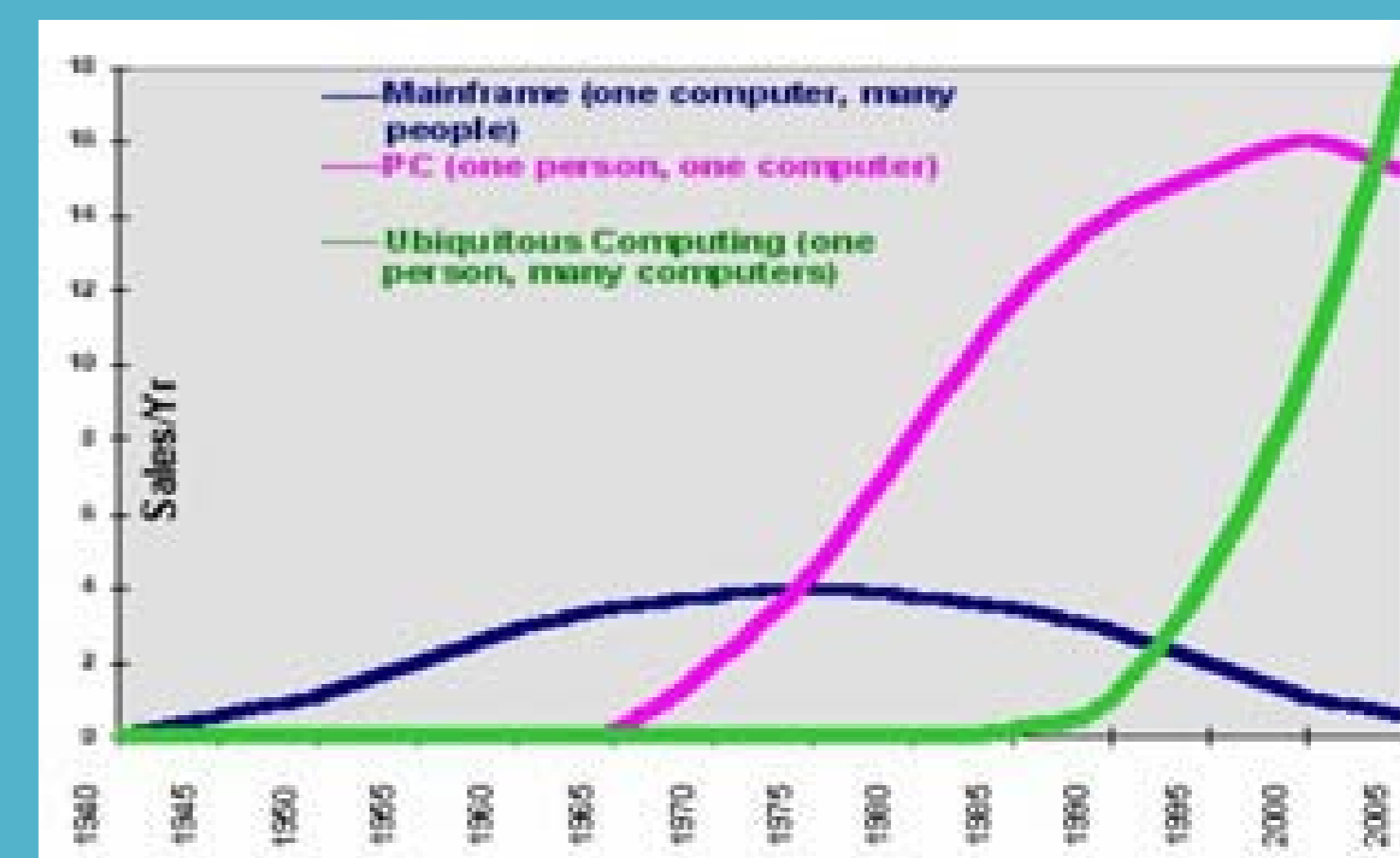
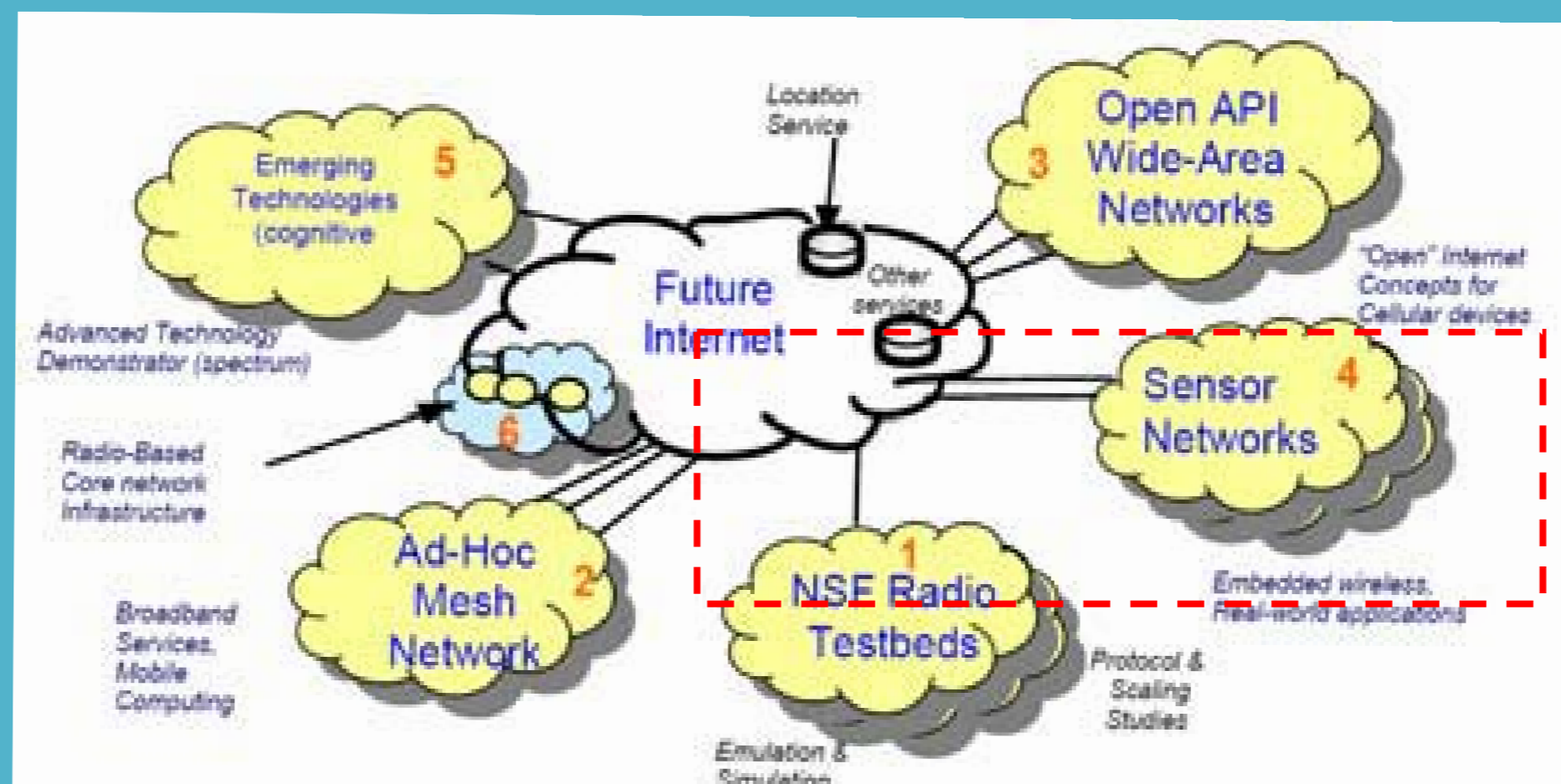


Towards Developing Mobile Code for Resource Constrained Wireless Networks

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Motivation

- Wieser's Vision of Ubiquitous Computing
- NSF Barriers to Disruptive Innovation
- Cyber-Physical Ecosystems
- Global Testbeds for e.g. GENI



Proposed Approach

- Terminal Mobility: Mobile Devices with Opportunistic Communication capabilities.
- In-Network Programming: WSN with Over The Air Programming (OTAP) capabilities.
- Opportunistic Communication

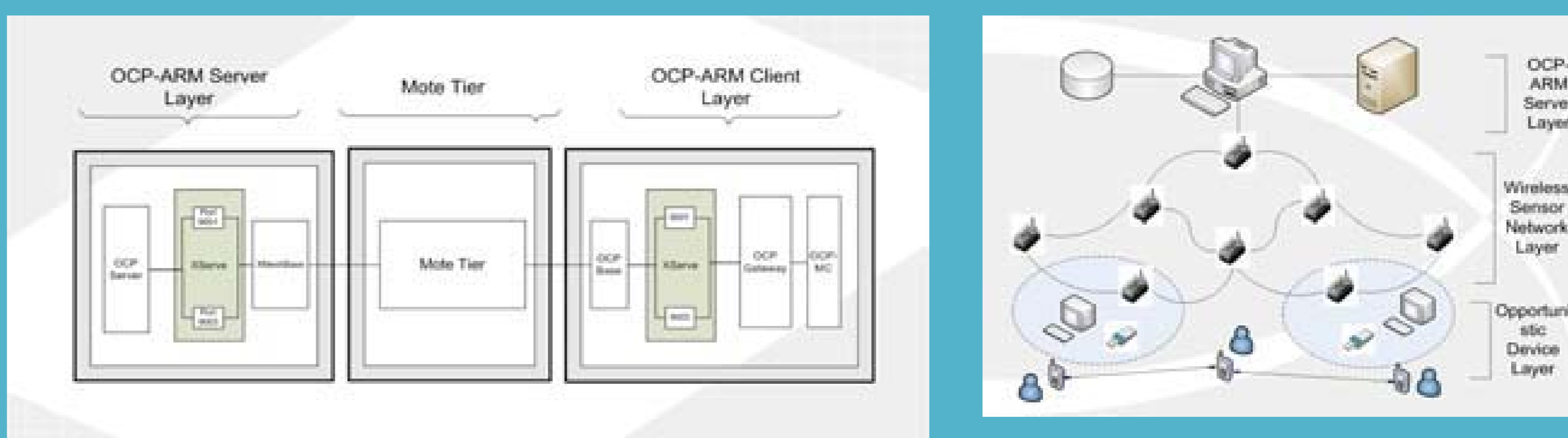


Key Idea
 Terminal Mobility +
 Opportunistic Communication
 + OTAP = Mobile Code

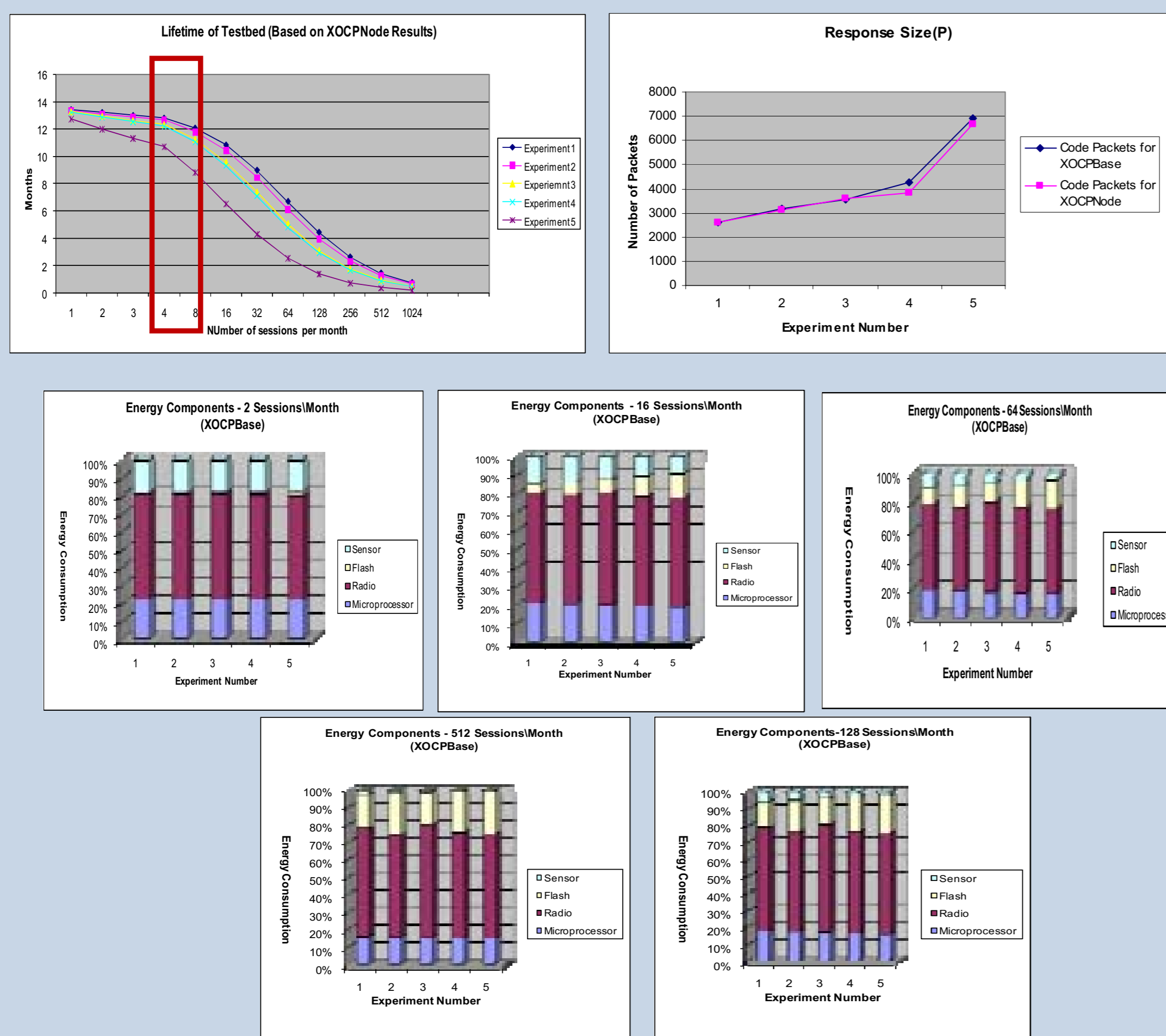
Problem Definition

- What type of gateway architecture (mobile, static, hybrid, etc) is efficient for the integration of sensor networks with the internet?
- How adequate is the concept of opportunistic communication for resource constrained networking devices?
- How practical is it to consider my architecture for real world deployment? If the feasibility is low then how can it be improved?

Design and Implementation



Results



ARM LAB
 Adaptive Risk Management LAB
 Director, Dr. Mihaela Ulieru.

