

Role of Mobile in DRM

Human Factors

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Content

- The history of DRM and Mobile
- Human Attitude to „handy”
- Differentiating Mobile Features
- Standards, Mobile and Future

DRM and Mobile in the Past

- Special mobile content
 - ring tone
 - background pictures
- Security based on natural limitation
 - Different phones, different formats
 - No transfer possible between phones
 - No transfer possible between phone and other equipment
- Proprietary solutions
- OMA DRM v1.0 standard
 - targeted at mobile
 - targeted at mobile content
 - copy stop, controlled use, copy control
 - more on OMA DRM v1.0 on next slide

OMA DRM v1.0

- Three levels
 - forward lock
 - combined delivery (control on use)
 - separate delivery (control on copying)
- Content used on mobile
- Content downloaded using mobile
- Authentication token is the phone not the SIM

OMA DRM v1.0 at T-Mobile Hungary Co. Ltd.

- Forward Lock
 - Commercially implemented for all content
 - For all phone types that support it
- Combined delivery
 - Implemented commercial
- Separate delivery
 - Implemented commercial
 - Lack of commercial demand

Solution Platform: Nokia Download Server

How do we use our mobile phone?

- There are important national differences
- Examples:
 - Hungary
 - main phone due to historical lack of land line phones
 - everybody (including dogs) have mobile phone
 - major business tool
 - no share of phones
 - Germany
 - secondary phone
 - many use pot
 - pot is the business phone
 - family shares the phone

What is mobile?

- Is it a moveable talking device?

IT IS MORE THAN THAT

Personal multimedia device continuously connected to high bandwidth GSM and local networks equipped with a strong identity token (SIM) managed by strong contractual relationship with the operator.

Detailed on next slide.

So what is a mobile?

- Personal
 - One phone one person (who do we sell content?)
- Multimedia (also high bandwidth)
 - Music, picture, video, games
- Continuously connected to GSM
 - Push is available
- Continuously connected to local network
 - Control other devices
- Communication device
 - Upload – download
- SIM
 - Know who is on the other end of the line
- Contractual relationship
 - Collect the money

Where does the world go?

- OMA DRM v2.0
- Two mobile functions
 1. Access to media („download”)
 2. Rights control (based on SIM and PKI)
- Control domain of playback devices
 - detailed on next slide*

Multimedia Home

OMA DRM v2.0

Domain of play-back devices

Download content on

- mobile
- other (ADSL, modem, broadcast, whatever)

Control play-back/access on TV, Hi-Fi (whatever) using the Mobile

- Mobile becomes THE enabler device

Where does T-Mobile Hungary go?

- Extend DRM v1.0 to full commercial use as market demands
- Technical pilot DRM v2.0 in 2005 (Beep Science)
- Extended pilot in 2006
- Implement SIM¹-based mobile PKI services in 2006

¹Note that SIM itself is a PKI device since epoch of GSM.

Thank You

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