

## Next-generation DVB-H

- **IfN deeply involved in DVB-H technology specification, verification and technical planning of service rollout**
  - DVB project
  - EU Celtic Project Wing TV
  - Projecting DVB-T in North Germany („DVB-T Norddeutschland“)
  - DVB-H in North Germany project
- **Possible research objectives related to DVB-H2**
  - Enhancing the bandwidth efficiency and robustness
  - Enhancing coverage models for DVB-H network planning
  - Enhancing the frequency agility
  - Reducing the zapping time and the energy consumption of terminals
  - Enhancing the mobility across network boundaries
  - Creating full IP transparency



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## Next-generation DVB-T

- **IfN took a leading part in the DVB-T standardisation process and in projecting the DVB-T network in North Germany (“DVB-T Norddeutschland”).**
- **The next generation of digital terrestrial television is now approaching and under the focus of research. The targets for DVB-T2 are:**
  - Enhanced bandwidth efficiency
  - Higher data rate at same robustness and/or higher robustness at same data rate
  - Enhanced mobility
  - Low cost of receivers



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## Hybrid Networks and IP Datacast

- **IfN deeply involved in IP Datacast specification**
- **IST projects**
  - IST-DAIDALOS, IST-DAIDALOS-2, IST-ARENA
- **Ongoing research**
  - Handover mechanisms
  - Hybrid networks (Enhance IP Datacast network by balancing the load among both branches DVB-H and UMTS)
  - Network planning of hybrid (DVB-H/UMTS) networks
- **Possible research objectives**
  - IEEE802.21-compliant handover solution
  - Integration into IP Datacast specification
  - DVB-T/H seamless handover integration



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## Software platforms

- **IST-MCP, IST-INSTINCT, ku-mobile demonstrator**
- **Ongoing research**
  - Java-based Application platforms for mobile DVB-H/IP Datacast enabled devices
  - Integration into IP Datacast and OSGi framework
    - „Handheld Software Platform“ (HSP):
- **Possible research objectives**
  - Java-based multi-purpose software platform (car, handheld, etc.)
  - UI description languages (SVG, SMIL, LAsER, etc.)



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