Multimedia Communications

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The book covers the period of the development of Broadcast television from the initial work by NHK in Japan on High Definition Television up to the period of the introduction of digital television world-wide. As such it is a must for those researching the political and technical issues that determined the outcome of an international battle to achieve world standards. Unfortunately, as with the Pal, NTSC and SECAM colour systems no world standard has been realised for analogue HDTV or even digital Standard Definition Systems. The reasons for this are clearly explained in the book as seen from the point of view of Governments, Broadcasters and Receiver manufacturers.

The Convergence issues with the increasing involvement of the Computer and Telco industries are considered as a main driver for many of the later outcomes due to the use of common integrated circuits in a digital environment. Whilst this is generally accepted, the conflict with the unregulated satellite broadcasters and the regulated terrestrial broadcasters in Europe has played a significant role in some of the outcomes.

The author looks at the developments in three main geographic and economic areas namely America, Europe, and Japan and in a clear and interesting way explains the strategies of the three camps in their struggle to either dominate or defend their particular corners. The period of the first attempts at a world standard for HDTV in the 1980?s brings to light many new inputs that have been obtained by personal interviews by the author. It also shows up the almost paranoiac view by the European receiver industry that the standardisation on the Japanese Hi-Vision system would spell the death knell of the industry.

However as someone who has worked in the industry throughout the period of the book I find a number of inaccuracies in the coverage of the European scene. Certainly it was the British Broadcasting Company not the BBC that was formed in 1922. During the period of the first Satellite Broadcasts it was the UK not Germany that adopted D-MAC and Marco Polo1 & 2 were high power DBS, BSS satellites not FSS ones. Rupert Murdoch's Sky channel never transmitted on the BSB satellite as he was in competition with BSB.

Many technical experts had predicted that it would not be possible to receive PAL from a medium power satellite without using a 1.2m dish. This convinced BSB that with its squarial it would have no threat from PAL. The cultural shock when PAL was first demonstrated on a 60cm dish was not mentioned in the book.

Although PAL plus is mentioned its role in introducing widescreen in Europe is underplayed and there is no definitive mention of the fact that 23 European Broadcasters transmitted the signal. This was to encourage tube manufacturers to produce 16:9 CRT's which became the platform for displaying the subsequent digital widescreen transmission world-wide.

It is stated that Granada Television with the joint venture with Sky namely GSkyB put all its programmes on to satellite in 1995. There was no way that they would contribute their main stream programmes such as Coronation Street which would undermine their viewing audience on terrestrial ITV. As such it is also disappointing to find little mention of ITV in the book who were the equivalent public service Broadcaster to the BBC in the UK albeit funded from advertising revenue.

In conclusion apart from the few inaccuracies in the European scene, I cannot comment on the detail for Japan and America, the book is an excellent review of what has been a ground breaking period for the industry as it moved into the digital age. It is unfortunate that the introduction of HDTV DVD systems and the rise of the large screen Plasma and LCD displays in recent years came too late for this book as this dramatically reinforces the case for HDTV in the home.

Professor Richard J G Ellis

Richard Ellis has been associated with the Broadcast industry for all his working life and has held posts in both development and management in the technical field. Starting as a graduate apprentice at Pye he became the Chief Engineer of Pye TVT the Broadcast Company of Philips and went on to become Chief Engineer of Granada Television. Today he is a well-known Consultant to the industry and visiting Professor in Media Technology at Salford University. He has served on many international and national technical committees concerned with the development and standardisation of technical issues affecting the industry. As a member of the European project to further develop the PAL colour television system, his book "The PALplus Story" is the definitive account of this project. He has also written a book on the history of Pye TVT the Broadcast Company of Philips. Having served on PGE14 and been the chairman of the Cambridge centre and other IEE committees he has considerable experience of the IEE. As its first chairman he saw the successful launch of the IEE Industry Group Multimedia Communications (MMC), which in its 4-year span held many successful seminars, and events, some of which attracted international participation. The IG attracted over 7000 interested members. He then became the first chairman of the re-named MMC PN. He has been a member of the IBC Conference and Management Committee involved in planning this major International Multimedia Convention. Richard Ellis is a Chartered Engineer and a Fellow of the Institution of Electrical Engineers and a Fellow of the Royal Television Society.