



Mobile TV Market Update – DVB-H Viewpoint

IEC AGS, Washington 20.5.2009
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NOKIA

Convergence drives Mobile TV experience

Traditional
Mobile TV
100's of linear TV channels

Broadcast



Streaming
Casting

DVB-H

3G TV



Streaming
↓
Downloading



Browsing
←
Socialising

Web TV
Millions of channels

Share on **ovi** NOKIA

kyte You Tube
Broadcast Yourself™



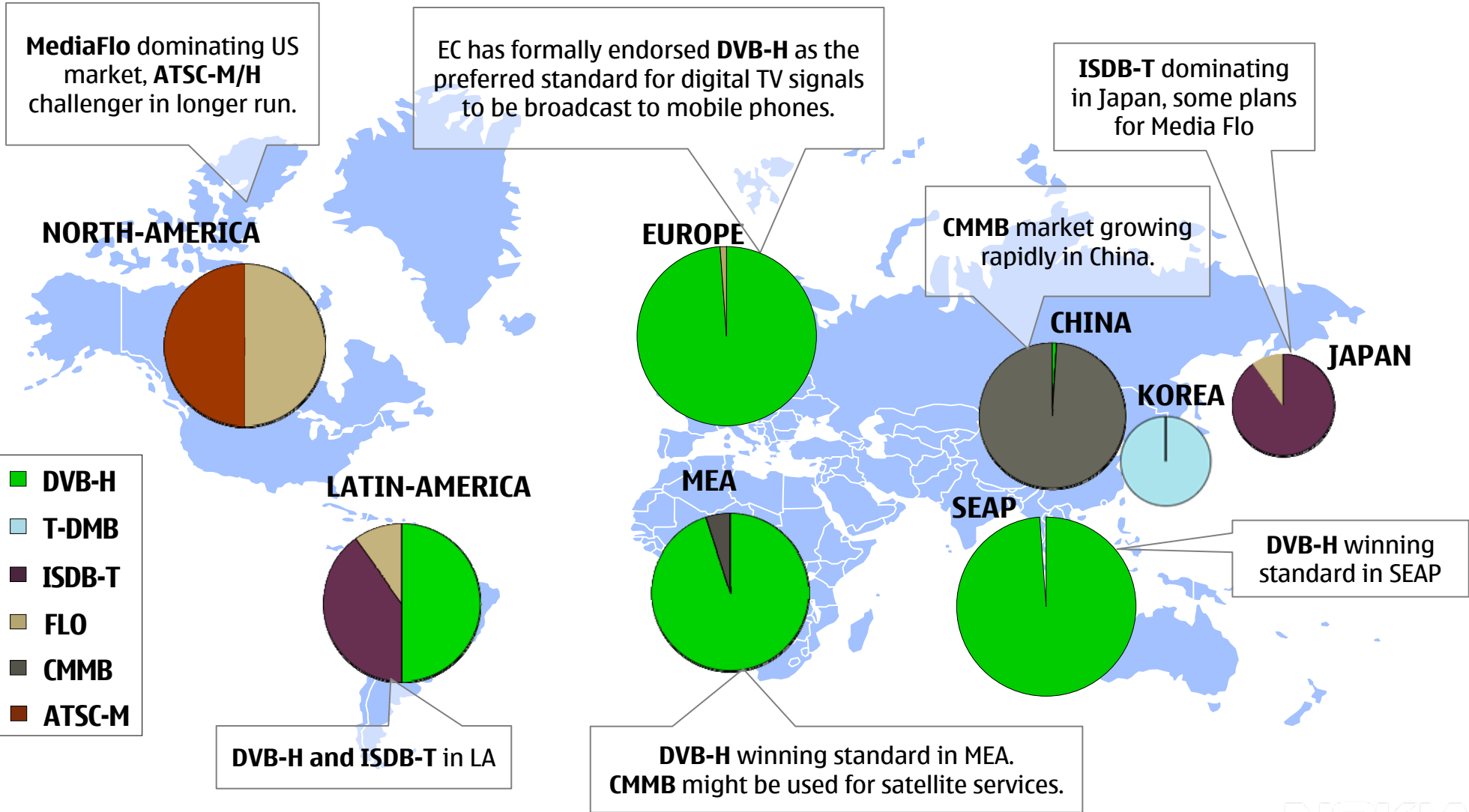
Global Mobile TV market outlook

- All major operators have launched mobile TV streaming services
- Broadcast services took off slower than expected but **big growth** seen lately in Japan and Korea
- By the end of 2010, ~60 million people globally will **watch TV on a mobile phone**
- Streaming services will have **20+ million** customers while broadcast networks will have **40 million***
- Measured geographically and by number of deployments, **DVB-H is most widely deployed broadcast technology**
- Measured in the number of **deployed terminals the ISDB-T is the most widely used technology.**
- By the end of 2010, estimated services revenue from mobile TV and Video will **exceed 12 billion dollars***
- Roll-out speed
 - Rollout of commercial DVB-H networks has been slower than forecasted by analysts, reason being difficult business models (media industry to partner with MNOs)
 - “Chicken and egg” situation: Networks require a range of available handsets to run successful service, handset manufacturers require enough commercial networks first
 - Amount of commercial DVB-H networks estimated to significantly increase in next years, primary focus in MEA, SEAP and Europe

**Source: Infonetics November 2007*

Short- and Mid-term Market View

DVB-H, CMMB and ISDB-T estimated to be the dominating standards



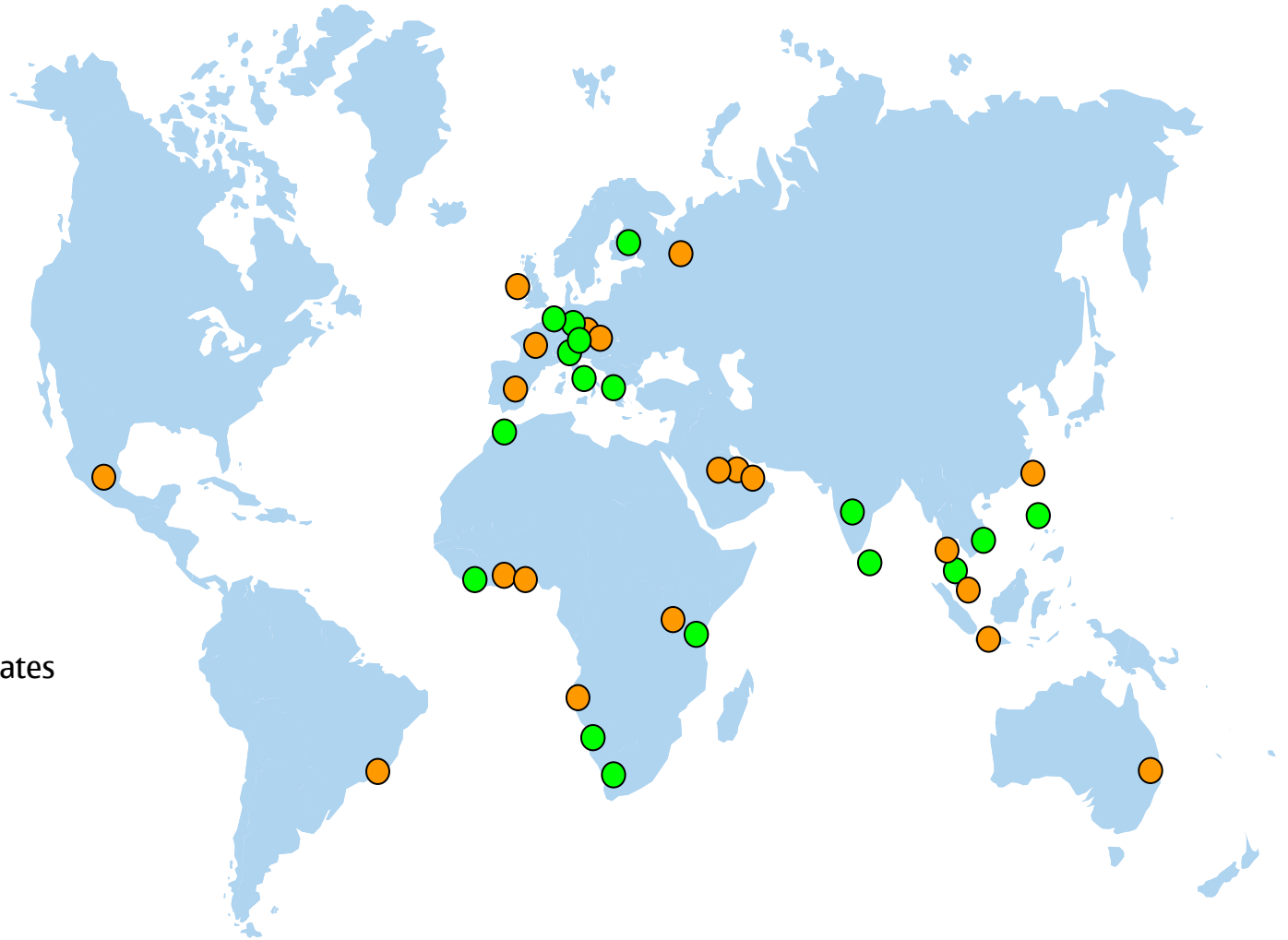
DVB-H markets status – Sep 2008

Commercial networks, Sept 08:

- Italy
- Vietnam
- Finland
- India
- Malaysia
- Philippines
- Netherlands
- Austria
- Switzerland
- Germany
- South Africa
- Sri Lanka
- Morocco
- Albania
- Nigeria
- Kenya
- Namibia

Planned launch in 2008-2009:

- Indonesia
- Australia
- Poland
- Czech
- France
- Hungary
- Ireland
- Mexico
- Qatar
- Russia
- Saudi Arabia
- Taiwan
- United Arab Emirates
- Brazil
- Ivory coast
- Thailand
- Singapore
- Uganda
- Ghana
- Angola

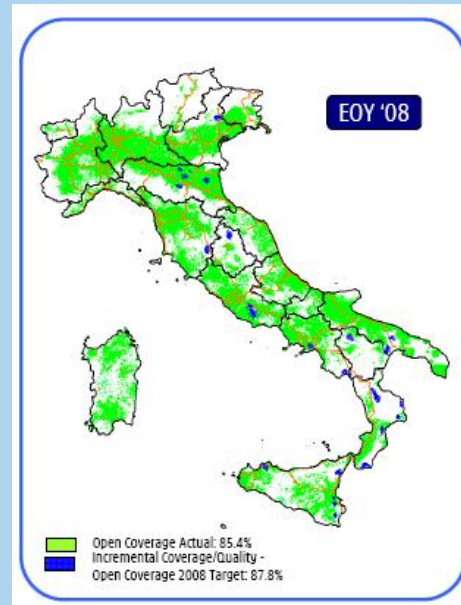


Europe

- Italy has generally been considered one of the most successful markets with nearly 1 million subscribers.
- Austria, the Netherlands, and Switzerland have also launched services in cooperation between telecom operators and broadcast network operators.
 - In all three countries, viewers can access between 15-20 services for a cost varying between €3 – 10 per month.
 - The most impressive subscription figures have been in Austria where one telecom operator, 3, has announced 90,000 subscribers for its DVB-H and UMTS mobile television services.
 - The early success in Austria may be a result of its cooperative business model which obliged the winner of the DVB-H license to bring the other contenders into the business.
- In Finland, the network operator Digita has rolled out the DVB-H network but broadcasters have been reluctant to join the platform.
 - Lack of business model and a company responsible of the business
- In Germany, mobile telecom operators who were not awarded the DVB-H license launched in competition mobile receivers capable of receiving free-to-air DVB-T services.
 - License was given back late 2008
 - Highly probable that a new license will be submitted.

H3G Italy Building Blocks for Success

- Good DVB-H network coverage
- Great mobile TV content portfolio
- Superb marketing
- Attractive pricing

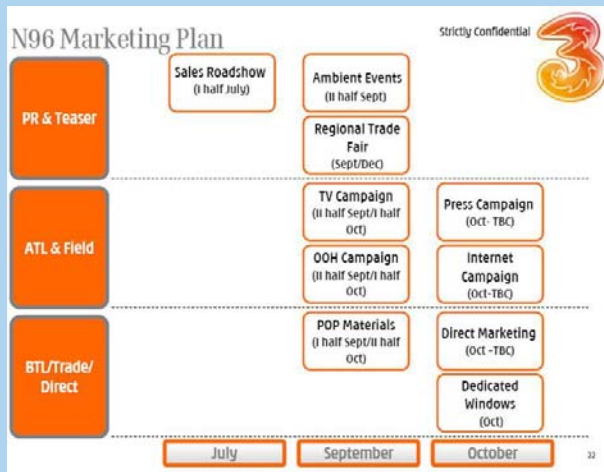


Rich and diversified TV offer

Free to Air channels	Premium bouquet				
0€	1€ day 2€/week <small>min. act.</small>	4€ day 9€ month	X€ day Y€ week	5€ day 9€ week	5€ day 9€ week

3TV's offer compete with Italian TV offer exploiting all the opportunities coming from the different platform of distribution

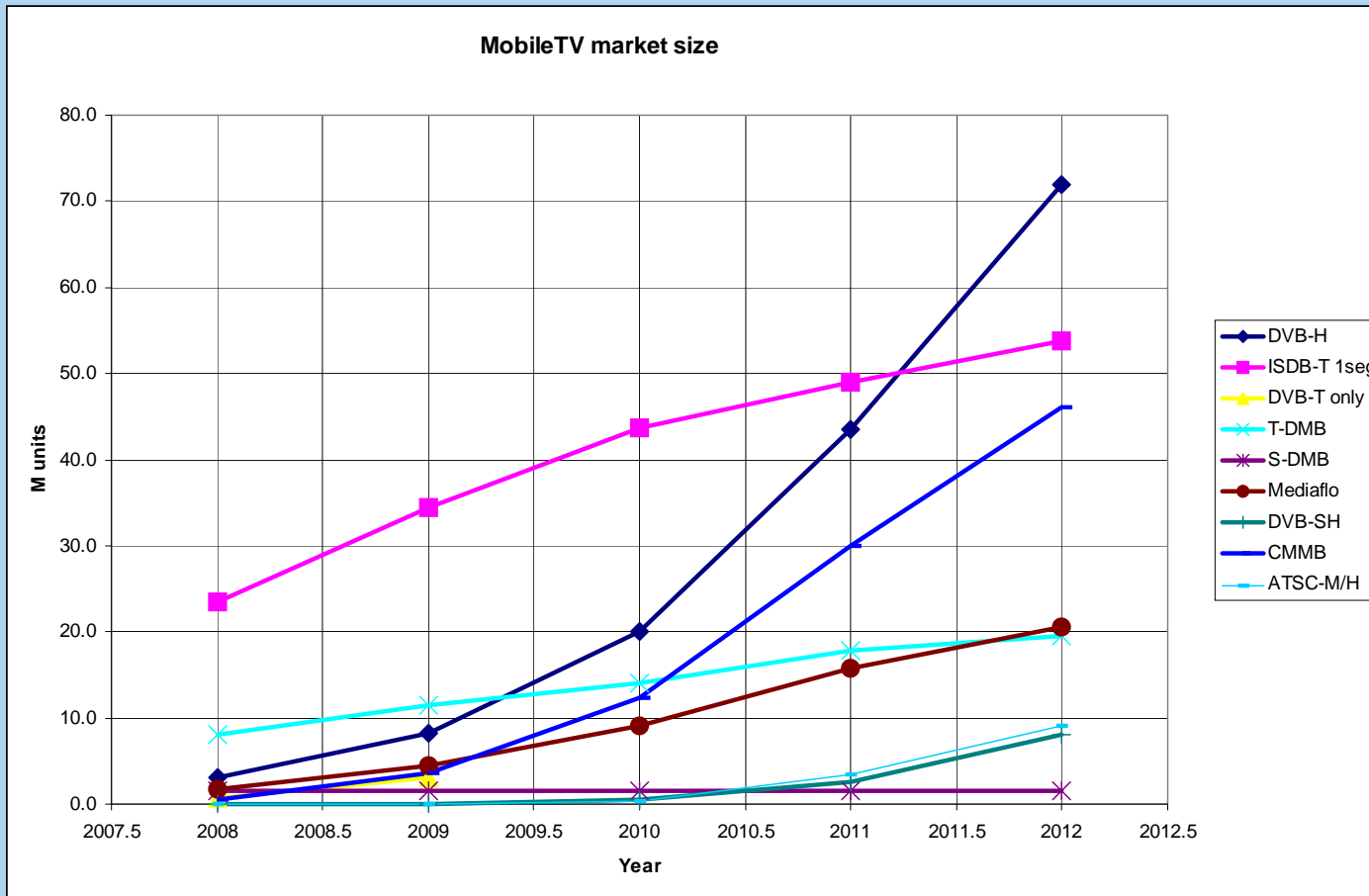
Strictly confidential



Mobile TV in Africa



Mobile TV market size estimates – Average from several reports Sept 2008



Dominating standards in 2012:

- DVB-H
- CMMB
- ISDB-T



Thank you