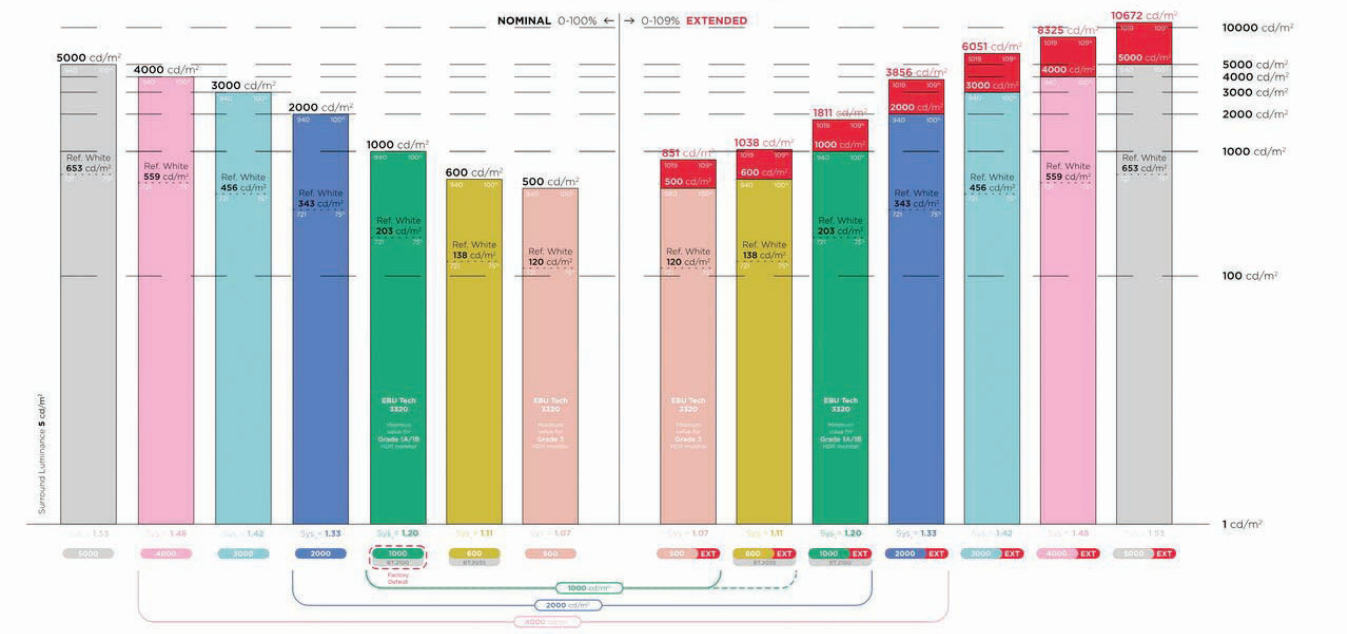
EBU RECOMMENDATION

To aid manufacturers, we have published EBU R 167, *Reference Monitors: Predefined Modes for HLG*, a recommendation that contains a list of predefined settings for reference monitors, complete with precalculated maths, and a clear naming scheme. We would like manufacturers to implement as many of the predefined settings as a monitor can. We have also included information on how to adjust the monitors for different viewing environments.

As well as guiding implementers, R 167 is a quick reference for users to understand what a monitor will show in each mode. This is especially relevant for those who want to use the extended range of the video signal. This topic is becoming more relevant as monitors are increasingly capable of higher peak brightness outputs.

Finally, we have a greater understanding of the trade-offs required for various screen technologies – for example, when a dual-LCD panel is used to allow the full contrast ratio required for HDR, the viewing angle can be compromised. This may or may not be a problem for users, depending on what the display is being used for.

EBU R 167 and associated open-source software are available from: https://tech.ebu.ch/publications/r167



EBU R 167 includes this visualization of pre-defined modes for HLG monitors

Upcoming webinar: colour gamut and reference monitors

At the time of publication of R 167 (see above), no tested monitor met the colour gamut requirements defined in the EBU Tech 3320 specification for a Grade 1A or 1B HDR reference monitor. The Video Systems Group wishes to investigate this together with monitor manufacturers and colour science experts.

A webinar on **24 June at 16:00 CET** will feature experts from University College London's Colour and Vision Research Laboratory exploring the ITU-R BT.2020 colour gamut's limitations in terms of aging vision, colour vision deficiency and the mathematics of colour representation.

See: http://tech.ebu.ch/2025/metamwebinar

T&I Award 2025:
and the nominees are...

The winner of the EBU Technology & Innovation Award 2025 will be announced during the EBU T&I Summit in Dublin on 5 June. We will be pleased to connect you with any contact person mentioned below.

Alter Ego – AI meets the self
AMPTV, Armenia • Anush Kherunts
A guest encounters an AI-generated alter ego, blending AI, psychology and entertainment to explore identity through TV storytelling.

MUFUs: small, smart workspaces
ORF, Austria • Markus Korhammer
Flexible, compact workspaces powered by software and IP tech, enabling rapid role shifts for efficient, adaptable broadcast production.

Classical Goes Digital workflow
Yle, Finland • Rami Lindholm
A fully digital, integrated production workflow replacing paper-based processes with real-time, connected tools across TV concert production.

User-friendly live streaming tool
Yle, Finland • Tommy Mard
Simple, browser-based tool enabling journalists to control streams, graphics, maps, and overlays in live productions without technical complexity.

Atlas: AI-powered editorial CMS
Radio France • Eric Bellemon
AI-enhanced CMS offering journalists automated transcripts, summaries, tags and titles, seamlessly integrated into editorial workflows.

ARTE chatbot: conversational content search
ARTE, France/Germany • Kemal Görgülü
Multilingual, human-supervised chatbot offering trusted, personalized content recommendations without profiling or algorithmic feeds.

C2PA in action: daily verified news
France Télévisions • Romuald Rat
A pioneering daily implementation of C2PA content signing, setting a new standard for transparency and trust in public service journalism.

PURE AI: pragmatic, useful, and responsible
France Télévisions • Romuald Rat
A strategic shift to decentralize AI, focusing on practical, high-impact solutions that directly support journalists and enhance viewer experiences.

AI-driven live subtitling solution
France Télévisions • Matthieu Parmentier
Live subtitling with synchronized video and automatic word updates, enhancing accessibility for the deaf and hard of hearing community.

Data contracts: revolutionizing data ownership
WDR, Germany • Nora Dejia Wen
Data contracts standardize data ownership, improving transparency and reliability, and enabling better data usage across ARD.

Automated live subtitling using AI
WDR, Germany • Christian Klöckner
AI-powered automated live subtitling for web and HbbTV channels, reducing costs and expanding accessibility without additional hardware.

Ensuring video authenticity with C2PA in HLS
WDR, Germany • Kenneth Warmuth
First-ever C2PA implementation for VoD HLS streaming, enabling real-time video authenticity verification with seamless user experience.

ARD.Player – unified streaming for all platforms
SWR, Germany • Marc Katz
Centralizing streaming across platforms, offering a seamless user experience and innovative features like multi-stream for live events.

Optimizing scheduling with data-driven insights
ZDF, Germany • Carolin Isabel Bauerhenne
Leveraging advanced analytics to optimize TV scheduling, enhancing audience reach and editorial decision-making with data-driven insights.

Unlocking film archive potential with APES
Rai, Italy • Giorgio Dimino
AI-powered solution to enrich film archives, enabling efficient content extraction and enhancing historical media for modern use.

AI-driven production for animated storytelling
Rai, Italy • Roberto Iacoviello
GenAI powers an end-to-end workflow for animated storytelling, from scriptwriting to animation, creating a seamless, scalable production process.

KI-Kjetil: AI avatar chatbot for election coverage
TV 2, Norway • Lubos Steskal
This AI avatar news chatbot answered 70,000 questions during the 2024 US election, enhancing personalized, interactive news experiences.

Giving voice and accents to public service with AI
RTVE, Spain • David Corral
Using AI to create synthetic voices for weather content in multiple languages and accents, ensuring personalized, accessible, and accurate information.

Enhancing and reinterpreting archive content
RTVE, Spain • David Corral
Breathing new life into archives, using AI to revive old content with enhanced quality and new narratives for broader audience engagement.

VisiONAIR: live video analysis tool for sports
SRF, Switzerland • Thomas Feger
Allows experts to instantly review, annotate, and compare sports footage live, enabling dynamic analysis seconds after the event.

Ochiva – safe communication in TV productions
ITV, UK • Jordy de Muijnk
Ensures safe communication in TV productions with moderated chats, media exchange, and instant access to trusted contacts.

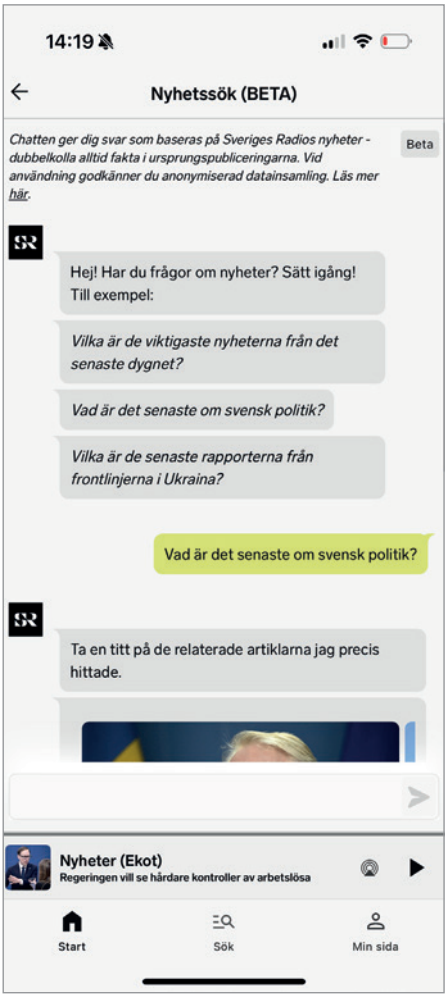
SR and EBU collaborate on a smarter way to search the news

Since March 2025, Svergies Radio (SR) listeners have been testing a new type of news search in the form of an AI-driven chatbot powered by Neo from the EBU. We asked **Max Sommerstein**, project manager and development editor AI and News at SR, about the project.

tech-*i*: What does this conversational news search offer to users of the SR app?
MS: It's a new way for listeners to engage with our journalism – by simply asking questions in their own words. Rather than navigating menus or using keyword searches, users can have a conversation with an AI assistant that understands their intent and offers answers based on relevant, reliable information from SR's trusted news coverage. It's a more intuitive, accessible way to explore the news, catch up on a developing story or try to understand complex topics.

tech-*i*: How does this tool differ from other AI assistants?
MS: While many AI assistants provide quick answers using generic web search results or large language models trained on broad datasets, our tool is specifically grounded in our own journalism. That means it doesn't guess or speculate – it only provides answers that can be traced back to something SR has published. This ensures the information is reliable, up-to-date, and meets the public service values we hold ourselves to.

tech-*i*: What are the main technology building blocks of the tool?
MS: It is built on a retrieval-augmented generation (RAG) architecture. This means it combines the strengths of search and generative AI. When a user asks a question, the system first decides if that question is news-related. It then retrieves relevant pieces of journalism from SR's editorial content through PEACH, the EBU model we use for our recommender system. After grading and ranking the news articles, the tool uses a language



model to synthesize an answer in natural language, always linking back to the original sources. On the backend, we've used OpenAI's GPT model (via API) for the generative component, while all content retrieval is managed in-house to maintain editorial control. The interface is integrated in our app through an embedded widget.

tech-*i*: What role does the EBU play in this tool?
MS: We've collaborated closely with EBU developers throughout this project. SR had already been involved in the news exchange project AEP (A European Perspective); it was the EBU that built the prototype tool (called Neo) and brought it to us. Initially the idea was to test it as an advanced research tool for our journalists, but we quickly saw its potential as an audience-facing feature. Our beta approach – to test a 'good enough' version of the tool to get early audience feedback – is thanks to Sébastien Noir and his team at EBU Technology & Innovation, who have been crucial to our success. Most of the development, both frontend and backend, was done by EBU developers. At SR, we've worked with design specifics and some development to make the implementation work as smoothly as possible.

tech-*i*: Can you share any early lessons?
MS: The beta approach, with full transparency, works well with our users, who understand the tool's capabilities and limitations. We will look at areas to improve, like yielding better results by indexing transcripts and combining semantic and keyword search. We will also be adding more editorial control of the tool with, for example, conversation starters. Later we'll look at scaling the tool to different kinds of content. After all, if this conversational search is to be of real value, you should be able to come to it with all kinds of questions, not just news-related.

tech-*i*: Why is this important for public service media?
MS: We feel strongly it's important to explore AI and to do so safely. If we try to block big tech from scraping our content to use in their solutions (which we do at SR), then it's natural to look for ways that we ourselves can offer these technologies and solutions – but, and this is the big PSM value, basing it solely on our own trustworthy journalism.

MXL is the new interoperability layer

Two things stood out at NAB 2025: the cloud is everywhere, and MXL – the Media eXchange Layer – has become the new focal point for interoperability. The EBU's **Frans de Jong** reports.

Abundant processing power, high-capacity networks, and cloud technologies have made software-based live production a reality. As the NAB 2025 exhibition floor in Las Vegas demonstrated, many software products for live production are now available. However, their interoperability remains limited and often relies on going back and forth via ST 2110 or other streaming video technologies such as SRT or NDI. This approach is inefficient in terms of processing power, energy consumption, and latency, and may necessitate compression where it is not desirable.

What is missing is a common way to share content 'in memory' – in other words, a common implementation of the Media eXchange Layer (MXL). The importance of this piece has already been highlighted in the EBU's Dynamic Media Facility (DMF) work – see issue 63 of tech-*i* magazine. What is new is that a concrete path towards a solution has now been created.

One day before NAB, the Linux Foundation announced its intention to create a Technical Project on MXL, aiming to develop an open-source software development kit that any implementer can use to share media in real-time (or faster) with other production software. This announcement was widely discussed throughout NAB, in business sessions, engineering talks, product demos, and customer conversations. The fact that key industry players on both the client side (BBC, CBC/Radio-Canada, Bell Media, Dome Productions, EBU, France Télévisions, NABA, Olympic Broadcasting Services, RTÉ, SRG SSR, SVT, SWR/ARD, VRT, and others) as well as solution providers (Appear, AWS, Grass Valley, Intel, Lawo, NVIDIA, Riedel Communications, Telos Alliance, etc.) support the initiative demonstrates a shared awareness of what is essential to move towards efficient, scalable software-based live production.

CODE FIRST

Industry veterans might expect a three-letter abbreviation in media technology to mean long committee discussions, heavy politics, and thick specifications. This is understandable, but is not the case here. The MXL approach is not only new in its topical focus; the 'code first' approach itself is also novel for our industry. Instead of word-smithing a specification, the MXL project will collaboratively develop code that *is* the solution.

This approach offers several benefits: testing the solution is central to the work, enabling quick iteration based on test results; documentation can largely be automatically generated from the code; and decisions between alternatives

Dematerialization

The word digitalization has been overused to describe many of the transitions our industry has undergone over the past decades – from analogue to digital tapes, tapes to files, PAL/SECAM to DVB, and linear broadcast to the internet. For Dynamic Media Facilities, use of the term is thus avoided as much as possible. The unique term used in the context of 'going software-based' is *dematerialization*. Contrary to its first connotation, the term is not about some magic out-of-body experience. Dematerialization refers to replacing hardware video processing with software-based alternatives. DMF implementations can run on-premises, in the public cloud, or in hybrid setups.

MXL was the focus of several demos and presentations at NAB 2025, for example (left to right) on the Grass Valley booth, at the SMPTE Technology Conference, and in Sony's on-booth theatre.

can be made pragmatically. By going code first, the project initiators expect to enable a fast path toward practical implementations.

This approach aligns well with the Linux Foundation's open-source culture (see page 17), which emphasizes technical minds working together to solve challenges with expertise – avoiding compromises imposed by more theoretical or distant viewpoints.

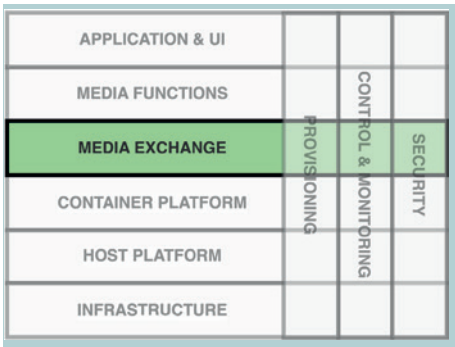
For those not involved in creating the solution, having existing code rather than a specification-only solution minimizes the risk of interoperability issues caused by differences in interpretation.

LITMUS TEST

The MXL project stems from work initiated in autumn 2024, when several EBU Members and vendors gathered to discuss how to make Dynamic Media Facilities a reality. From these meetings, a draft list of MXL requirements was created, and initial solution ideas were proposed by software developers. This 'tiger team' approach served as a quick reality check before launching a fully-fledged project.

The first concepts passed their litmus tests, as demonstrated by various NAB 2025 booth demos. The requirements and code will now form the basis of the Linux Foundation project. Importantly, the relationship between the two is crucial.

As with any serious engineering project (though not always easy to maintain), the MXL code will be a requirements-based solution – but these requirements will not be limited to high-level client-side business needs. Implementers can also contribute requirements, ensuring practical considerations are not overlooked.



DMF layered model

The Media eXchange Layer is defined in the DMF Reference Architecture (*see* https://tech.ebu.ch/dmf). It provides high-performance transport of media between different processes, which can run in separate containers or even on different nodes. Media can be compressed or uncompressed. Unlike ST 2110, media access is asynchronous, simplifying implementations and enabling faster-than-real-time processing. Timing information is preserved with the media, allowing retiming for output, such as rendering video.

MXL is part of the three top layers, which are industry specific, in contrast with the bottom three, which are generic and thus allow the media industry to benefit from the global IT industry – using COTS (commercial-off-the-shelf) components, such as the CPUs, GPUs, and RAM used in the Host Platform layer.

Similarly, the Container Platform layer includes Kubernetes for container orchestration. The vertical parts are relevant for all layers; they make sure the resources are available and configured (Provisioning), are healthy (Control & Monitoring), and are secure.

The last one is especially relevant as the same resources may be used by multiple parties. In DMF the base assumption is 'zero trust'.

MORE AT NTS 2025

This year's EBU Network Technology Seminar (NTS) will dedicate a large part of its programme to MXL, including education and demos. It is the easiest way to get up to speed with the project's details, either on-site or via the stream.

Join via: tech.ebu.ch/nts2025

The need for industry alignment

As François Legrand (CBC/Radio-Canada) referred to in a business panel during NAB 2025, there are many media functions available in current products. The broadcaster published a tender and, among the responses, counted 12 vendors that were together already providing 170 different functions. But these do not share a single platform. Actually, three vendors provide their own platforms, which the other nine vendors do not support! Some vendors even exclude specific other platforms.

This fragmentation and lack of interoperability stands in the way of efficient scalability and being able to combine different tools in a single operation. The DMF work identifies gaps that prevent multi-vendor systems from becoming a reality. The MXL work addresses the interoperability aspect as far as media exchange is concerned.

RTÉ's strategic transformation charts a new direction on new technological terrain

With the EBU Technology & Innovation Summit hosted by RTÉ in Dublin this month, Head of Technology Infrastructure **Brian Wynne** describes how technology is supporting the Irish broadcaster's 2025–2029 strategy, titled New Direction.

As media evolves faster than ever, many public service media (PSM) organizations are facing the same fundamental challenge: how to stay true to their public mission while navigating the constantly shifting landscape. RTÉ's 2025–2029 strategy, New Direction, offers a confident answer, one that places storytelling at the core, powered by the systems needed to deliver it anywhere, anytime.

Under this strategy, content is the map – it guides, inspires, and shapes the path. Content decisions determine what matters, which stories are worth telling, whose voices are elevated, and what role RTÉ plays for its audience, and in turn, the content strategy influences technology development.

Technology is the terrain, the environment through which content must travel, the network of systems that enables every story to be created, moved and scaled to reach its audience.

It is this combination of content strategy and technology development that establishes a forward-looking foundation for the creation and distribution of public service content.

RTÉ's new LED wall studio offers high production values and a fast turnaround for multiple formats, from politics to sport and beyond

CREATIVE COMPASS

At the heart of RTÉ's new direction is a bold creative vision. RTÉ has committed to increasing production with the independent sector, delivering 60 hours of original Irish drama and comedy by 2028, while focusing on regional investment and cultural initiatives. These initiatives are the creative coordinates marking out where RTÉ is going and why. But even the best map is useless if we don't have the ability to move through the landscape it describes.

While content defines the route, it is technology that allows RTÉ to walk it and to do so with speed, scale and resilience. Several flagship projects are now defining RTÉ's future media terrain.

ORION: THE LIVE BACKBONE

Orion is RTÉ's state-of-the-art ST 2110 IP-based media network. It replaces traditional infrastructure with a real-time, high-capacity IP backbone that supports live video production across the organization.

It is robust, agile, and future-proof; Orion provides the stable foundation that will power RTÉ's path ahead. Designed and built so that it can scale over time, it allows us to move our infrastructure from SDI to IP incrementally, as budgets and refresh cycles allow.

AURORA: ARCHIVE & ENGINE

Aurora is our decentralized, high-capacity object data storage platform, built for resilience, accessibility, and growth. It houses RTÉ's creative output and decades of archival material, instantly retrievable.

Aurora will soon be RTÉ's central creative hub, providing low-cost, high-capacity storage for all parts of the company. In addition to storing the archive

RTÉ's headquarters are just outside the city centre in Dublin

that defines our past, it will also be a key enabler for the production workflows that shape our future.

Built on Aurora, One Media Share will enable collaboration between RTÉ's creative teams. It will seamlessly connect production teams, archives and digital platforms enabling real-time access, collaboration, and content sharing across RTÉ.

These are the tools and infrastructure that will power real-time collaboration and content flow, ensuring RTÉ's creative journey is agile, connected, and fast-moving.

ALREADY IN MOTION

RTÉ isn't waiting for the future to arrive. While the above projects are currently being rolled out, the transformation journey has been under way for several years now.

By investing in new LED wall virtual studios we've enabled multi-format, modern production methods. Keeping the set elements light in these studios makes them 'fast turnaround', allowing us to produce multiple different formats from the same studio in a far shorter time than traditional studios – and all of this while maintaining production values and without compromising on the unique look and feel of each programme.

We also have a new suite of visual radio studios that are extending radio output to television, online and social platforms. Content initially produced for radio can now be utilized on other platforms, allowing us to make better use of our existing resources. Similarly, a developing podcast strategy is reaching new audiences with serialized, on-demand storytelling and more visual content.

Across the organization, new production models are being conceived to support decentralized and agile content creation. As RTÉ builds these new production models to support more sustainable, cost-effective storytelling, emerging technologies like artificial intelligence offer new opportunities to enhance productivity. AI-enabled tools, from metadata tagging to automated workflows, will accelerate content discovery, streamline production processes, and unlock more creative time for teams. In the evolving terrain, AI will become a vital companion on the creative journey.

THE POWER OF THE PLAYERS

The RTÉ Player is central to this journey. It is no longer just a companion to traditional broadcast; it is rapidly becoming the primary destination for Irish audiences seeking on-demand, high-quality video content. In 2024, the RTÉ Player achieved a record-breaking 42% growth in streams, reaching 142 million views across television and digital platforms. By 2029, half of all non-live video content will debut first on the RTÉ Player, as part of a massive expansion in on-demand hours.

Alongside this, the RTÉ Radio Player will continue to transform how audiences access and experience audio content. Live radio, podcasts, and on-demand audio services are available across multiple devices, reflecting the same shift toward personalized, anytime access in the audio space.

The surge in usage across both platforms reflects a fundamental change in audience behaviour, from scheduled television and radio listening to personalized, on-demand engagement. This transformation is not just about convenience, it is about meeting audiences where they are, on their terms, while continuing to deliver rich, trusted storytelling.

In our evolving media terrain, the RTÉ Player and RTÉ Radio Player are not simply digital add-ons, they are the highways that connect RTÉ's creative map to its audience, offering seamless access to video and audio content, driving deeper engagement, and creating new opportunities for innovation in how stories are told and shared. The success of the players is based on ongoing investment, platform enhancement, and a relentless focus on user experience.

JOURNEY AHEAD

RTÉ's New Direction is more than a strategy – it is a reorientation of the broadcast business, built on the understanding that content alone is not enough, and neither is technology. It is their relationship, supported by new, more efficient production models, that truly matters. Content sets the path, technology enables the journey, and innovation can ensure it is sustainable and cost-effective. While the map sets RTÉ's direction, the terrain makes it possible to deliver it into the lives of audiences everywhere.

RTÉ's journey is guided by one constant: placing the audience at the heart of every story, on every platform.

OGraf: defining the future of broadcast graphics

Niels Borg (TV 2, Denmark), chair of the EBU working group on HTML Graphics, introduces a project to define a new open specification for multi-platform delivery and rendering of graphics.

Broadcast graphics – lower-thirds, over-the-shoulders, and more – are well-established and fundamental elements of video production. Yet even mature technologies can create recurring challenges, particularly as broadcasters move towards multi-platform distribution. The EBU's OGraf project aims to address these issues head-on by developing a definitive, open specification for the delivery and rendering of graphics across diverse media environments.

Driven by the EBU HTML Graphics working group, OGraf takes a modular, technology-agnostic approach to video graphics, ensuring compatibility, adaptability, and long-term sustainability. The draft specification and supporting materials are publicly available via GitHub (https://github.com/ebu/ograf), where broadcasters, developers, and vendors are encouraged to review the work and contribute feedback.

NEED FOR MODULARITY

As broadcasters expand from traditional channels into digital platforms, streaming services, and interactive media, the need for modular and flexible workflows has become critical. Many graphics systems remain tied to proprietary end-to-end solutions, limiting broadcasters' ability to innovate, integrate new tools, or maintain consistency across platforms.

OGraf aims to solve this problem. Its goal is to define a standard way to create and describe graphics so that they can be rendered consistently in any compatible system, whether in a live control room or in post-production editing suites. By decoupling creation, control, and rendering, OGraf gives broadcasters the freedom to mix and match tools that best fit their operational and creative needs.

MODERN WEB STANDARDS

Ograf is built on widely adopted web technologies, particularly HTML5 and web components. This ensures that OGraf graphics can be easily integrated into existing systems, lowering barriers for both development and deployment.

The use of web components allows developers to build encapsulated, reusable custom elements, making OGraf graphics highly modular and adaptable. This means graphics packages can be tailored for different workflows without compromising interoperability.

Importantly, OGraf also supports vendor-specific extensions, enabling system providers to add proprietary enhancements without undermining the specification. This balance between openness and customization is crucial for fostering both innovation and broad adoption.

The current draft of OGraf offers a set of compelling features designed to meet broadcasters' real-world needs:

- Single, open format: a unified, HTML-based specification for both live broadcast and rendered video graphics.
- Modular workflow: individual components can be replaced or upgraded without disrupting the overall system.
- Universal delivery: graphics can be rendered across traditional broadcast, web platforms, editing software, streaming services, and interactive applications.
- Interactive-ready: enables audience engagement through user-interactive graphics across devices.
- Flexible API framework: as part of a future release, would support seamless integration of OGraf-compliant controllers, servers, and renderers, whether commercial or open source.

In an increasingly complex media landscape, OGraf offers a path toward simpler, more flexible, and future-proof graphics solutions.

GET INVOLVED

The project is still evolving. The latest specification draft, comprehensive workflow descriptions, sample graphics, developer toolkits, and logos for software integration can be found in the OGraf repository on GitHub. A short demonstration of the concept is available here: https://tinyurl.com/html-graphics Broadcasters, vendors, and developers are encouraged to explore the resources, join the discussion, and contribute feedback via the EBU working group: https://tech.ebu.ch/groups/html_graphics

Ensuring reliable streaming in a volatile CDN market

Members are facing growing challenges in delivering to audiences online, writes **Paul Tweedy** (BBC), who leads the EBU Broadband Distribution Architectures group.

As more people turn to the internet for news, entertainment, and live events, we rely on content delivery networks (CDNs) to deliver high-quality streaming at scale, as we have since streaming began in the late 90s. However, recent changes in the CDN market could impact the affordability, reliability, and flexibility of online content delivery.

CDNs operate by distributing digital media through networks of servers positioned close to end users. Running and expanding these networks to meet customer demand is becoming more expensive. Rising infrastructure costs, supply chain delays, and higher energy prices are squeezing CDN providers' profit margins, while their customers continue to demand lower prices. For broadcasters, CDNs are particularly important for delivering valuable live events that attract huge audiences, often in bandwidth-hungry UHD; but this means CDN providers need to maintain infrastructure than can handle those peaks but is otherwise greatly underused.

MARKET VOLATILITY

There is thus an imbalance between the infrastructure investments required to fulfil the traffic peaks and the commercial returns for providers. This has led to market volatility and consolidation, where providers have been acquired, undergone bankruptcy, or simply exited the CDN market to concentrate on other business. Furthermore, earnings calls indicate that many established providers see overall revenue from content delivery alone decreasing and are relying on more profitable products such as security and cloud services.

For PSM organizations, these changes present several risks.

Nathalie Mastail-Hirosawa

Paul Tweedy spoke on this topic at HORIZONS 2025. The presentations are available to EBU Members via: https://tech.ebu.ch/horizons2025

Having fewer providers could lead to reduced competition, rising prices, and less available capacity. Broadcasters may also find themselves locked into long-term contracts with large, global companies whose priorities may not align with local public service goals or European regulations. A provider exiting the market or changing its focus can lead to broadcasters facing decreasing quality of service or needing to migrate to new providers at short notice – an expensive, complex and risky undertaking.

Within the EBU, the Broadband Distribution Architectures (BDA) working group evaluates CDN market trends and new approaches to content delivery, producing research and best-practice guidance, all based on EBU Member experiences. (New participants are always welcome – *see* https://tech.ebu.ch/groups/bda.)

SOLUTIONS FOR PSM

To navigate this uncertain environment, we advise adopting a more diversified and resilient content delivery strategy, for example, considering a multi-CDN approach where possible. Working with multiple CDN providers provides a safety net in case one service disappears or suffers poor performance or a reduction in capacity. While this increases operational complexity and cost, it improves resilience and reduces the risk of outages, especially during high-traffic events like live sports .

Also important is building collaborative relationships with local internet service providers (ISPs). By aligning distribution strategies with the ISPs that deliver our content to end users, broadcasters can improve performance and ensure more efficient use of end-to-end network capacity, with better traffic management and clearer understanding of potential bottlenecks.

Some EBU Members (SVT, BBC, RTÉ) have followed the Netflix Open Connect model, building private CDNs to serve content directly to users within their home territories, sometimes alongside commercial CDNs in a multi-CDN model. While resource-intensive, this approach provides greater control, reduces reliance on commercial providers, and can lower long-term costs. However, it requires significant technical expertise and a long-term commitment. In this shifting landscape, the key for PSM is to diversify delivery methods, reduce dependency on single providers, and invest in strategies that ensure long-term resilience, affordability, and control.

CDN procurement guidance

The EBU recommendation on the procurement of interoperable CDNs, R 159, was revised and updated in January 2025. It provides valuable guidance for both broadcasters and CDN providers when it comes to procurement processes. *See*: https://tech.ebu.ch/r159

High five: EBU groups team up to address speech intelligibility

Werner Bleisteiner, co-chair of the EBU Audio Systems group, raises the dialogue level on a transversal workshop hosted by BBC R&D in London with participation from five EBU working groups.

More and more, broadcast technology topics break traditional silos. Take speech intelligibility (SI), tackled from various angles by five EBU groups: Audio Systems (AS), Personalized Sound Experiences (PSE), Media Access Technology (MAT), Quality Control (QC), and Access Services Experts (ASE). All five met recently for a joint transversal workshop at BBC R&D, London.

"Why broadcast speech intelligibility matters". A 'title as statement' from RNID* Technology Lead Lauren Ward kicked off the workshop: some 20% of people in all countries are affected by hearing loss. And it's not just anecdotal evidence but also media intelligence telling us that subtitles are left constantly switched on. So, what's wrong with the audio?

Undoubtedly, since the introduction of digital production technology, audio mixes have become complex: there's more music, more foleys, lots of effects, and more 'naturalism' in speech, whereby directors want mumbling rather than stage-like pronunciation. That might be fine as artistic intent, but where should the line be drawn? And what can be done so that all in the audience can understand and enjoy what's being said?

The first day featured four blocks, with top experts to provide input:

1. Research – Trevor Cox (University of Salford) introduced the UK's Clarity Project, applying AI to simulate and predict hearing and hearing-aid processing, while Hannah Baumgartner (Fraunhofer IDMT) demonstrated ways to measure SI, now to be applied in audio production tools.

Hannah Baumgartner (Fraunhofer IDMT) on measuring speech intelligibility

2. Requirements – Cathy Taylor (Ofcom) presented the UK regulator's view (significantly, SI had already been on the UK parliament's agenda). Kieran Lynch (IADT) provided the background to an EBU report on audio description dip levels (TR 084). Max Kiefer (WDR) explained ARD's *Klare Sprache* (clear speech), a 24/7 additional audio stream for DVB broadcasting. Thomas Lund (Genelec), well known for his profound contributions to EBU R 128, enlightened us on the relationship between auditory perception and loudness.
3. Broadcast workflows – renowned sound engineer Tony Churnside (BBC) demoed stunning acoustical illusions. Focusing on audio description, Philip Klenk (SWR) and Nigel Megitt (BBC), co-chairs of the EBU MAT group, explained the differences in workflow and technologies applied for "broadcast mix" and "receiver mix". Alan Archer-Boyd and Lawrence Pardoe recapped BBC R&D's manifold work on dialogue enhancement.
4. Object-based audio – BBC's Dave Marston (PSE chair), as a major figure behind ADM (the widely adopted metadata scheme, standardized by the ITU), gave a crash course. Jacob Smith (Dolby) and Daniela Rieger (Fraunhofer IIS) explained how ADM and S-ADM have become essential for producing adaptive and personalized audio experiences for AC-4 and MPEG-H. Scott Kramer and Iroro Orife outlined how they drive SI a tick further at Netflix. Finally, Andrew Dunne (BBC), as chair of the EBU QC group, discussed aspects for quality control.

On day two, three groups – SI, AD, QC – of each five to seven people, elaborated approaches for solutions, touring the demo stations and questioning the experts. To wrap it all up, there was a one-hour open discussion.

The common basic finding was that an object-based production approach with ADM – with speech elements kept separate from ambience, music and fx – is the ideal approach to tackle any downstream requirements and flexibly deliver better SI and AD. There is an urge to move forward in production practice, which needs to be reinforced through deliverable specifications.

To wrap up, members of the five EBU groups gathered to recap and brainstorm with fresh memories about takeaways and joint actions. Quite a few bullet points…

EBU Members can access the slides and videos here: https://tech.ebu.ch/si-workshop-2025

** The national hearing loss charity in the UK*

Sustainability Summit 2025: understanding the full impacts of using generative AI

At the 2025 EBU Sustainability Summit, held online on 10 April, among the most pressing and complex topics to be covered was the environmental impact of artificial intelligence (AI). BBC's Natasha Westland moderated a discussion involving journalist Payal Dhar, sustainability consultant Cedric Lejeune, Frans Melissen of Breda University, and BBC R&D's lead for sustainable engineering Mohit Arora.

The discussion opened with a consensus that AI's environmental footprint is vast and often invisible. "We've all seen papers about the huge expansion of data centres," said Cedric Lejeune, highlighting the dual concerns of energy and water consumption. But perhaps even more troubling, he added, is how difficult it still is to evaluate the actual impact due to opaque cloud infrastructure.

Mohit Arora echoed this frustration, pointing to the lack of reliable data from generative AI providers. "You don't really have a clear answer," he said. "So in the end, the answer comes to the responsible use of AI." He called for collective industry efforts to demand transparency and create shared frameworks for impact measurement.

But as Frans Melissen emphasized, direct environmental concerns are only one part of the story. He urged the audience to consider the systemic effects of generative AI, particularly its potential to reinforce outdated paradigms. "If we're not very careful, we might run into the trap of [AI systems] replicating conventional economic and environmental paradigms rather than challenging them." This would be a step backwards from a sustainability perspective, he said.

Payal Dhar brought a social lens to the discussion, warning that sustainability cannot exist in an unequal world. She also raised concerns about the public's understanding of AI, noting that many users don't distinguish between search engines and generative AI tools. "There is a lot of education required for people to actually understand what happens when you're asking ChatGPT a question," she said.

The panellists, as seen during the Sustainability Summit (clockwise from top left) Payal Dhar, Cedric Lejeune, Mohit Arora and Frans Melissen

The panel also explored the rebound effects and ethical dilemmas of automation. Cedric Lejeune offered a sobering comparison: one could imagine using AI tools to replace, say, three people doing editing in front of a desk in an office. If that AI is processed in a low-carbon data centre, the result might be lower overall emissions – but at the cost of employment. "The question is what do we want to achieve as a society?"

In a more optimistic tone, he noted that model efficiency is improving rapidly. "We had 20 times less footprint for the same performance" with recent AI models, Lejeune said, citing Microsoft's decision to pause data centre expansion as a positive sign.

Still, Mohit Arora reminded the audience that efficiency gains in training the AI models don't account the energy used when people interact with AI. "The device is at the end, so the use at home is the largest energy footprint hot spot," he explained, noting that this often-overlooked area, and the related energy impact on telecoms networks could, when scaled globally, rival training energy costs.

In closing, the panellists issued a call to action. Payal Dhar likened big tech's use of public data to "Nestlé bottling water and selling it back to locals," urging people to consider the entire lifecycle of AI technologies. Frans Melissen summed it up succinctly: "In the long term, it really is all about how we decide to integrate GenAI into our society."

As the conversation made clear, AI is not inherently good or bad – but understanding its full impact is essential to ensuring a just and sustainable digital future.

The presentations from the EBU Sustainability Summit 2025 are available at: https://tech.ebu.ch/sustainability2025

The first draft of this article was generated by ChatGPT, based on GPT-4-turbo, using a transcript of the discussion. The text was edited and cross-checked by Eoghan O'Sullivan.

Embracing change at DR: modernizing platforms for a flexible future

Aino Olsen, CTO and head of DR Technology, a core department at Danmarks Radio (DR), plays a central role in shaping how DR connects with audiences across Denmark. Here she highlights the major changes and opportunities currently facing DR Technology.

As CTO in DR, being ready for change is part of the job – and right now, that readiness is more important than ever. I often ask myself: how do we ensure that DR Technology stays agile and keeps evolving alongside the rapid shifts shaping the media industry?

For DR Technology, this moment brings renewed focus on strengthening and modernizing our technological foundation. It marks the beginning of a new chapter, one guided by our Technology Vision, a strategic roadmap we have developed to ensure we move forward together, with a clear sense of purpose.

DR's Technology Vision is built around four key tracks: creating a modern IT organization, simplifying the system landscape, developing future-proof infrastructure, and ensuring robust and secure operations. We believe these four tracks are essential enablers for both stable operations and innovation, and while focused on operational stability, they also support continuous innovation in an evolving organization. Together, these efforts build on our Technology Vision's motto of "*stable operations that last, digital innovation that transforms*", a vision we are closely following as we modernize and simplify our core production infrastructure.

STARTING WITH RADIO

A lot has changed since our beginnings in April 1925 – 100 years ago – when we started broadcasting radio. We are currently transitioning from a fragmented and vendor-dependent radio production setup towards a unified, highly adaptable platform. Traditionally, our three separate radio production systems have been complex, rigidly interconnected, and heavily reliant on vendor-specific technologies. Now, our ambition is clear: merging these into a single, modular solution designed for maximum adaptability.

This initiative is not just about simplification. It is the foundational step in modernizing our entire production chain. We have successfully transformed distribution platforms like DRTV, dr.dk, and DR Sounds, and it is time to bring that digital innovation deeper into our production processes.

Radio, as DR's oldest media, presents an ideal starting point. This is partly due to its existing technical debt, but also because its highly automated workflows, often operated by editorial staff, will benefit greatly from modern user interfaces built on a redesigned data architecture. However, the journey is not without challenges. DR's radio production workflows are rooted in decades of technical expertise and routines. Modernizing these entrenched practices requires careful consideration and significant user involvement to ensure that new solutions meet the demands of our teams. But because we know that standing still is not an option, we are committed to making constant evolution to the new standard.

Aino Olsen, Chief Technology Officer, DR

MEDIA ARCHIVE

The modernization of our media archive is also an integral component of DR Technology's digital transformation. As we upgrade our radio platforms, modernizing the archive will support our vision of a connected digital ecosystem, leveraging advanced data management and production content. Our media archive, which was built over two decades ago, is a tightly coupled and hardware-heavy system that plays a central role in production workflows. However, its outdated architecture limits flexibility, making innovation slow and complex. We are now rethinking both the archive's role and structure, aiming to decouple systems and functions so they can evolve independently. By redefining interfaces and aligning with business needs across DR, we can ensure the archive supports, not restricts, modern content creation, data workflows, and future AI integration.

At DR Technology, the future we envision is not defined by rigid old practices, but by a flexible, digital approach rooted in our strategic vision. It is a journey I believe many media organizations in other countries have already been through, or are currently embarking on, which is why I hope our experiences at DR can offer insight and inspiration to others navigating similar change.

Expanding the open source ecosystem for European digital sovereignty

The EBU is partnering with the Linux Foundation on the development of a key enabler for future media production. **Gabriele Columbro**, General Manager of Linux Foundation Europe, explains how the MXL project fits into the wider picture.

Launched in 2022, Linux Foundation Europe (LF Europe) extends the Linux Foundation's proven model of open collaboration to meet the unique needs of European stakeholders. As a neutral, trusted home for open source projects, we provide a governance framework that enables public and private sector actors to co-develop digital infrastructure aligned with European values like interoperability and digital sovereignty, while keeping open source global in the worldwide ecosystem of projects fostered by the Linux Foundation.

Europe is at a critical juncture. As technologies evolve rapidly, ensuring alignment with democratic principles, privacy protections, and sustainability goals requires an approach rooted in openness and transparency. Our team at LF Europe is working to help realize this vision, by building communities, fostering innovation, and driving long-term investment in open technologies.

At LF Europe, we don't simply support projects – we build ecosystems. As the Linux Foundation's Executive Director Jim Zemlin has put it, we take a "portfolio approach" to open source innovation. Rather than backing isolated efforts, we foster interrelated global communities that build upon one another, creating compounding value over time.

LF Europe is a key regional expression of this broader Linux Foundation strategy. Flagship efforts including:

- Sylva, supporting telecom modernization;
- OpenWallet Foundation, driving open interoperable digital wallets engines;

Gabriele Columbro, General Manager, Linux Foundation Europe

- and NeoNephos, the first open source outcome of the IPCEI-CIS* European Commission investment in a sovereign cloud-edge continuum.

These are examples of LF Europe investing in projects that deliver real-world impact while supporting European technology on the global stage in strategic digital domains.

MEDIA EXCHANGE LAYER

One of the more exciting open source projects recently announced by the Linux Foundation is the Media eXchange Layer project (MXL). First introduced in March, MXL is a collaborative initiative – driven by many stakeholders, notably the EBU and NABA – to create open source software for the real-time, in-memory exchange of video, audio, and metadata across software-defined media workflows.

As the media industry transitions toward virtualized and containerized production environments, we need a global approach to shaping the technical and governance foundations that will support this future. MXL represents a clear opportunity for European organizations to play a leading role in next-generation media infrastructure and help set open, interoperable standards for the entire industry. (See pages 8–9.)

At LF Europe, we see open source not just as a licensing model, but as a lever for sovereignty, competitiveness, and resilience. Our mission is to empower global stakeholders to invest in and lead Europe-strong open source initiatives that reflect shared policy goals and long-term digital priorities.

We invite organizations across Europe and beyond to engage with us – to contribute, collaborate, and lead the development of the next generation of open digital infrastructure. Together, we can ensure that Europe continues to be a global leader not only in technological innovation but in the values that shape how technology is built and shared.

For more information, visit: https://linuxfoundation.eu/

* Important Projects of Common European Interest, Cloud Infrastructure and Services

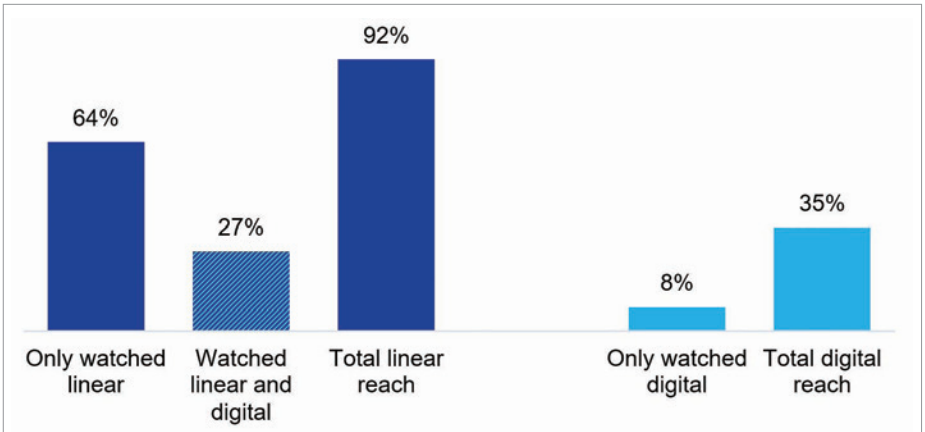
How streaming is changing the European sports media landscape

Will Davies shares some findings from a new EBU Media Intelligence Service report on how the global streaming platforms are using the acquisition of sports rights as a way to grow in an ever more competitive market.

Streaming now dominants the way audiences across Europe consume video content, encompassing subscription video-on-demand services (SVOD), broadcast VOD (BVOD), free ad-supported streaming television (FAST), and free social video platforms such as YouTube. Although live sports is considered one of the last bastions of appointment-to-view linear television, the global streaming platforms are increasingly turning their attention to acquiring sports rights in Europe, as a way to grow in an ever more saturated and competitive market.

Premium sports, such as American football, have been used by the global streaming platforms to increase their subscriber numbers in the USA. Data from Antenna reveals that an exclusive broadcast of an NFL AFC Wildcard football match resulted in 3 million sign-ups to Peacock, while their Olympic Games coverage is estimated to have accounted for 2.8 million new subscribers. Furthermore, the entrance of Netflix, Amazon Prime Video and YouTube has contributed to a significant increase in the value of the NFL domestic rights in the USA, up over 125% across the past 10 years.

Women's sport, hours broadcast (left) versus hours viewed (right); UK, 2024
Source: Women's Sports Trust. Free To Air: BBC, ITV. Pay TV: Sky Sports, TNT Sports, Eurosport



Paris Olympic Games, linear and digital reach, France; live competition followers on a screen Source: Arcom

GLOBAL VS. LOCAL

Europe has already seen a profound change in the sports media rights landscape, with SVOD platforms now accounting for approximately 20% of the spend on rights, dominated by DAZN and, to a lesser extent, Amazon Prime Video. However, the other global streaming platforms are also increasing the hours of sports content on their services for European audiences. Netflix has taken a global approach with its 10-year deal with WWE to broadcast the weekly Monday Night Raw wrestling, while Disney+ has a more tailored local strategy, securing the rights to the UEFA Europa League and UEFA Conference League football in Denmark and Sweden.

However, acquiring sports rights is not necessarily a silver bullet for streaming platforms seeking growth. Ampere Analysis's consumer survey tells us that willingness to pay to watch sports among fans in Europe is relatively low outside of the top-tier domestic football leagues. For the most popular sport outside of football, Formula 1, less than 10% of sports fans in Europe say they would pay to watch it.

Public service media sports coverage continues to drive live audiences, especially for emerging sports and the big global and national events. For example, despite broadcasting less than 8% of the total hours of women's sport in the UK in 2024, free-to-air coverage from BBC and ITV accounted for 61% of total viewing time. However, what is becoming increasingly clear for PSM is that, if they want to reach all audiences, linear broadcasts must be complemented with digital coverage – 8% of the total Paris Olympic Games audience in France only consumed content on digital platforms.

Sources: Ampere Analysis, Antenna, Dataxis, Women's Sports Trust, Arcom

EBU T&I videos on demand

A selection of recent additions to our rich library of videos from EBU Technology & Innovation events, available from our website and the tech-*i* app (https://tech-i.ch/download.html).

Prominence/findability rules – a game changer for public service media?

Renate Dorr (ZDF)

A stand-out presentation from HORIZONS 2025 on why regulatory efforts are falling short

How to set up a DVB-I service list with all necessary components

Gordon Maynard (OnScreen Publishing)

A valuable tutorial for DVB-I implementers

Building a sustainable public service media company

Athena Trastelis (CBC/Radio-Canada)

From this year's EBU Sustainability Summit

IN THE SPOTLIGHT

Thomas Palmkvist

Video Lead and IT Architect, SVT, Sweden

What are your current responsibilities?
I wear several hats: I am a project manager/IT architect at a strategic level, as well as a member of the EBU T&I Think Tank, where I try to bring fresh perspectives, together with my colleagues. Primarily, I work as head of the Video value stream, a cross-functional collaboration from production to playback with a focus on creating user value in the field of video. My mission is to ensure that a vision and goals are in place, and to create relationships and alignment throughout the entire organization to make it easier and more fun – which also implies more efficient – to work towards SVT's strategic and long-term goals.

What do you consider as your finest achievement so far in your career?
My superpower is to bring people together and create a sense of clarity on complex and challenging issues. I am most excited about having created a shared vision of the video experience, throughout the video chain from commissioners to developers, that appeals to the viewer, but also efficient for us. When I started in my role, we were all moving in different directions, now we have a vision around which we can rally and support content makers' ambitions for success.

What are your predictions for media technology in the future?
It will be increasingly difficult to determine whether a video is genuine or not. Currently, it is possible to identify AI-generated content, but within five years there is a risk that we will not be able to do so. How do we ensure that a video is genuine? Should we be as critical of a video as we are of a text? Historically, we have reasoned that if it's on video, it's true, but now it can be generated. This is particularly dangerous when tiny alterations are made to authentic content, changing the context of an entire clip.

What, for you, are the biggest challenges for EBU Members today?
Relevance. We need to become more agile to respond to new needs and stay relevant. This means taking tough decisions and working in new ways that are different from what we are used to. We need to learn more from each other, both within and beyond our companies. I believe IT development and traditional production need to come together to do this, and I believe the EBU has the tools to help us join forces in areas where we can't fight alone.

Tell us about some of your interests away from the workplace.
I am a doer and an 'experience junkie', so I always have some kind of project going on or an experience I long for. Right now, I'm counting the days until my family's next adventure, this time to Japan, where we will eat and drink well and try to explore as much as our bodies can carry us. Also, we have just moved, so a lot of time is spent building our home for the future.

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