

“This is DAVIC”

DAVIC Information Seminar

hosted by the European Broadcasting Union

Geneva, 12th January 1999

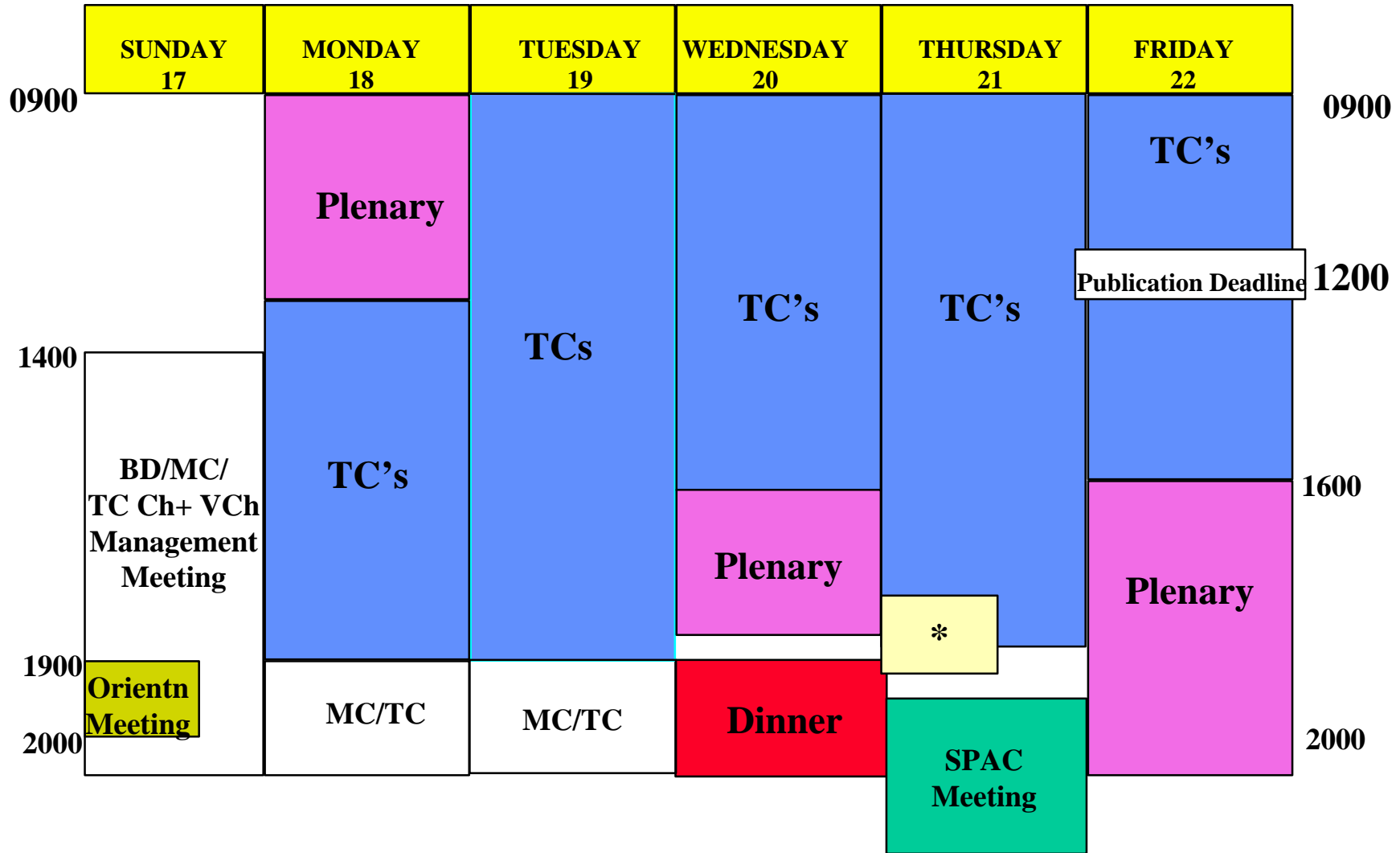
John Thompson, DAVIC COO

(2) : Meeting organisation and DAVIC's decision/IPR process

- DAVIC the systems integrator (hence its relationship to ATM-Forum, NMF, IETF, etc)
- The CFP, freezing, voting, baselines process
- ***One tool, one functionality in the context of SID's and Contours***
- IPR control
- Some DAVIC implementations

Schedule for the 23rd DAVIC Meeting

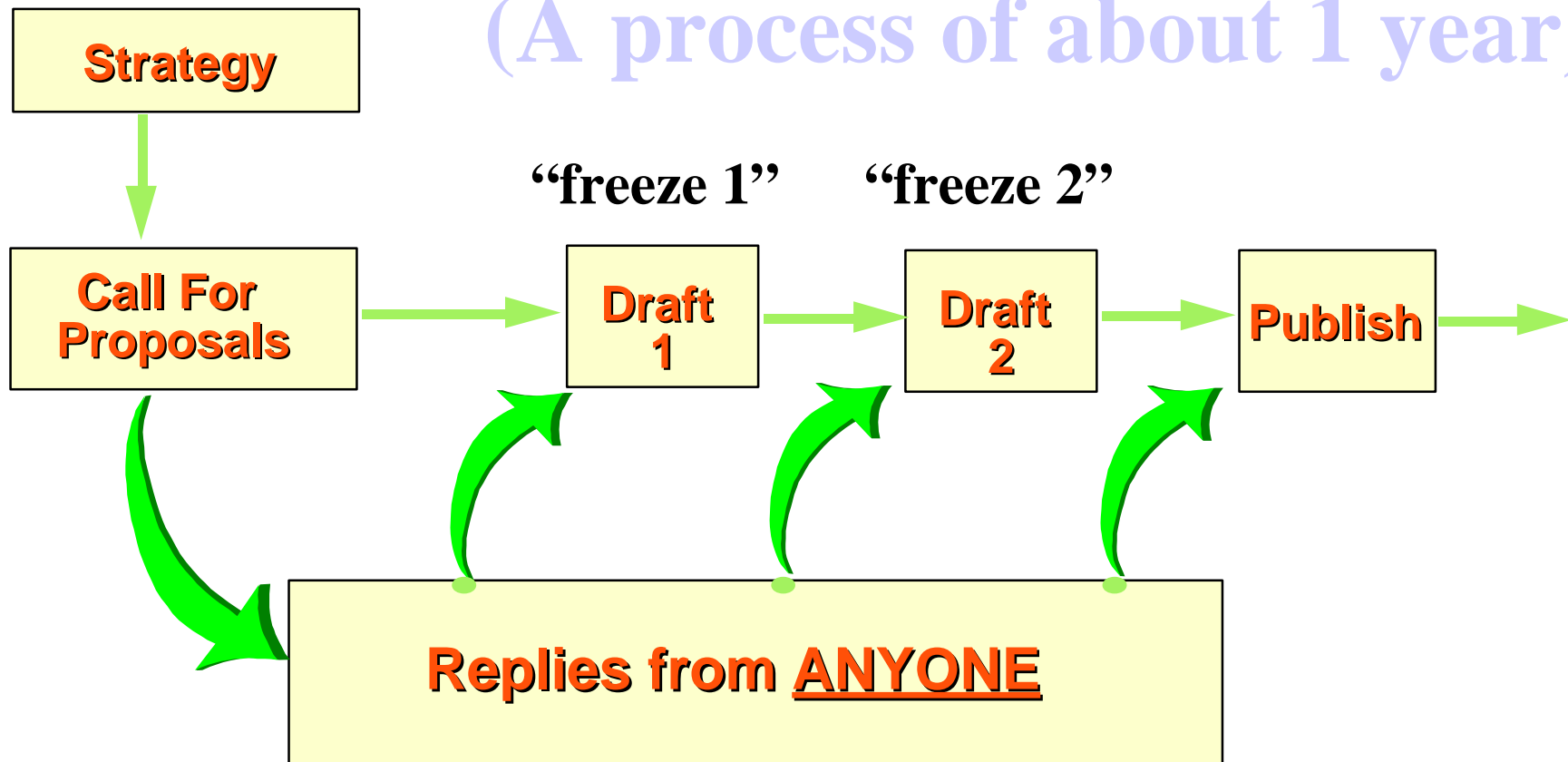
Portland, Oregon, 18 - 22 January, 1999



* Editors/MC/TC (6-7 pm)

The DAVIC Process

(A process of about 1 year)



“Functionalities” and “Tools”

- DAVIC Specifications define the “tools” which execute the “functionalities” required by applications
- DAVIC tools build DAVIC conforming systems
- Tools may be relocated to different parts of a system (when technically feasible)
- Only one tool is specified for each functionality in any one instance, or “System Integration Definition”

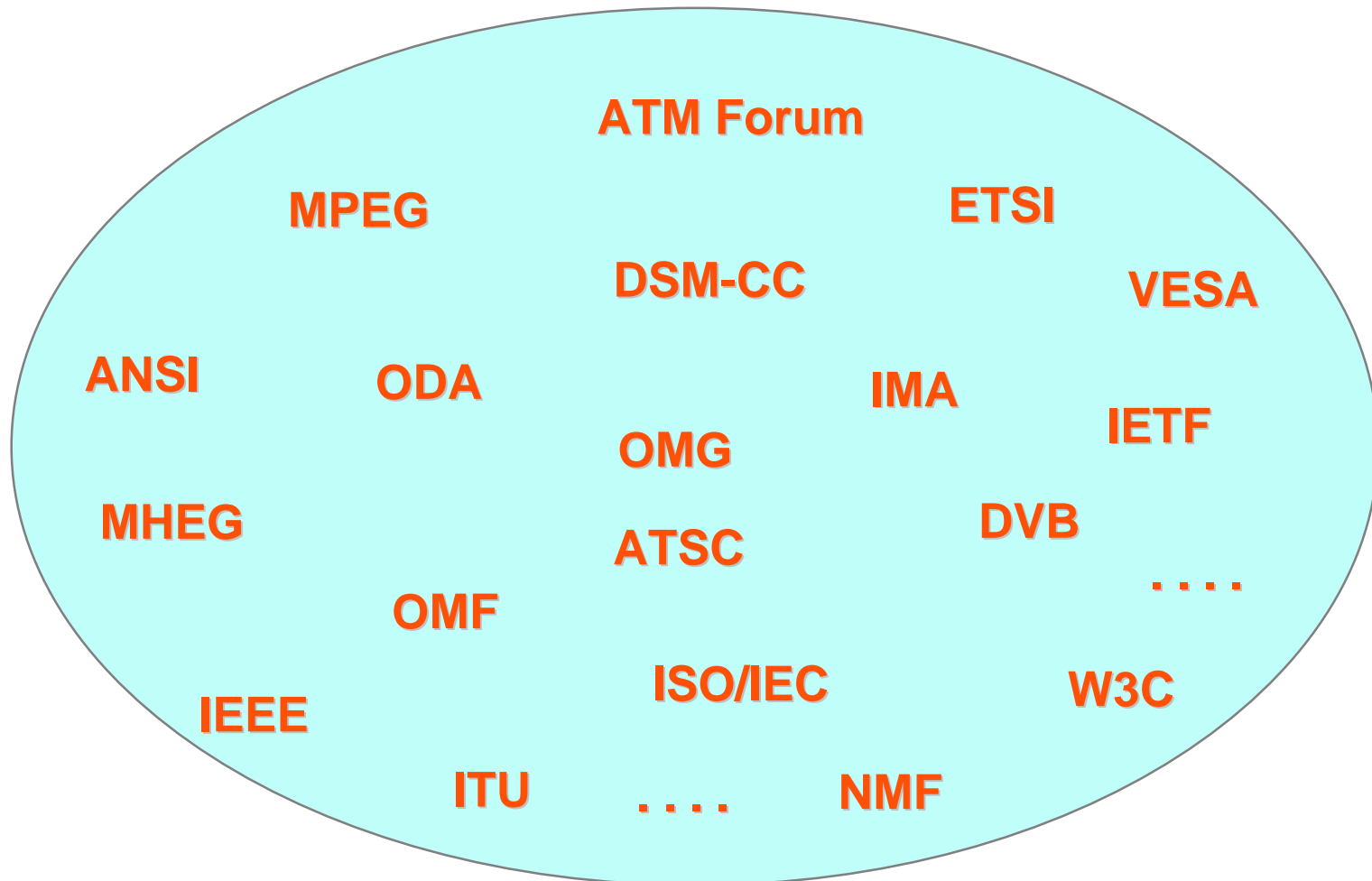
DAVIC operates by.....

- * Adopting existing standards where possible
- * Only generating new specifications where none exist
- * **Forcing the “one tool for one functionality Principle”**
- * Contributing to the formal Standards Bodies
 - currently going for ISO/IEC standard

Some tough decisions (at the time) !

- modulation techniques for ADSL
- AAL5 for ATM applications
- Java for the DAVIC virtual machine API
 - “MHEG 5 through Java”
- AC-3 for DAVIC High Quality audio
- 1080 as the maximum line standard for High Quality video
- MPEG2 for Scaleable Audio

Sources For DAVIC Tools



Nature of the DAVIC Specifications

There is no one unique definition for ‘the DAVIC system’.

Examples of DAVIC systems:

D1.0: Interactive MM with MPEG over ATM

D1.0: Interactive MM with MPEG TS native transport

D1.1: Enhanced Broadcast

D1.1: Switched Video Broadcast

D1.2: Internet Access

D1.3: Real-time Video Contribution Network

D1.4: HANs and LANs

D1.5 : IP-based services (TV Anywhere...)

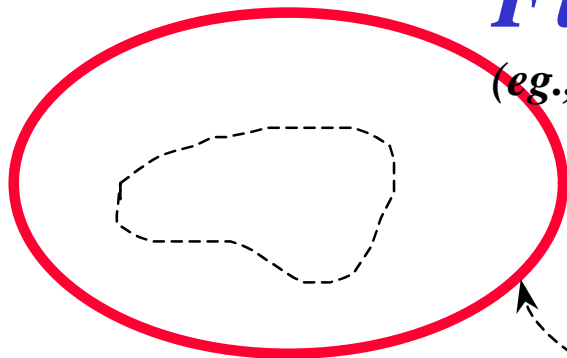
D1.6 : TV Anytime

Description of DAVIC

Functionalities and Contours

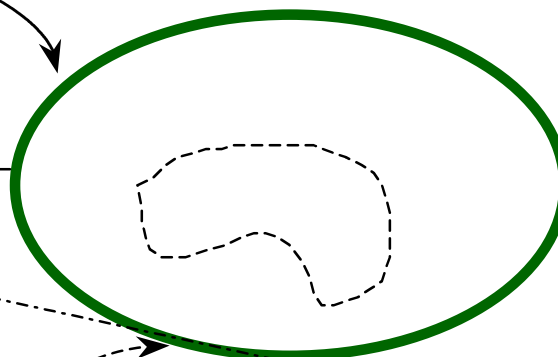
Market Domain

(eg., Interactive Digital Broadcast with Electronic Return)



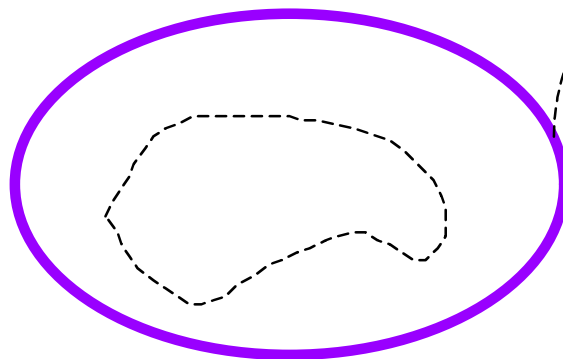
Function Domain

(Contour Annex to Part 1)



Technology Domain

(Contour Sections in Part 14)



Requirements

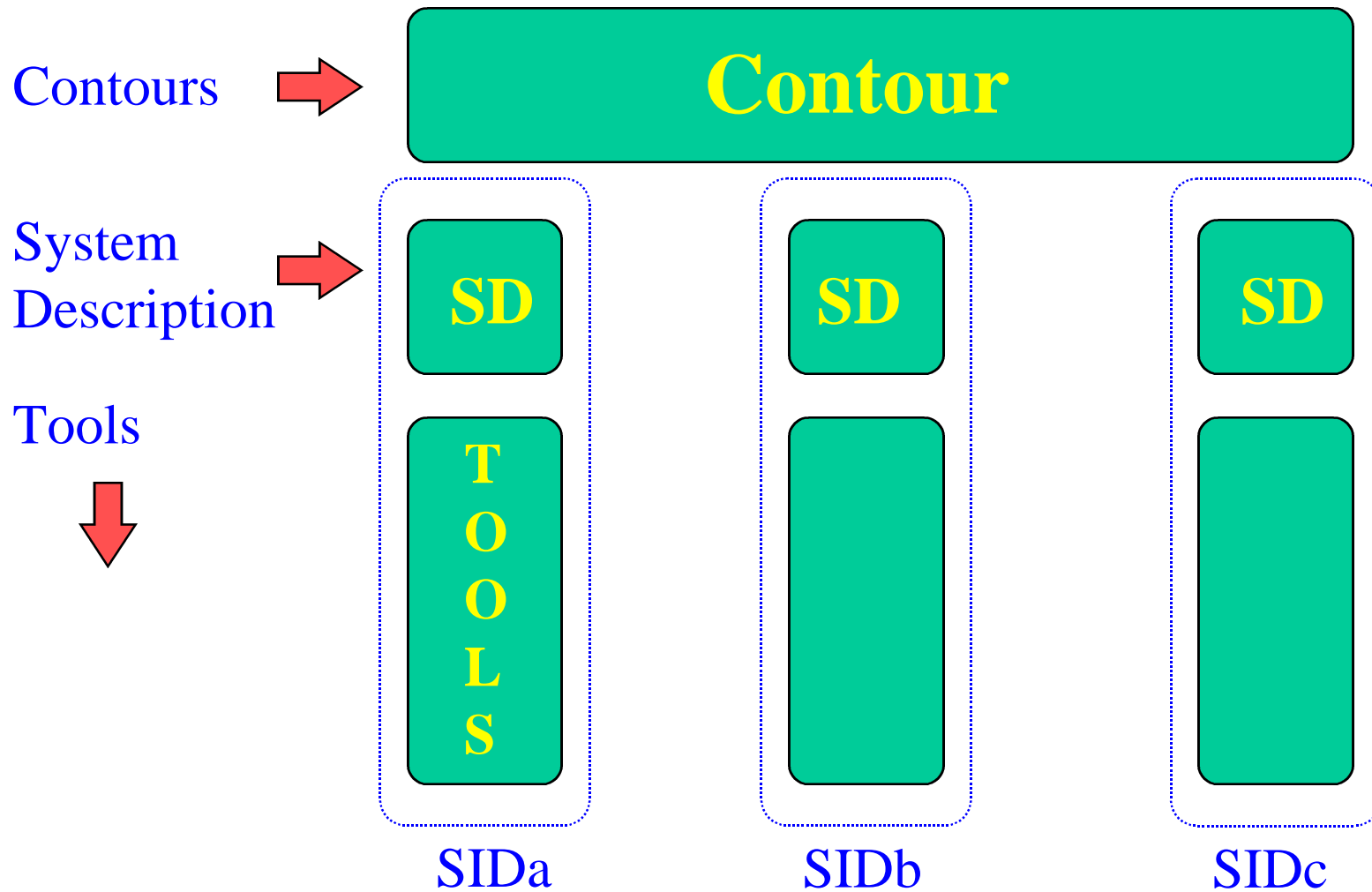
Capabilities

Capabilities

Requirements



Multiple Contours and SIDs across Application Domains



Intellectual Property

- IPR must be available on fair & reasonable, and non-discriminatory terms (the “ITU/ISO/IEC Rules”)
- Each response to a Call For Proposals has an IPR statement
- DAVIC 1.0 - strong effort to identify IPR
 - continuing for DAVIC 1.5
- Periodic review of a “DAVIC IPR Entity”

So, what is the problem?

In the UK for example, interactive multimedia is promised by :

1. Digital Terrestrial Broadcasting (OnDigital)

- MHEG based upon the DAVIC profile (The UK MHEG Profile, plus DSM-CC Object Carrousel)

2. Satellite

- DAVIC/DVB is Java centric - but current uncertainty over associated html variants and MHEG plug-ins. MHEG has been excluded from (German public broadcasters) the DVB spec as a 'mandatory part' but it can be signalled and referred to.
- Sky Digital is not MHEG but is based upon OpenTV

3. Cable

- Not MHEG
- at least two major UK cable operators are developing web-centric services

DAVIC is gaining Market Acceptance !

Examples of existing implementations which utilise DAVIC specifications include ASCII Laboratories Inc./GCL VOD, BellSouth's New Orleans' DVE (Digital Video Entertainment) Service with products from DiviCom and Zenith, CANAL+ MediaHighway+™, Cite Coeur de Reseau in Paris, CSELT's ARMIDA® (Applications Retrieving Multimedia Information Distributed over ATM), China's Fujian Province VOD trial, Daewoo Electronics' Genie™ and HET (Home Entertainment Terminal), Fujitsu Media Server System, Hong Kong Telecom's VOD system, Hughes Networks Systems' CableServe™, IBM's Logicast™, NEC HyperMS VOD and France CSI VOD Systems, Panasonic's Video Server (PanaViSS), Panasonic's Video Network Server (VideoShower), Panasonic's Multimedia on Demand System (MediaStage), Panasonic's VOD System, Philips' Clevercast™, Time Warner's cable-based interactive TV (Pegasus™), and the UK DTG British Digital Broadcasting D-MUX Platform. Many other companies provide boards or chip sets which comply with DAVIC specifications. These include Broadcom, Fujitsu, NTT Electronics Corporation, Pioneer, Scientific-Atlanta, Toshiba, etc.

Already evident in broadcast systems and in internal systems within museums, hotels, apartment complexes and aircraft, DAVIC Specifications are being increasingly adopted and used in switched fixed networks with the availability of improved bandwidth. The anticipated market acceptance, by the growing intranet communities and the increasingly networked society is expected to be multiple billions of dollars.