

WS-SMH/Sec 29/INF-0503

CENELEC Workshop WS-SMH

Open Standardisation Approach
Smart House

to spearhead convergence of interests of the different stakeholders and consumers

3rd Plenary May. 19th, 2003

WS-Secretary H.K. Tronnier

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On WS-SMH

- Objectives
- Secretariat's Activities since last meeting
- May 19th Workshop Program

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WS-SMH Objective

This **WS-SMH** shall assist therefore CENELEC TC205/WG16 in its tasks and role as a focal point:

- by gathering from a to be identified broadest possible forum of interests new and detailed information on *Smart Houses* and related standardisation needs (see SMH model), with appropriate emphasis on Design for All and Assistive Technologies,
- by specifically investigating together with relevant market players, consumers, and other interested parties, needs for proper actions such as reinforced liaisons between existing bodies and/or additional working this field of *Smart Houses*
- by agreeing, where necessary, on recommendations for future standardisation work and/or other complementary Consensus forming initiatives such as dedicated CENELEC workshops on specific topics.
- by offering a forum for the presentation of RTD projects relating to the "Networked *Smart House*" - Platforms and/or to "Services to *Smart Houses*" with the view of possible application specific European consensus forming and/or standardisation.
- by ensuring consultation and active involvement of the user communities

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Activities since last Plenary Nov. 2002

- Reporting about the WS-SMH Initiative
- Update CLCTech Documentation site
- More and/or new contacts required
 - By e-mail and phone
- Evaluation of Service Provider options
- Evaluation of Digital TV standardisation
- Evaluation of Energy Performance Legislation
- Preparation of May 2003 plenary (and addressing other potential contributors)

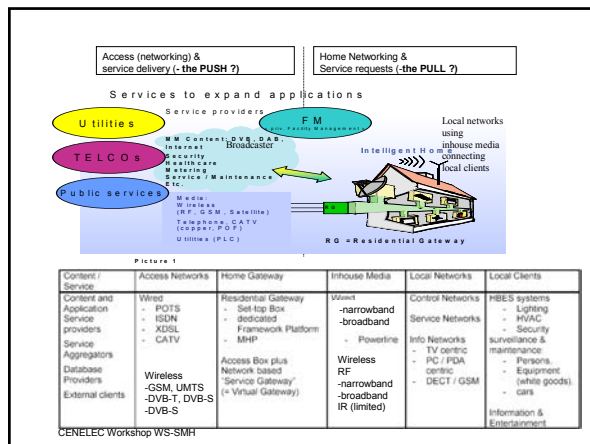
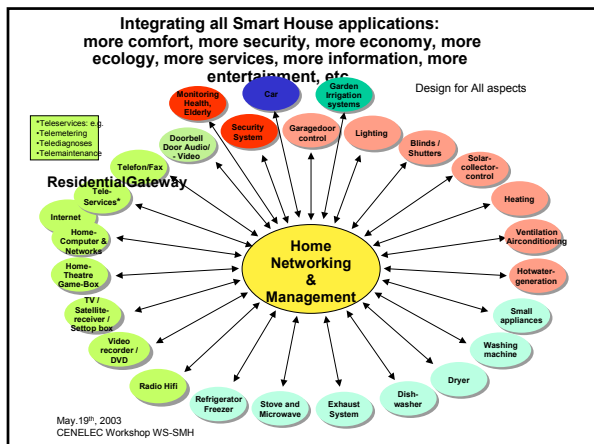
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- **Agenda To-days Workshop Program**
- **Smart House Interest and Opportunities**
 - Introduction and Overview WS Secretary [H.K. Tronnier](#)
 - Update on (ANEC) Consumer requirements [Roy Brooker / ANEC](#)
 - Conclusions at CEN/CENELEC/ETSI Nice Conference on Accessibility and Design for All ([H.K. Tronnier](#))
- **SMH Models and standardisation**
 - ETSI standardisation of User requirements: Interoperability and Quality of Service [J. Gebhard](#)
 - ETSI standardisation [Access and Terminals \[AT\]](#), WG "NGN @ Home" [AT-N] , Update on Activities [NN](#)
 - Digital (interactive) Television and Smart House ([H.K. Tronnier](#))
 - EU legislation on Energy Efficiency of Buildings and Smart Houses ([H.K. Tronnier](#))
- **Assessing the** (so far obtained) **WS-SMH results** (Order Voucher, Business Plan, [Conclusions](#), etc.) ([H.K. Tronnier](#))
- **Furthering Smart House standardisation** ([H.K. Tronnier](#))
 - CENELEC TC205 WG16: Questionnaire results
 - Smart House Plugfest approach
 - COPRAS project: harnessing FP6 projects for the Smart House field

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Introduction

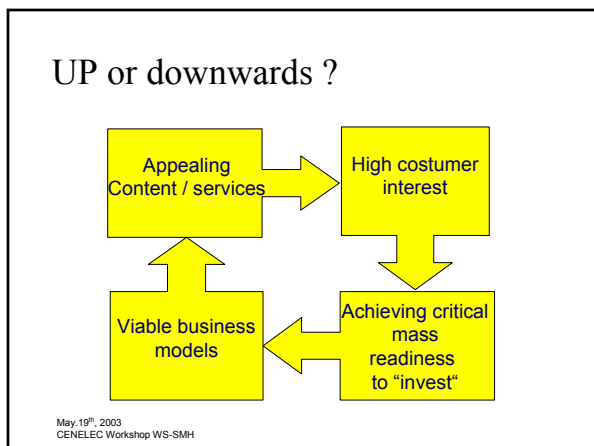
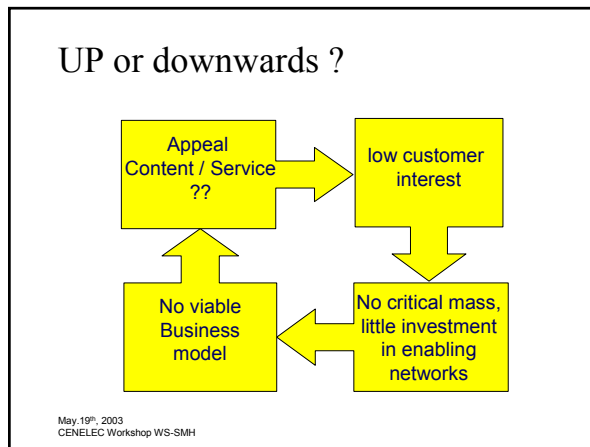
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Smart House market does not take off (?)

- All required technologies are available, but ..
- Negative «messages » from PC field: system crashes, Plug n' Play ?
- Too many incompatible systems on the market, hence economy of scale ? Priceline ?
- No Mobile Phone « market push » !

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Which way to follow to push Smart House market ?

- Mobile centric (GSM, UMTS but also DECT rather low cost terminal, easy networking)
- PC centric (networks become quite complex, but best Internet accessibility)
- TV / MM centric (with advent of DVB-T : TV-set become fully mobile, low communication cost interactive even with mobile function)

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Some German figures on Market potential of digital technologies in the Home
as at April 2003

- 75% own mobile phone
- 15.9% digital camera (6.8% 2 years ago)
- 70% own PC
- 37% PC are equipped with DVD drive (threefold increase in 2 years); 10% of PC have even DVD writer

External Networks

- 53% have Internet access; potential short/medium term increase fell to 11.9%
- 18% have ADSL connection (2% 2 years ago)

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German figures: Services

- Internet is being accessed several times a week
- 7mio of the 27mio Internet users download music from Internet
- Internet serves preferably for information retrieval of information related to
 - Tourism
 - School and university studies
 - Events
 - Product information
 - News
- To be paid information has generally lost in appeal by 60%

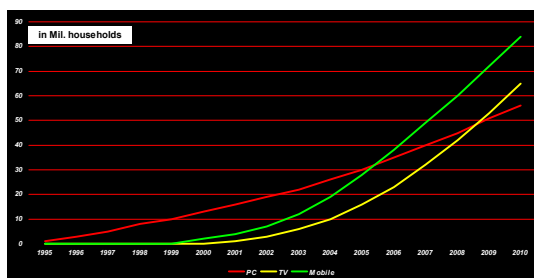
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German figures: Services ctd.

- however people are ready to pay for Internet services
 - classified ads (+48%)
 - medical counsel (+40%)
 - newspaper articles (+33%)
- buying via Internet has increased tremendously by 4.5 mio within less than one year to 21 mio
 - due to the ease to get comparable information
 - for bargain hunting
 - good access to mail-order house, in particular Amazon, but also the traditional ones
 - preferred products with substantial increase are sports ware, fashion and even pharmaceutical goods

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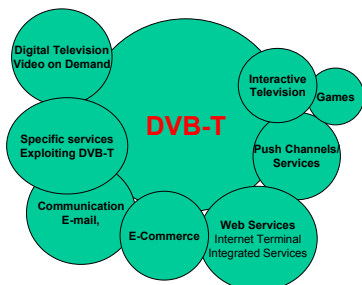
Digital MM Communications to the Home Europe



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DVB-T-Workshop Berlin 2002

The new **mobileTV** entertainment / infotainment / edutainment: Everything without a cable



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DVB-T-Workshop Berlin 2002

Standardisation

To pave the way for open markets

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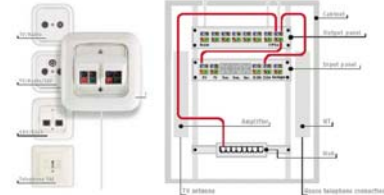
The current general Smart House craze:
DVD (=>Home Theater ? Starts with

- 1) TV with DVD; they have tremendously dropped in price; their features have terribly improved: multi-standard and multi-region, 6 sound channels, progressive scan capable, etc.
- 2) Add Dolby surround Loudspeaker set
- 3) switch to Widescreen: e.g. Plasma or LCD projector, or ?
- 4) Upgrade settop box to become PVR
- 5) Upgrade to Internet connection
- 6) Further upgrade to include smarthouse control /door CCTV camera via TV remote control
- 7) Add Home Multimedia server and MM Network (cable or soon Wireless), etc. etc.

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SMH networks

- New Construction: preferably Narrowband and Broadband cabling Networks for best QoS
 - Narrowband control networks according CLC EN50090
 - Broadband IP over Ethernet or 1394 for data and image



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SMH networks (ctd.)

- Retrofit in existing Houses (no new wires !)
 - For Narrowband control networks lowcost RF or Powerline (CLC TC205 standards)
 - Broadband according to Wifi standard; for data and soon also for MM (with extended QoS 802.11e, 802.11g, 802.11i)
 - Broadband Powerline: cost of Linefilter, cost of Phasecoupler, which standard will be agreed in CLC SC205A ? Regulatory hurdles, QoS ?

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Connectivity & Interoperability
of Services

Designed for All

- Services must be Multi-Access and Multi-Device capable to
- Serve any terminal
- Use any medium (Sound, Image, Text, Interactive)
- Connect to any user & at any place (roaming)

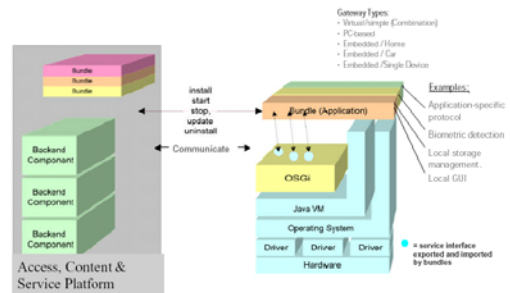
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Reconfigurability and downloading new applications

- Devices are connected and can 'see' and 'use' other's functionality
 - But the end user functionality is still fixed, i.e. what the manufacturer thought was appropriate at design time for that device
 - Large variations between devices and networks in different homes
- ⇒ We need a flexible environment for adding functionality (applications) after shipping

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Service Aggregation
OSGi Service Platform

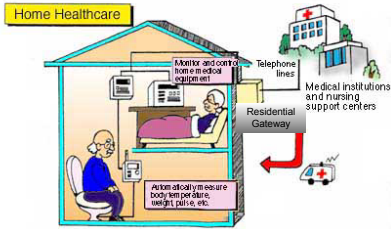


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Hans-Werner Bitzer / Deutsche Telekom

Serving Elderly and Disabled

Social / Health services save money
There is more money at advanced age



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Source: Edmore

Awareness & Testbenches (examples)

inHaus Duisburg



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Futurelife Switzerland

= Smart House
Application Classes