Vertical handover in operator environment

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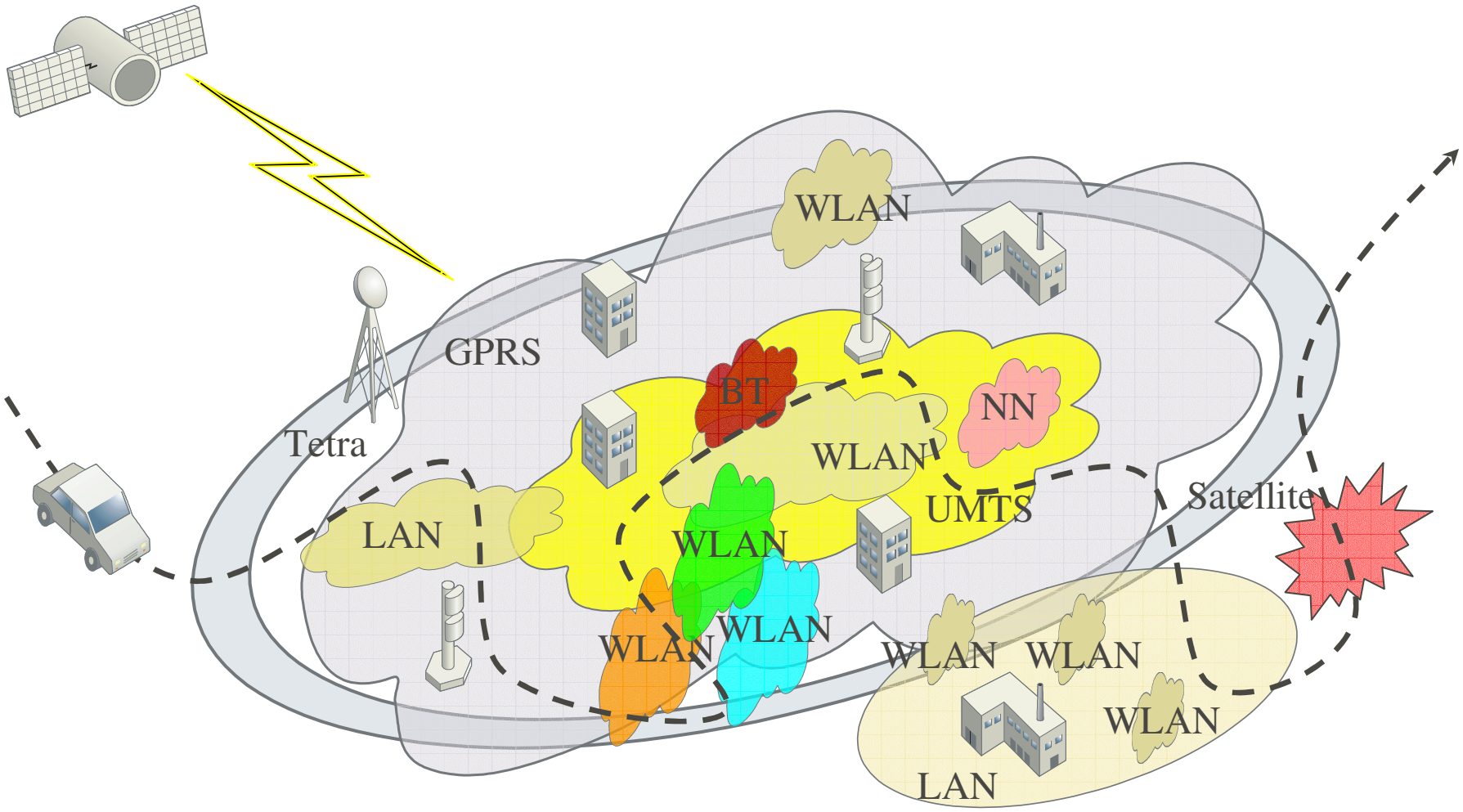
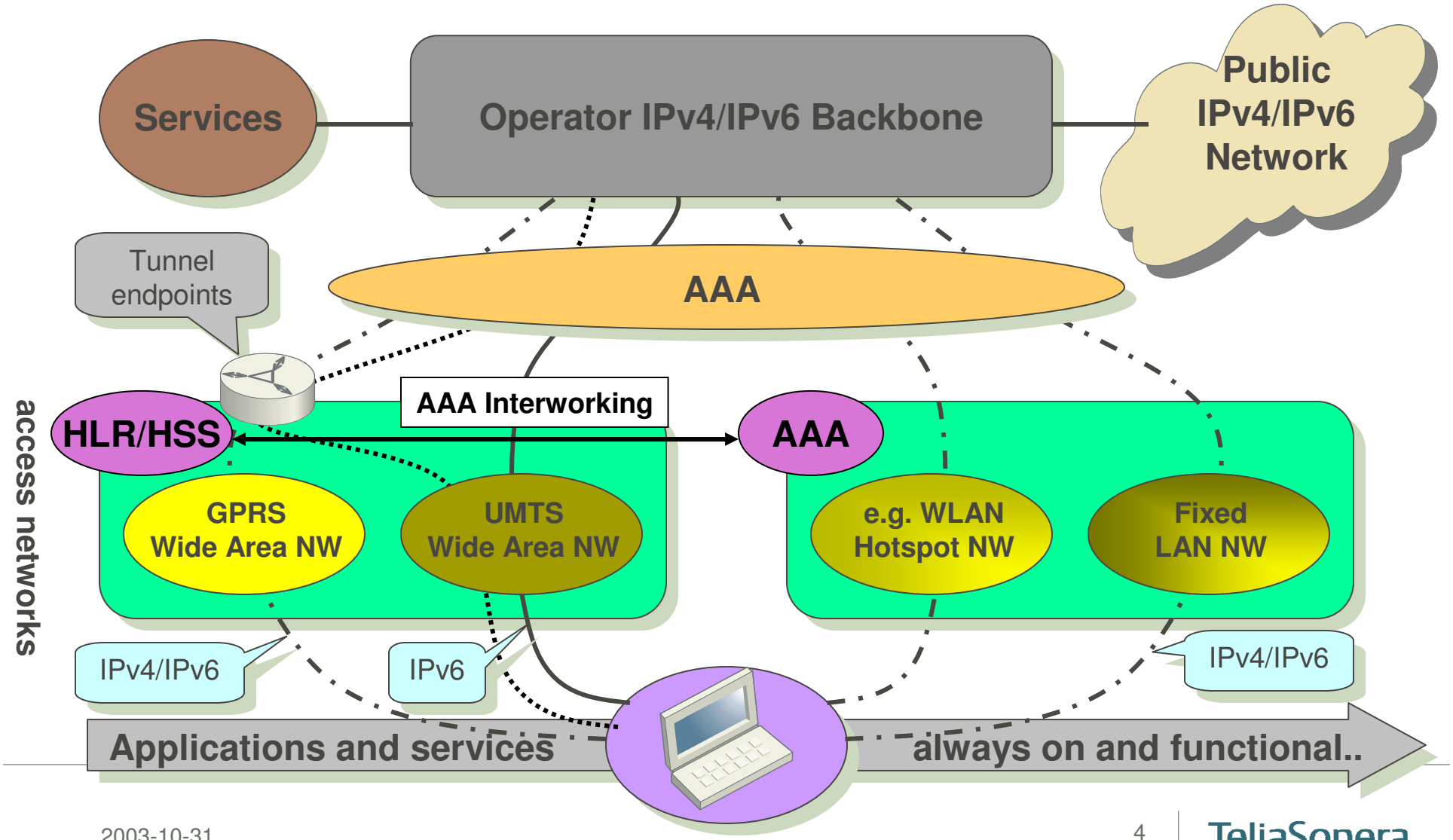
Objectives for the VHO Research Project

- To study and experiment with different IP-Mobility enabling and related technologies
  - Understanding the evolution path of IP-mobility and finally deploying Seamless Mobility requires in-depth practical knowledge of wide variety of related and affecting technologies, like IP transport, access network characteristics, handover mechanisms, use of multiple access networks simultaneously…
- Work focuses on those technologies that have possibilities to evolve into standards and operator scale technologies
  - Focus on relevant standardization bodies and academic research
  - Look at everything from an operator point of view!
- Work aids product developing and decision making
  - Correct technology evolution path and view to new technologies
  - Can find bottlenecks, problems, and opportunities

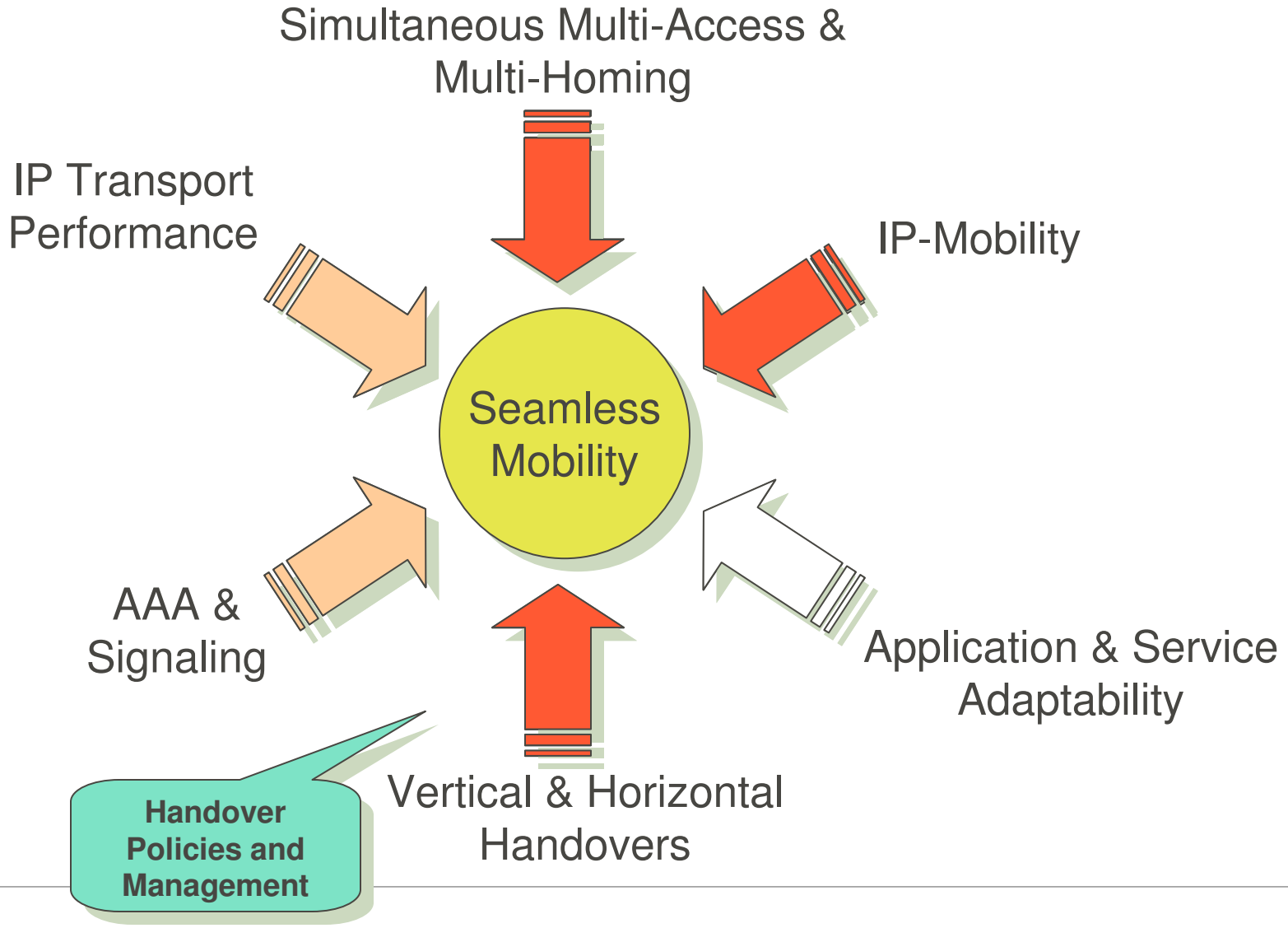
In the Future Network Heterogeneity Increases



Combining Accesses to Enable Service Continuity



VHO and Related Technologies – Research



Importance and Relevance of the VHO Research

- Handovers and Mobility are a technology enabler
  - Should not really be a “visible” end user service
- Heterogeneous networks benefit from a seamless mobility solution
  - Solving problems at application level is possible but letting IP network/transport layer infrastructure to do it is more reasonable
- Mobility has several IP related issues to deal with
  - Transition phase from IPv4 to IPv6
  - Simultaneous Multi-Access and Multi-Homing
  - Security, identity and AAA
  - Possible performance implications
- Mobile users are not always humans
- Concentrate on IP-Mobility solutions with “operator grade” functionality
- Availability of terminals is always a key issue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