

# Mobile TV with DVB-H

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# MobileTV & Video User Paradigms

Multiple ways to receive, download and play TV and video content

## Broadcasting: Live MobileTV

- “same content for everyone at same time”

Example: DVB-H based broadcast mobile TV

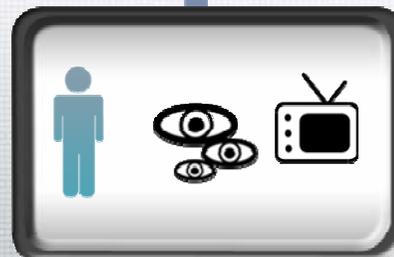


## On-demand

- “specific content request”

Examples:

- Video streaming services over cellular network
- Download video services over cellular network (online)

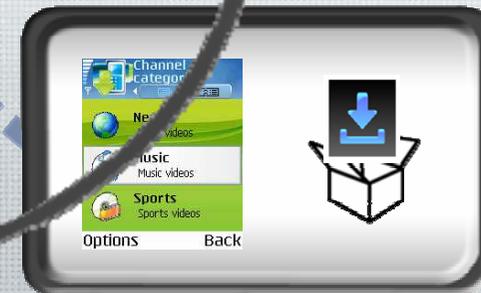


## Content synchronization

- “taking my content with me for later use”

Examples:

- Subscription based scheduled download of video content over cellular network (for off-line use)
- Video synchronization from PC to mobile device



# Mobile TV is poised to take off

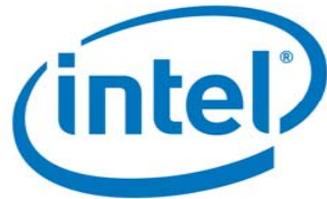
- TV is the world's most popular home entertainment medium
- Digital convergence means that mobile phones are
  - More than communication devices
  - Offering more entertainment and games
  - Used as a source of information
    - news, travel, weather, sports results
- Broadcast introduces cost-efficient delivery of TV and other media content now to mobile users
- Commercial mobile broadcast services are expected to spread out during the year 2006
  - Commercial announcements have already been made in Italy and Malaysia for 2006

# Positive consumer response to Mobile TV

- Recent Oxford pilot interim results show clear consumer demand for mobile TV
  - 83% of triallists are satisfied with the end-to-end service provided
  - 76% of triallists indicate that they would take up the service within 12 months
- Positive response from 500 triallists in Finland Pilot (May 2005) using mobile TV devices with live services
  - 58% thought the concept of mobile TV was interesting
  - 41% claimed they would buy future mobile TV services
  - 50% found 10 euro to be acceptable monthly fee



# Mobile DTV Alliance Board Companies



**MOTOROLA**

**NOKIA**



# DVB-H Worldwide

arqiva

abertis

CMC  
中環股份有限公司  
CMC Magnetics Corporation

FINNISH  
Mobile TV  
Mobile phone TV over DVB-H network.

CROWN CASTLE INTERNATIONAL  
shaping the wireless world™

MULTI CHOICE

Telefonica

Mobile TV content

Mobile Broadcast network

Mobile Terminal

mitv

mmO<sub>2</sub>

movistar

SFR

DiGiTenne

Cellular network

CANAL+

nozema services

kpn mobile

THE BRIDGE NETWORKS by united

Telstra

swisscom broadcast

bmco  
Broadcast\_Mobile\_Convergence

Nokia Nseries  
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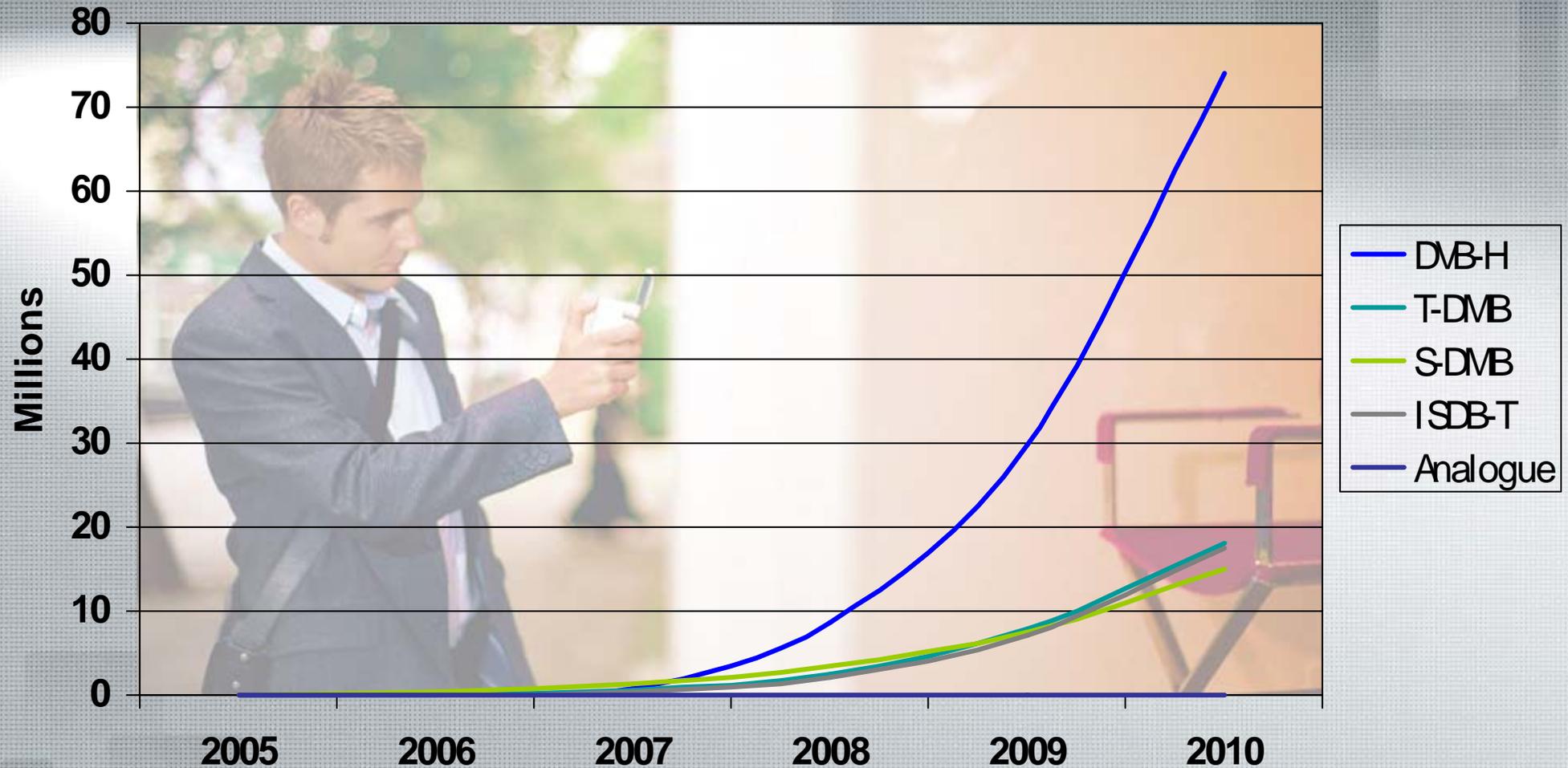
# Overview of DVB-H technology



# DVB-H benefits

- **Short time to market**
  - Already established - pilots in US, Europe and Asia/Pacific
  - Technology available from several sources
- **Great end-user experience**
  - High quality audio and video
  - Offers up to 50 channels and/or other multimedia content
  - Long battery life, 4 hours of viewing time
  - Ease of use, service discovery, easy subscription
- **Open standard for value chain partnerships**
  - Open, multi-vendor system => cost competitiveness
  - Attracting investments from major companies worldwide
- **Wide support from broadcast and wireless community**
  - related specification work in DVB Project and OMA
  - 600+ members representing broadcast and wireless industry across the globe
  - global standards, openness, interoperability

# DVB-H is the preferred technology



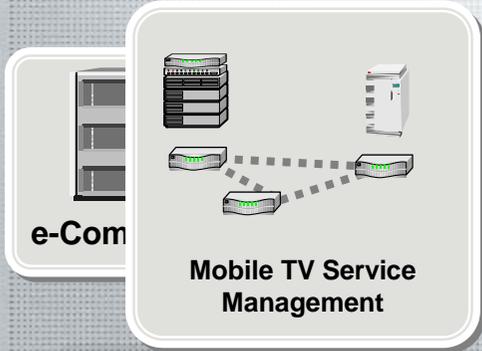
Source: Informa

Nokia Nseries  
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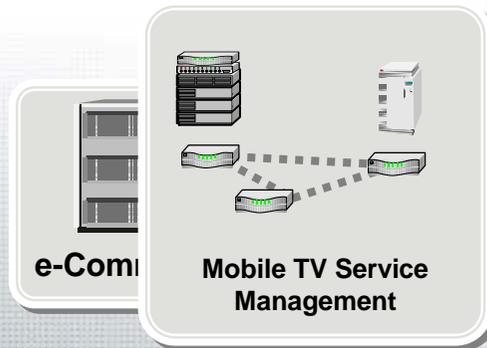
# Nokia Mobile Broadcast Solution

**Nokia 7700**

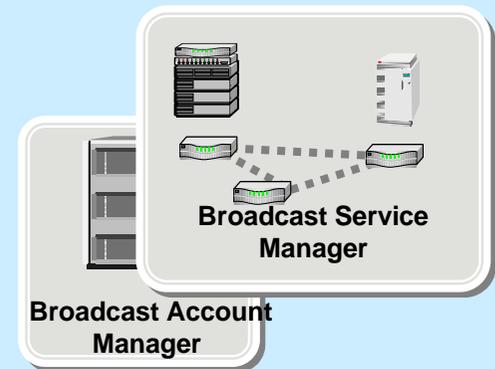


**Mobile TV Server Solution 2.1**  
• three pilots

**Nokia 7710**



**Mobile TV Server Solution 2.2**  
• over 15 pilots



**Mobile Broadcast Solution 3.0**

**Commercial Service Start Enabled**

2003

2004

2005

2006

# TV goes Mobile with the Nokia N92

- Watch up to **4 hours TV**
- Large **2.8" anti glare screen with 16 million colours**
- **One Key TV** access
- 30 second replay, 30 minute recording
- **Always up to date** Electronic Service Guide Dedicated **4-in-1 media keys**
- Full **Nokia Nseries** feature set
  - Music player, FM radio & Visual Radio
  - 2 MP camera



See new. Hear new. Feel new.

**NOKIA**  
Nseries

# Summary

- TV is going mobile, now
- Commercial launches announced in Italy and Malaysia for 2006
- DVB-H preferred technology for Mobile TV
- Mobile TV brings together media, broadcast, and mobile industries
- Nokia N92 and Mobile Broadcast Solution 3.0 enables commercial service offering
- New business opportunities for all industry players



Thank You