Press Release

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IBC 2023: German DVB-I Pilot starts Phase 2

Unifying the broadcast and streaming experience for all screens – "German DVB-I Pilot" is paving the way

Amsterdam, 12 September 2023

"German DVB-I Pilot" confirms performance of the technology and wins IBC Special Award 2023 for Innovation

Last year, stakeholders from the media industry – including broadcasters, device manufacturers, software providers and research institutions – launched the "German DVB-I Pilot". The successful Phase 1, in which a comprehensive proof-of-concept was realized from September 2022 to March 2023, confirmed the performance of the technology. The report can be viewed at https://dvb-i.tv/services/. The success of the project will be recognized with the renowned IBC Special Award 2023 for Innovation, to be presented during a ceremony in Amsterdam on 17 September.

The rapidly evolving media landscape is challenging TV broadcasting with fundamental changes. In a period when video usage is increasingly Internet-based and global platforms are gaining influence in an ever more fragmented TV market, findability, new forms of media consumption, and easy access to streaming offerings are becoming more and more important. Changes in traditional broadcasting, for example discussions around UHF spectrum for terrestrial TV, changes in satellite transponders or the discontinuation of the ancillary cost privilege for German cable customers* are further topics. DVB-I provides a means of closing the gap between broadcast and broadband and offers a technical solution to the changing requirements of the TV market.

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Fergal Ringrose, Jury Chair of the IBC Innovation Awards 2023, says: "The various stakeholders in Germany chose to embark on this ambitious pilot project, testing DVB-I as a potential solution to the challenge of preparing for the future shift to pure internet-based distribution of television programming. In large thanks to the German DVB-I Pilot the DVB-I standard has made enormous progress in recent months, creating the opportunity for an open and horizontal TV market in the process of digital transformation."

Remo Vogel (rbb), project manager of the "German DVB-I Pilot", says: "The extremely positive results of phase 1, the constructive cooperation in the pilot and, not least, winning the IBC Special Award 2023 for Innovation motivate us for the upcoming tasks. The market maturity of DVB-I has made enormous progress in the past months and our pilot initiative was able to contribute a lot to this. The cooperation with other European partners is very essential for us. Together with the Mediaset driven Italian trial we are defining a common profile to harmonize requirements for receiver manufacturers.

Phase 2 starts at IBC

At IBC2023, the "German DVB-I Pilot" will start Phase 2, which builds on the successes of Phase 1. Phase 2 will intensively address open questions and requirements to enable the foundations for a market launch of DVB-I in Germany. The key points of this phase are:

- Defining a technical-organizational entity for the central provision of a DVB-I service list in Germany.
- The implementation of the public value recommendation of the German state media authorities as well as server-side regionalization based on the postal codes of the distribution areas.
- The expansion of DRM (digital rights management) and subscription services to enable business models for private TV providers.
- The implementation of addressable TV technologies for the delivery of individual content via streaming.
- The development of strategies for providing DVB-I clients as apps for Smart TVs, set-top boxes, streaming sticks and mobile devices.
- Evaluation of new use cases for playlists, pop-up channels, media library deeplinks in content guides, etc.
- The investigation of possible concepts for audience measurement and personalization.

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Test scenario and roadmap pave the way to market maturity

Phase 2 will create a stable test scenario for device manufacturers and software companies according to a common basic technical profile. For manufacturers, Phase 2 will enable them to test their product development in a realistic environment and help shape market maturity. In parallel, a roadmap for a market launch will be developed.

Demos at the IBC Show 2023

During the IBC Show 2023, the "German DVB-I Pilot" will be a partner at the EBU booth (10.D21) in hall 10 and at the stand of the DVB Project (1.B73) in hall 1. At the EBU booth, bmt, WDR and ZDF will demonstrate dynamic service-list generation according to the public value recommendation of the German State Media Authorities and server-side regionalization of selected distribution areas as well as new offers such as playlists, box sets and pop-up channels. At the booth of the DVB Project, comprehensive demos of the DVB-I pilot projects in Europe will be shown and information on details of the German pilot will be provided.

* A provision in Germany that allows property owners to pass cable TV and internet costs on to tenants as an ancillary cost. It will be discontinued in 2024.

End

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About the DVB-I Pilot Germany

In the scope of the "German DVB-I Pilot", a common view on the technical functions (proof-of-concept) of the standard and the associated opportunities and challenges was realized from September 2022 to March 2023. Alongside this, a future scenario was developed how a complete DVB-I ecosystem could look. The following 21 broadcasters, companies and organizations are involved in the "German DVB Pilot": ARD, Bayerische Medien Technik, Dolby, DVB, EBU, Fraunhofer FOKUS, LG, Media Broadcast, MIT-xperts, OnScreen Publishing, ProSiebenSat.1 Media, rbb, RTL Deutschland, SES, Sofia Digital, Sony, TARA Systems, TP Vision, Vestel, WDR and ZDF.

Website

https://dvb-i.tv/services/#germany

https://www.bmt-online.de/en/organization/#downloads

About the participants of the German DVB-I Pilot

ARD Arbeitsgemeinschaft der öffentlich-rechtlichen Rundfunkanstalten der Bundesrepublik Deutschland) ARD stands for "Association of Public Broadcasting Corporations in the Federal Republic of Germany". This consortium includes nine self-governing regional broadcasters serving Germany's 16 federal states and airing

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Bayerische Medien Technik GmbH

Bayerische Medien Technik GmbH (bmt) was founded in 1994 as a subsidiary of the Bavarian Regulatory Authority for Commercial Broadcasting (BLM) and the Bavarian Broadcasting Corporation (BR). Its work focuses on software developments (apps, HbbTV, TPEG products) and services (TV playout, FM transmitter network operation, frequency measurements) for private radio and television companies in Bavaria. Through a multitude of projects in the distribution of audio and video services for all partners of the dual broadcasting system, bmt has built up comprehensive expertise in the digital media sector.

www.bmt-online.de

Dolby Laboratories

Headquartered in San Francisco, Dolby Laboratories has offices around the world. From movies and series to apps, music, sports and gaming, Dolby transforms the science of sight and sound into spectacular experiences for billions of people worldwide. Dolby works with artists, storytellers, developers and businesses to revolutionise entertainment and communication through Dolby Atmos, Dolby Vision, Dolby Cinema and Dolby.io.

Fraunhofer FOKUS conducts research on digital transformation and its impact on economics, technology, and our society. For this purpose, FOKUS offers research services ranging from requirements analysis to consulting, feasibility studies, technology development right up to prototypes and pilots. The FOKUS Business Unit for Future Applications and Media (FAME) develops future technologies in the domain of AI and Deep Learning for Media, Multiscreen Applications, Internet delivered Media and Personalization. Moreover, FAME is an active member and contributor in various standardization bodies, especially HbbTV, W3C, MPEG-DASH and CTA. www.fokus.fraunhofer.de/fame

OnScreen Publishing (OSP) is a consultancy and software developer specialising in DVB-I applications. OSP has developed a unique end to end DVB-I platform including all metadata types plus client apps for HbbTV, Android and Apple devices. This platform is ideal for DVB-I trials and evaluation, allowing stakeholders to see the potential of DVB-I and crucially to demonstrate interoperability with other system providers. OSP has partnered with DTG Testing to create the DVB-I Test Suite, a comprehensive set of metadata and test cases to support receiver manufacturers.

http://www.onscreenpublishing.com

About Media Broadcast

Broadcasting and telecommunications services with 100 years of experience.

Media Broadcast is a freenet AG company and, as Germany's largest nationwide service provider for the broadcasting and media industry, is your partner for digitalization. The company plans, sets up and operates multimedia transmission platforms for TV and radio based on modern transmitter, cable and satellite networks. Media Broadcast is the market leader in terrestrial radio and television broadcasting (DAB+ and DVB-T2 HD) and markets the freenet TV platform. Among its other activities, it holds shares in Antenne Deutschland, the DAB+ platform operator. The company also connects broadcasters with its high-availability fiber-optic network and broadcasts live events for TV stations and companies. Media Broadcast operates 5G campus networks for innovative applications and offers them to industry customers, private companies and public sector customers on a permanent as well as temporary basis. In addition, the company provides high quality telecommunication services for nationwide customers.

In 2019 Media Broadcast was one of the first companies in Germany to introduce a four-day week for all employees. The company is based in Cologne. Several hundred service employees are deployed nationwide.

About Seven.One Entertainment Group

Seven.One Entertainment Group is a wholly owned subsidiary of ProSiebenSat.1 Media SE. Since October 2020, the smart entertainment company has combined all of the Group's station brands as well as its content, digital, distribution and marketing business under one roof. The Seven.One Entertainment Group is regarded as an innovation driver in the ad tech sector and stands for strong content brands that everyone in Germany knows - on all platforms.

RBB (Rundfunk Berlin-Brandenburg) is the public broadcaster for Berlin and Brandenburg. RBB produces and broadcasts one television channel and six radio stations, in addition to providing a range of interactive multimedia services including websites, mobile apps, teletext, Smart TV applications and social media feeds. As part of the ARD (Association of Public Service Broadcasting Corporations in Germany), it contributes to several nationwide TV and radio channels and multimedia services.

RBB hosts and manages the ARD Play-Out-Center which is responsible for the playout of the ARD digital programme bouquet via DVB-S/T and the production and editing of in excess of one million SI data sets per

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annum covering all ARD TV and radio programmes. It has been producing and broadcasting interactive TV applications since August 2002.

With coverage of over 30,000 km², RBB provides services to almost 6 million inhabitants from its main broadcast centres in the capital Berlin, the media city of Potsdam-Babelsberg and regional studios. RBB employs approx. 1,800 staff and a large pool of freelancers.

RTL Deutschland

RTL Deutschland is Germany's leading entertainment company, spanning all types of media: TV and streaming, print and digital, radio and podcasts. It is home to some of the country's strongest media brands, from RTL to Stern, Brigitte to Vox, and Geo to NTV, and operates Germany's largest streaming platform, RTL+, with more than 4.3 million subscribers.

RTL Deutschland owns 15 TV channels and numerous premium magazines and digital offerings, such as CAPITAL, Gala, CHEFKOCH digital and Wetter.de. RTL Radio is one of Germany's largest privately owned radio groups, with holdings in 20 stations including Antenne Niedersachsen, Antenne Bayern or Radio Hamburg. RTL Deutschland stands for positive entertainment and independent journalism, employing around 1,500 journalists to inform and entertain on all topics shaping contemporary society. Encompassing everything from news to sport, living to lifestyle, and women to family, RTL Deutschland reaches 99 per cent of the German population.

The company also boasts one of Germany's largest advertising sales houses: Ad Alliance. Thanks to targeted investments in tech and data, RTL Deutschland is well on the way to becoming the country's leading media company in terms of technology. RTL Deutschland has its headquarters in Cologne and offices at 17 other locations, including Hamburg and Berlin. It employs around 8,000 people and is part of RTL Group.

SES

SES has a bold vision to deliver amazing experiences everywhere on earth by distributing the highest quality video content and providing seamless connectivity around the world. As the leader in global content connectivity solutions, SES operates the world's only multi-orbit constellation of satellites with the unique combination of global coverage and high performance, including the commercially-proven, low-latency Medium Earth Orbit O3b system. By leveraging a vast and intelligent, cloud-enabled network, SES is able to deliver high-quality connectivity solutions anywhere on land, at sea or in the air, and is a trusted partner to the world's leading telecommunications companies, mobile network operators, governments, connectivity and cloud service providers, broadcasters, video platform operators and content owners. SES's video network carries ~8,000 channels and has an unparalleled reach of 366 million households, delivering managed media services for both linear and non-linear content. The company is listed on Paris and Luxembourg stock exchanges (Ticker: SESG). Further information is available at: www.ses.com

Sony Corporation

Sony Corporation is responsible for the Entertainment, Technology & Services (ET&S) business in the Sony Group. With the vision of "continuing to deliver Kando and Anshin* to people and society across the world through the pursuit of technology and new challenges," Sony will create products and services in areas such as home entertainment & sound, imaging, and mobile communications.

For more information, visit: www.sony.net

* Both Japanese words, Kando means emotion and Anshin has various meanings such as peace of mind, reassurance, reliability and trust.

Sony Europe B.V.

Sony Europe B.V. is a subsidiary of Sony Corporation and is headquartered in UK. We drive Sony's leading Entertainment, Technology & Services (ET&S) business for consumer and professional markets, as well as Imaging & Sensing Solutions business across Europe. From R&D and engineering, design, to sales, marketing, distribution and customer service, we work to deliver Sony's purpose to fill the world with emotion through the power of creativity and technology.

For more information, visit: www.sony.eu/presscentre

Sofia Digital is an international high-tech company based in Finland, having over 20 years of history delivering services for TV screens and interactive smart devices. As the developer or DVB-I reference application and DVB-I CSR, Sofia Digital is at the forefront of DVB-I development. Sofia Digital is offering award-winning end-to-end Sofia Backstage DVB-I solution, that can complement with best practices of pure OTT to Hybrid-TV environments, such as TV-guide services, HbbTV Operator Apps and mobile client apps.

TARA Systems is a technology driven software company providing components and services for embedded systems in the field of consumer electronic, industrial, automotive and mobile devices. We focus on reliable solutions for digital TV reception and media streaming as well as graphical user interface tools and developments. TARA Systems was founded in 1990 with the vision of developing innovative concepts, software components, and tools for consumer electronic (CE) devices. Today, millions of CE products rely on solutions developed by TARA Systems. More than 30 years of experience enable TARA Systems to offer their customers high quality innovative products.

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TP Vision

TP Vision Europe B.V. ("TP Vision") is registered in the Netherlands, with its head office in Amsterdam. TP Vision is wholly owned by TPV Technology Limited ("TPV"), one of the world's leading monitor and TV manufacturers. TP Vision is a major consumer electronics player in TV and audio entertainment. TP Vision focuses on the development, production and marketing of Philips television sets (Europe, Middle East, South America, India and selected countries in Asia-Pacific) and Philips audio products (worldwide). We combine the strong Philips brand with our product development and design expertise, operational excellence and TPV's industry experience and position. We believe in creating products that provide consumers with a superior audio and visual experience.

Vestel

Comprised of 24 companies, Vestel Group is a multi-industry manufacturer that operates in consumer electronics, major domestic appliances, professional displays, automotive and battery solutions, and EV Chargers. Testimony to the global importance of Zorlu Holding across multiple technology sectors, Vestel is not only thriving at home in Turkey, but also through a further 14 subsidiaries that have been set up in various other parts of the world. Thanks to its renowned manufacturing and R&D complex, Vestel exports to 158 countries and keeps its position as a global player.

For more information: www.vestelinternational.com

WDR

WDR (Westdeutscher Rundfunk) is the German state of North Rhine-Westphalia's (NRW's) public broadcaster. Based on the number of employees, it is the largest media organisation in Germany and the second largest in Europe, after the BBC. It enriches the lives of the people living here – and offers them an opportunity to develop well-informed opinions and to personally experience events. Every day.

For more information: www.wdr.de

ZDF (Zweites Deutsches Fernsehen) is Germany's national public television broadcaster. Today, ZDF also operates the two thematic channels ZDFneo and ZDFinfo. In partnership with other public broadcasters, ZDF jointly operates the internet-only offer funk, the German channels PHOENIX and KiKA, and the European channels 3sat and ARTE. ZDF offers full-range generalist programming with a mix of information, education, arts, entertainment and sports. Its coverage provides both a broad view on the world and a comprehensive picture of Germany.

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