The Transition to Digital Television in Berlin

Observations from January 2004 Visit

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Introduction: Why We Went to Germany

- Germany is Transitioning to Digital TV by 2010
- Berlin's flashpoint transition: All analog TV was switched to digital on August 4, 2003
- How did this happen?
- Does Berlin provide a model for completing the digital transition here?

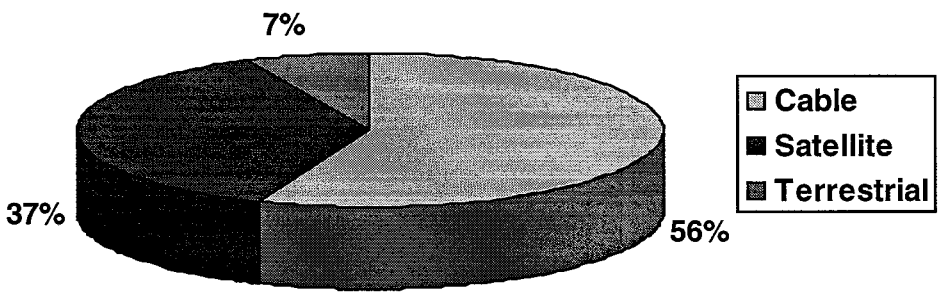
Our Meetings

- Regulators
- Media Representatives
- Network Facilities Operator
- Technical Experts

What We Learned

- The Berlin transition went smoothly, BUT . . . .
- The German transition differs from the U.S. transition in several key respects:

- **Key difference between German and US market shares:**
  - Only 7% of German households rely on over-the-air broadcasting:



Key Differences in Transition's Purposes

- U.S.
  - Advanced Services, esp. HDTV
  - More efficient use of spectrum
- Germany
  - Continued justification of fee to support public broadcasting
  - Continued justification of transmission expense for private broadcasters

- **Key differences between German and U.S. Cable Television:**
  - Many fewer channels of programming
  - Most programming provided by broadcasters
  - Programmers pay for carriage, not vice versa; no programming supported by subscriber fees
  - "Must Carry" includes payment from broadcasters ("just and reasonable" price, subject to negotiation
  - Choice of analog or digital carriage at operator's discretion

- **Key differences between German and U.S. Cable Television (cont.):**
  - Stunted development of cable modem service; DSL is dominant high-speed Internet service provider

- **Satellite Service in Germany More Competitive:**
  - Subscribers pay a one time fee for equipment and then receive programming (690 channels) at no additional cost
  - No “middleman”; it’s free

Key Benefits for Berlin Consumers

- Multicasting: Unique for Germany vs. US
  - Replace one analog channel with up to four digital channels (with EPG) – 27 digital channels in Berlin
  - Provide over-the-air competition to cable's *30-channel* offering
  - More leverage in negotiating with cable operators

Other Perceived Benefits

- Mobile Applications
  - Digital enables TV reception in vehicles traveling at high speed.
  - Digital expected to enable reception of TV on low power handheld devices
  - TV and Internet service on cell phones

Key Elements (cont.)

- HDTV – Not a Factor
  - Not enough spectrum available to support HD terrestrial broadcast
  - Broadcasters not interested in supporting or promoting this technology
  - No HDTV sets available in the German marketplace

Customer Premises Equipment

- **Availability:** More than 70 models of digital set-top receivers to date.
- **Price:** Approximately 109 to 200 Euros today – but some boxes were available at special introductory price (approximately 100 Euros) prior to completion of the transition.
- **Subsidies:** Approximately 6,000 receivers were provided to low-income households at no cost (But this program will no longer be offered going forward).
- **Consumer Response:** More than 85,000 households purchased equipment prior to the end of the transition in August 2003. By winter 2004, more than 200,000 receivers have been purchased in Berlin.

How Does Cable Carry Digital Broadcast Signals

- Operators have *discretion* to carry in analog or digital, but currently carry in analog
- Of the new digital channels available over the air, cable operators *already* were carrying virtually all in analog

Conclusion

- In the local circumstances in Berlin, it was possible to shut off analog TV on a date certain with minimal disruption, BUT . . .
- It's highly uncertain whether those unique circumstances exist even elsewhere in Germany. They do not exist in the United States