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NOTES ON THE CONTRIBUTORS

Christoph Dosch After graduating from the Technical University Munich in 1976, he started his career as scientific engineer with Munich's Institut für Rundfunktechnik (IRT): the research and development arm of the public-service broadcasters of Germany, Austria and Switzerland. He served as project leader in digital HDTV and a series of further R&D projects covering terrestrial, cable and satellite broadcasting, as well as multimedia and interactive services such as HbbTV. In the 1990s, his interests turned to aspects of general networking and accessibility to linear and interactive television services for people with special needs. In 2014, Dosch retired, having served IRT as its General Manager, Collaborative Research for almost two decades. From 2014 to 2021, however, he continued as IRT's liaison officer to the International Telecommunication Union (ITU) and EBU, mainly with respect to spectrum use and frequency planning. In 2007, he was elected Chairman of ITU Study Group 6 (Broadcasting Service), and served in that role until 2015. Currently, he is its Vice Chairman.

Paul Kafno is a graduate of Oxford University. He taught in Swaziland before joining the BBC as a radio producer, and subsequently moved to BBC TV, where he directed and produced a wide range of Arts and Drama programmes. At ITV, his theatre and music productions won the Prix Italia and Royal Television Society, Golden Gate and Prix Gemini awards, and were widely seen throughout the world. He pioneered the use of digital with his *Stravaganza dei Medici* programme, and later set up HD Thames, which produced the first high-definition coverage of the Olympics and world ice-skating, as well as plays and musicals. He continued to develop new technologies for the creative industries, including the distribution of live theatre and opera performances to UK cinemas. While on the Council of the International Broadcasting Convention

he was President of the Nombre d'Or competition. He is currently a Director and Chair of CTVC.

Ulrich Reimers is a retired university professor of communications technology. After studying at Technische Universitaet Braunschweig, he worked as a researcher at its Institute for Communications Technology. Leaving the university as a Dr.-Ing., he joined the industry and became responsible for the development of HDTV studio equipment when that technology was still in its infancy. He then became Director of Technology for Norddeutscher Rundfunk, one of Germany's public broadcasters. During this phase of his career, he co-founded the Digital Video Broadcast (DVB) consortium, which went on to provide standards for digital television for many countries, including the UK. As Chairman of the DVB Technical Module for 20 years, he was responsible for the development of these standards. In 1993 he was asked to become a full professor at his alma mater, and the managing director of its Institut fur Nachrichtentechnik (IfN); and for the last eight years, he has served as a vice president of that university. Prof. Reimers, often called the 'Father of DVB', has received numerous international and national awards, including the J. J. Thomson Medal of the Institution of Electrical Engineers of the UK. He is currently working on the development of 5G broadcasting, together with a team of researchers at IfN.

Aleksandar Louis Todorović After graduating from Belgrade University's Department of Electrical Engineering, he spent more than 40 years of his professional life in various areas of broadcasting. His diverse posts included Director of Television Production, Editor-in-Chief of Special Programmes, and Director of Research and Development at Radio Television Belgrade, and Executive Director of Yugoslav Radio Television. In parallel with his broadcasting activities, he had a notable academic career at the University of the Arts in Belgrade, and from 2006, at the Mediterranean University in Montenegro. From 1993 to 2001, he was Director and Dean of the International Academy of Broadcasting in Montreux, Switzerland. Prof. Todorović was a Chairman of the Technical Committee of the EBU, Vice-Chairman of Study Group 11 of the International

Telecommunication Union, and at the time of his death in 2020 was a member of the Council of the IBC and Honorary Chairman of the EBU's Technical Assembly. He was a Life Fellow of the Society of Motion Picture and Television Engineers (SMPTE) and received the IBC award and the Gold Medal for Creativity from the World Intellectual Property Organisation. He published widely on the subjects of broadcasting and the relation between the arts and technology, including several important books on these subjects.

Jelena Todorović (BA, Faculty of Philosophy Belgrade, MA and PhD, UCL London) is a Full Professor of early modern European culture at the Faculty of Fine Arts, *University of the Arts in Belgrade* and the Vice-Dean for International Cooperation. Since 2006 she runs the project of the *State Art Collection in Belgrade*, the work for which she received European Union Award for cultural heritage in 2018. Although an art historian by training, her interests have always been more directed towards early modern cultural history, as well as the curatorial work and the history of collecting in the first half of the 20th century.

Simon Tuff read Electrical and Electronic Engineering at the University of Bradford and, after a short spell in the defence and computer industries, joined the BBC in 1988. There, he was able to pursue his passion for broadcast audio, which he acquired 14 years earlier as a boy chorister whilst recording radio programmes for the BBC's schools output. Since then, he has been fortunate to work on the engineering of all forms of the BBC's audio output, from local radio to the World Service, and from the introduction of TV surround sound to codec developments with BBC R&D. He is currently active in the field of next-generation audio technology, both as a creative programme-making tool and as a means of enhancing audience experiences.

George Waters graduated from University College Dublin in 1956, earning an MBA from the same institution 10 years later, and a doctorate from Trinity College Dublin in 1990 with a thesis dedicated to HDTV. He joined Raidió Teilifís Éireann (RTÉ), the Irish public broadcaster, in 1956 and was on the team that prepared the launch of

Irish television in 1961. Following a stint as RTÉ's Director of Engineering, he became its Director General in 1978, serving in that role for seven years. In 1985, he joined the headquarters of the EBU as Director of the Technical Department, and stayed there until 1997. Dr Waters was intimately involved with the standardisation of broadcasting systems throughout the world, and worked closely with standardisation bodies like ITU and ETSI. He was a member of the DVB project, and in 1993, co-founded the International Academy of Broadcasting in Montreux with Aleksandar Louis Todorović, and served as its President. Over the years, Dr Waters's work has been recognised with numerous awards, including from IBC, the National Association of Broadcasters (USA), and the SMPTE. He is a Life Member of the SMPTE, and currently involved in research on the history of broadcasting.

Janet West has spent more than 40 years in various broadcasting roles, including early HDTV development. In 2008, she obtained a master's degree in Environmental Strategy, with a view to helping the digital connected world develop ways to address sustainability. Her early career was as a commercial pilot, and her thesis addressed the factors affecting emissions by airliners, high-speed trains, standard trains, and cars. She has since lectured at Skema in France and at Anglia Ruskin University on the impacts of a connected world, lifecycle assessment, the built environment, and the ethics of sustainability. She also worked at BBC R&D on the environmental impact of broadcasting; at Warwick University on the impact of the internet; at the University of Bologna on changing student views of sustainability; and at the University of Valencia on climate change's impact on water quality.

David Wood has spent a lifetime in broadcasting, working for the BBC and Independent Broadcasting Authority in the UK, and for the EBU in Brussels and Geneva. The author of many technical papers on digital television and media quality evaluation, he has received a number of awards, including the SMPTE's highest: the Progress Medal. He was educated at the University of Southampton in the UK and the Popov Institute in the Ukraine. He is currently a technology and innovation consultant to the EBU.

Paolo Zaccarian has spent a lifetime in media technology. He worked for many years for Radiotelevisione Italiana, the national broadcaster of Italy, including as its Director, before joining CBS in the United States. He has led two technical groups of the EBU Technical Committee: Working Party G, concerned with programme production, and Sub-Group G2, with videotape recording. Included in this work was the development of the world's first professional digital tape recorder format, D1, undertaken in partnership with Aleksandar Todorović. Zaccarian also led various study groups in the ITU, charged with preparing technical standards for television and radio broadcasting. He has participated in most of the major media-technology standards discussions of the past 50 years.