

# **MOBILE TV IN HANDSET – INTEROPERABILITY ADDRESSED BY MANY ORGANISATIONS (CBMS, OMA, BMCO, MDTVA) AND BUSINESS POTENTIAL.**

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## **Abstract**

Most of the standards are designed during group work. They often contain optional elements which provide freedom for design, but do not help when interoperability between implementations is needed. To provide the needed interoperability, a series of guidelines needs to be written. DVB IPDC is one of those needing additional guidelines. DVB is not the sole organization working with guidelines. There are organizations that either define guidelines for their own set of specifications (OMA BCAST), Organizations that have a national agenda (MDTVA) as well as organizations that are working in parallel with others (BMCO). All the groups have a target to provide the guidelines by 1H 2007. As just guidelines do not always suffice, the plans are completed with interoperability testing.

With these industry agreed guidelines in place, the true market potential of DVB-H can be exploited and services be offered to customers in an effective way.

The market potential will be presented with the help of independent market research studies.

Keywords: DVB-H, Interoperability.

## **Interoperability**

Interoperability is the key to success with any specification / standard. Having a specification standardized does not always guarantee interoperability. There may be optional ways specified for single feature or there may be some freedom to interpret the text, all leading to slightly different implementations (though all following the standard) and in the worst case, not interoperable systems / terminals and eventually dissatisfied customers. Achieved interoperability has always enabled fast market development and benefits to all stakeholders. One good example of this is the success of the known GSM standard.

Nokia as one of pioneers in Mobile TV, is closely co-operating with other Mobile TV industry players (operators, Broadcasters, manufacturers, etc.) to ensure interoperability of solutions.

The organizations active with interoperability will be presented in more detail in underlying chapters.

**DVB CONVERGENCE OF BROADCAST AND MOBILE SERVICES (DVB CBMS)**

The majority of DVB CBMS (later called IPDC) specifications were published by ETSI during 2006. CBMS has continued their work on two main issues: New phase 2 enhanced specifications as well as interoperability guidelines. The main participants in the work are the same as the ones who originally wrote the phase 1 specification. Nokia is using the collected know how of several successful trials and has brought that input to the work. DVB CBMS guideline documents cover: Content Delivery protocols, Electronic Service Guide and Mobility Implementation Guidelines. The documents are expected to be available early 2007.

#### OPEN MOBILE ALLIANCE BROADCAST (OMA BCAST)

OMA BCAST is finishing) a set of service level enabler documents that are bearer agnostic. Those can be used for Mobile Broadcasting using DVB-H. The estimated time for "BCAST 1.0 Candidate Enabler Release" of the documents is April 2007. Test happenings and IOP testing are an essential part of OMA process where a specification reaches full status after there are several interoperable implementations available. Thus there is a parallel process (OMA IOP-BRO) that is :

- Specifying test methodology, test specifications and test cases
- Determining test phases
- Determining schedule for Test Fests

#### THE BROADCAST MOBILE CONVERGENCE FORUM (bmcoforum)

The "Broadcast Mobile Convergence Forum" (**bmcoforum**) is an international organization of companies targeting to shape an open market environment for mobile broadcast services.

The activities of **bmcoforum** are focused on driving and shaping the business value chain (necessary technical, economic and regulatory framework) needed for the development of an economically successful market for mobile broadcast services.

Bmcoforum has taken a two way approach to achieve interoperability. They have not produced any specifications and thus they are in a process of defining IOP profiles for both OMA BCAST and DVB IPDC specifications.

The IPDC profiles are further developments from earlier IOP activities around 3GSM, CEBIT and other similar unified presentations. The work is now focused on Service Purchase and Protections. Electronic Service Guide and some more generic areas.

The main focus of bmcoforum IOP work is in finalizing IOP profiles for the OMA BCAST specifications. The work is driven by the major Mobile Operators with commercial launches in mind. They target to have IOP test cases available during summer 2007.

To note is that bmcoforum is planning cooperation with OMA organization with IOP efforts.

#### MOBILE DTV ALLIANCE, (MDTVA)

The Mobile DTV Alliance is an open industry consortium that focuses on promoting the best practices and open standards to deliver premium-quality broadcast television to mobile TV devices in North America. The alliance includes leading companies from across the mobile business system and entertainment value chain. The promoters include Intel, Microsoft, Modeo, Motorola, Nokia and Texas Instruments.

MDTVA organization has published a document: "North American DVB-H Implementation Guidelines", which can be purchased from the organization. ([www.mdtvalliance.org](http://www.mdtvalliance.org))

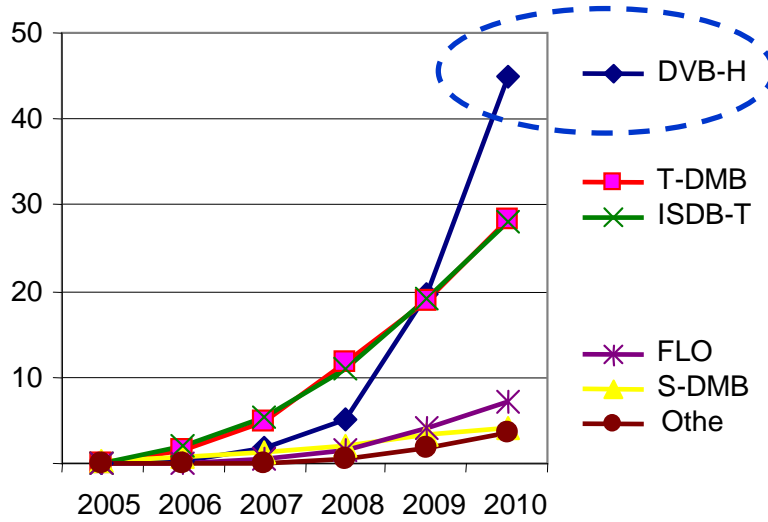
The document gives guidelines to e.g. Electronic Service Guide and Service Purchase and Protection design.

#### **Business Potential**

Interoperability is the key to success with any specification / standard. Any system will reach its' growth potential only when all components work together and customers are satisfied on what they get for their money.

There are several predictions of how the Mobile TV market will evolve. The figures presented are lucrative and show the full potential of this new technology.

## Forecast Mobile Broadcast service users by technology, millions



*Source: Strategy Analytics,  
2006*

iSuppli Corporation has estimated that the Worldwide Mobile TV revenues (advertising, Streaming and Broadcast TV subscriber income) will reach 2BUSD by 2007, 5BUSD 2008 and 15BUSD by 2010.