

Digital convergence – soon in a handset near you!

NEM Launch

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Communications applications – TV is the next step



Drivers for Mobile phone TV

- TV is a bigger application globally than telephony
- Daily amount of time spent with media is significant
- Digital convergence will happen in the handsets
- Broadcast paradigm will come to the mobile business environment
- IP Datacast technology delivers the best quality for the mobile environment

Now is the right time to act to make
mobile phone TV a reality!



Broadcast complements one-to-one services



IP over DVB-H technology makes TV mobile

MPEG-2
over DVB-T

24 Mbps

Recent news (Nov2004):
DVB-H standard finalisation
ETSI adopts DVB-H for Mobile TV

IP Datacast
over DVB-H

11 Mbps



In-building
coverage

Power saving

Optimal capacity



4-5 Mbps

3-5 TV programs for large screen

128-384 kbps

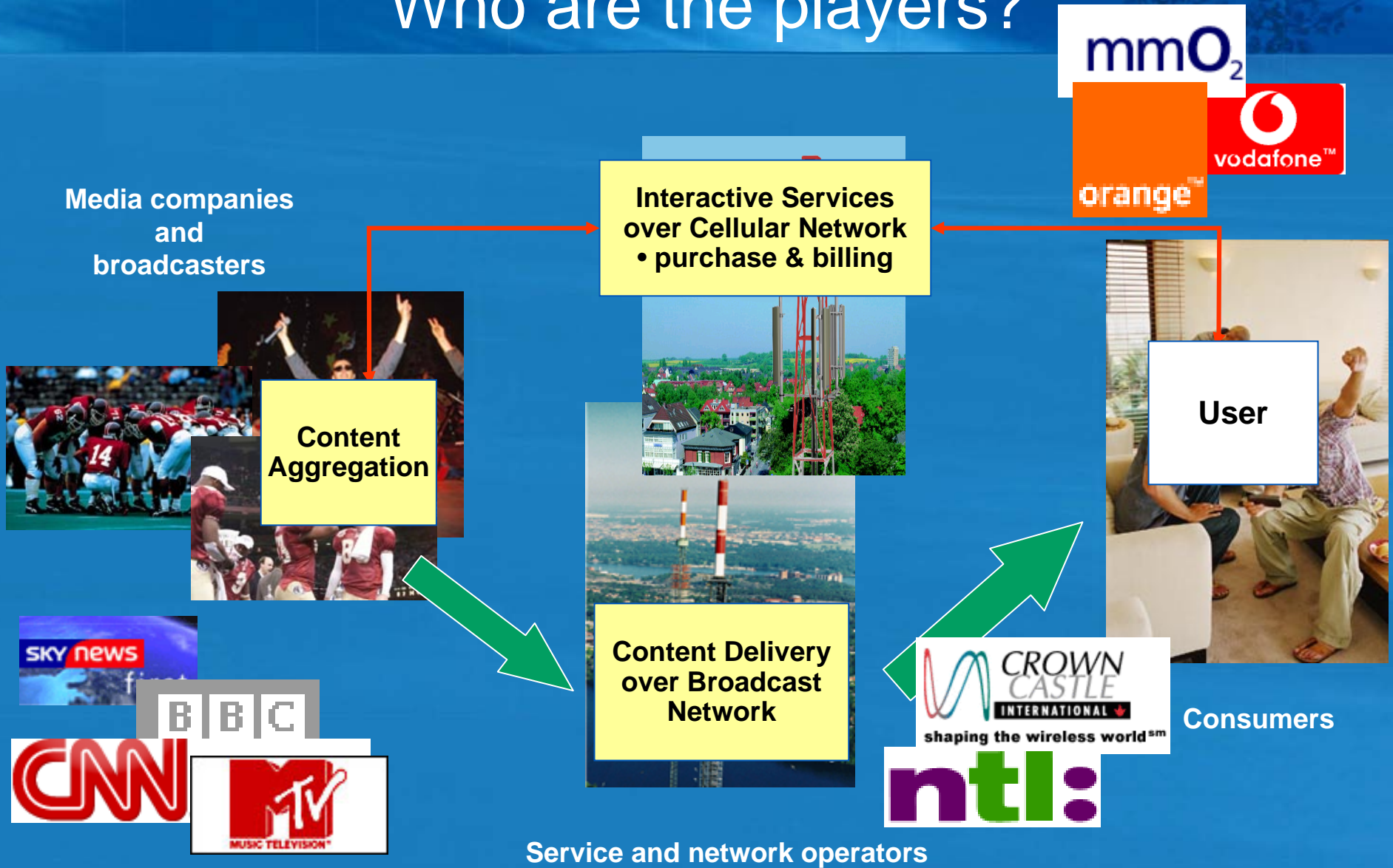
30-80 video streams for small
screen

Benefits

- Consumers: good, understandable service
- Media & broadcasters: re-use of popular content and new distribution platform
- Producers: opportunities for new content formats
- Broadcast network operators: additional core business opportunity
- Mobile operators: very good consumer service and opportunities for interactive services
- Regulators: good use for the spectrum released in digital switchover – help for local mobile and media businesses
- Equipment vendors: new, relevant phone feature



Who are the players?



Synergies between conventional & mobile TV



Livingroom

- On the move
- new, additional prime time
 - new business models for pay-TV



Interactive TV

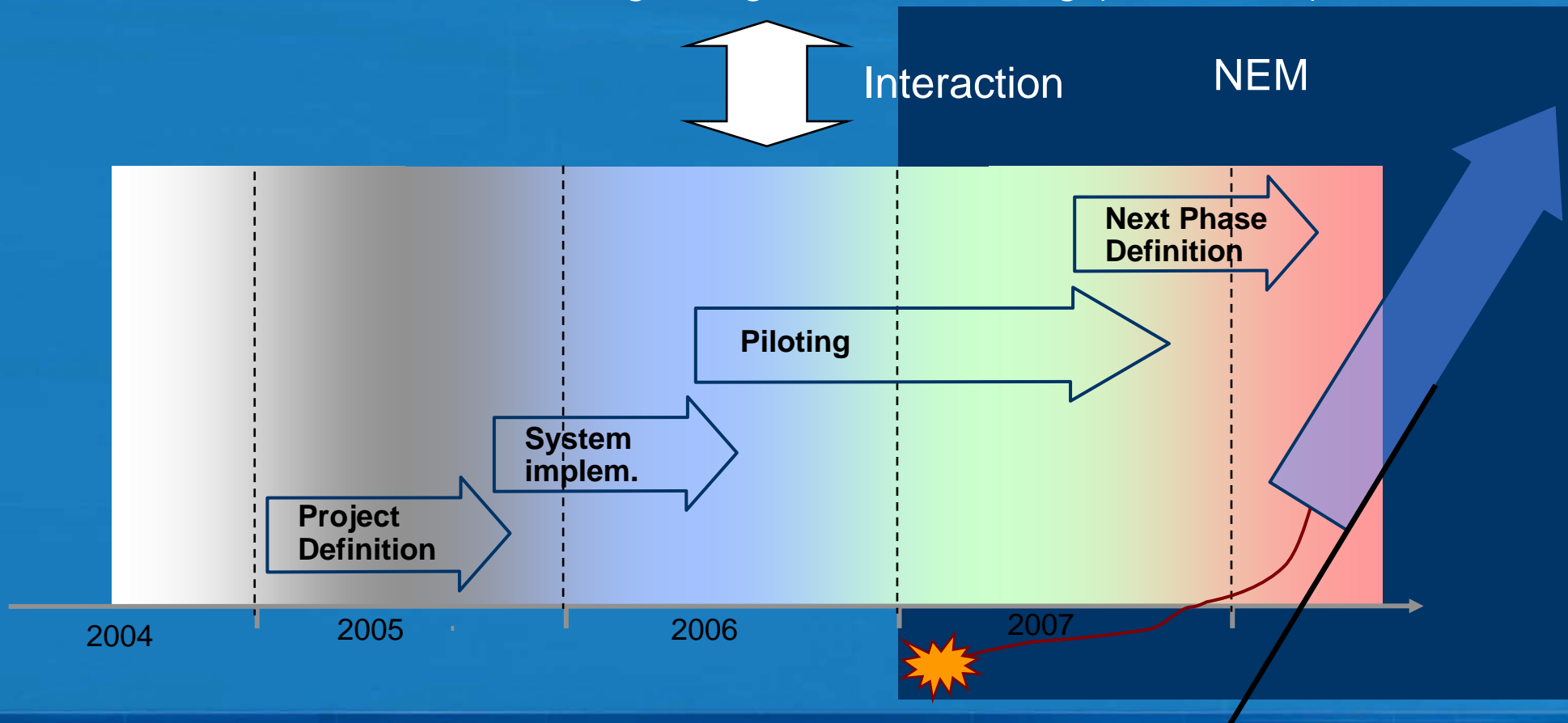
Personal
Alternative views

Nokia plans to bring a commercial mobile TV handset with integrated DVB-H to market globally in 2006

Pilots and NEM

Pilot to be executed parallel with

- standardisation activities (eg. DVB org., OMA, 3GPP)
- product implementation programs
- transition from analog to digital broadcasting (switchover)



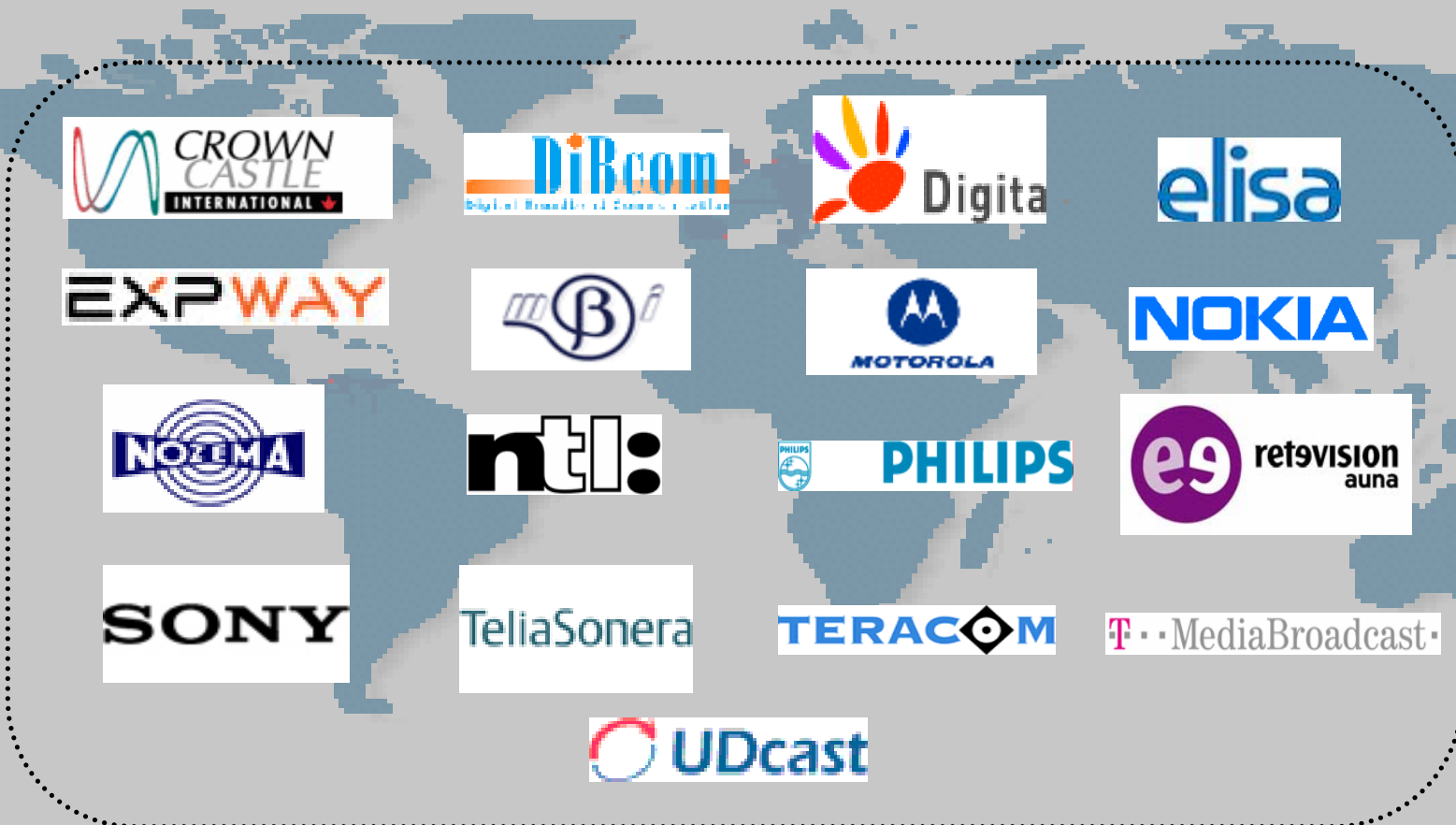
Some recent IP datacasting pilots

- Finnish companies join forces for a commercial pilot for mobile broadcasting services (→Oct2004)



- Companies and authorities pilot IPDC to bring TV-like services to mobile devices
- Bmco in Berlin (Nokia, Philips, Vodafone and Universal Studios, Germany) to explore new opportunities and co-existing of MPEG2 and DVB-H broadcasting (ended, but broadcasts continue)
- Crown Castle and Nokia in Pittsburgh, PA, USA (Oct2004→)

IPDC Forum



Thank you!



NOKIA
CONNECTING PEOPLE