IEA/4E/SEAD Network Standby Workshop
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Beyond Network Standby

Further energy implications & challenges that need to be addressed

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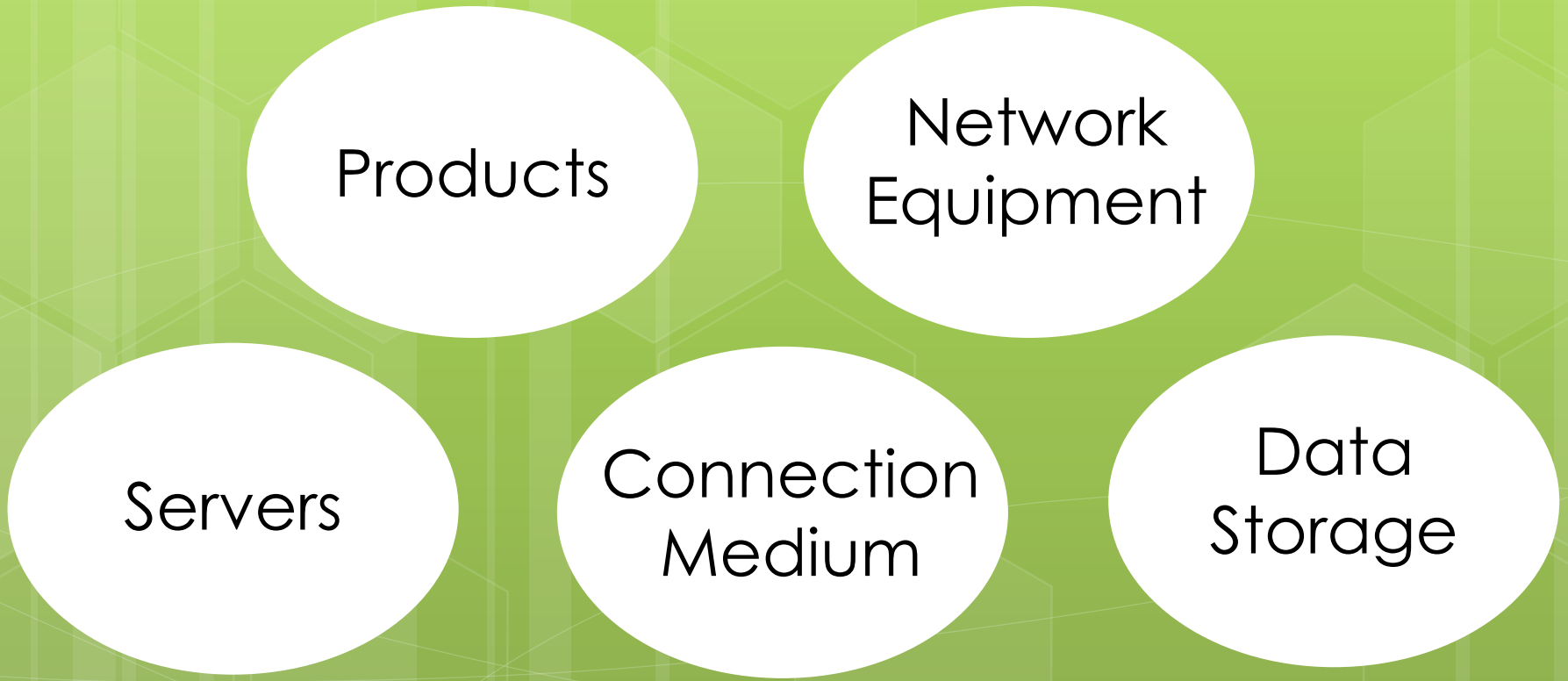
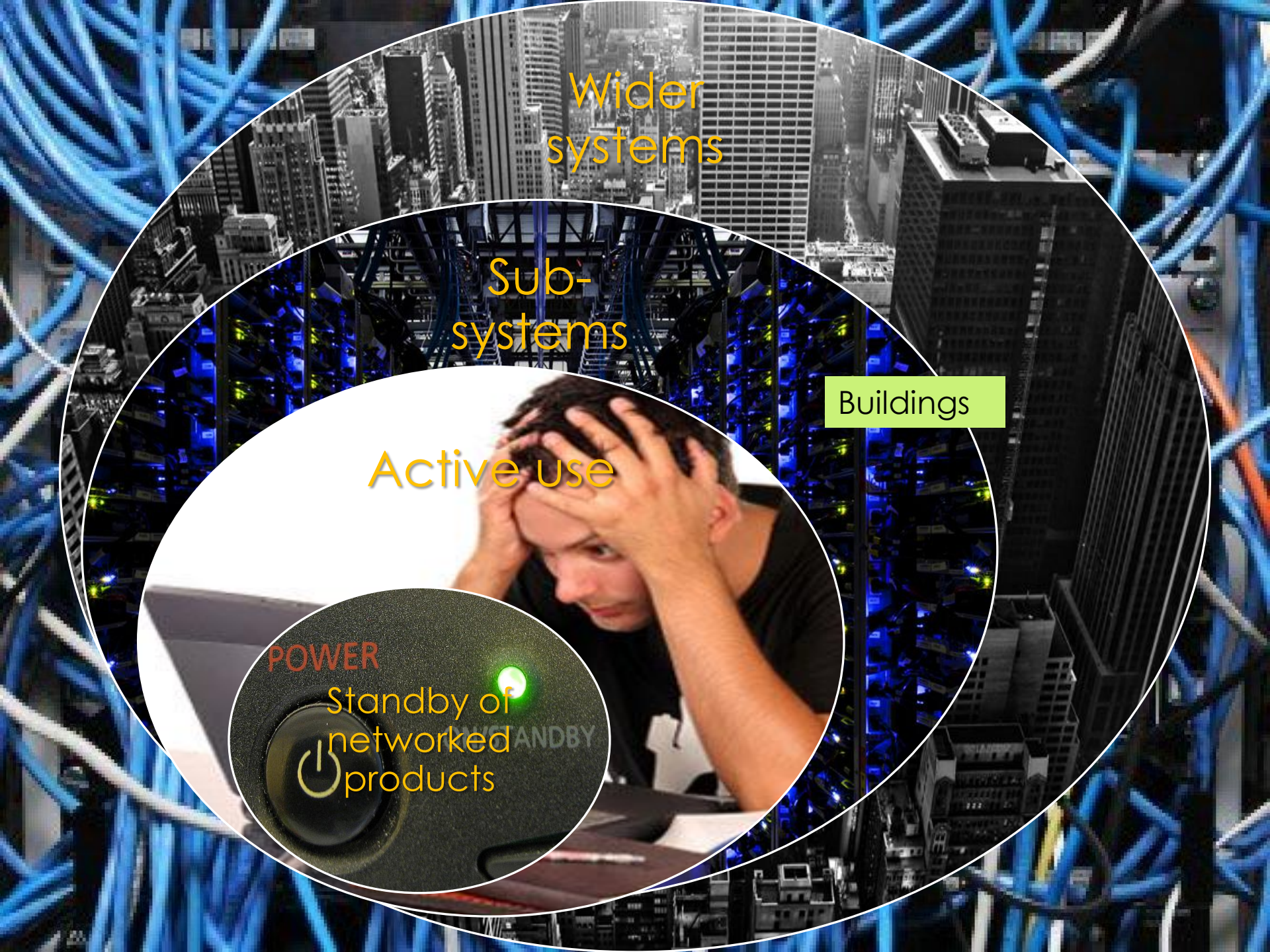
- Network standby policies are only part of the solution
- Efficiency can be maximised by targeting ICT systems




Wider systems
Sub-systems
Buildings
Active use
POWER
Standby of networked products

Making Sure Smart is Efficient

- Network Standby is one part in a bigger system
- To maximise efficiency the whole system needs to be considered
- To avoid energy shifting need to consider other parts of the system

What is Beyond Network Standby?

What are the priority areas?

- Efficient Network Services
- Smart Meters & Energy Monitoring Systems
- Demand Response Enabled Products
- Smart homes
- Others?

What is Beyond Network Standby?

- Approaches for promoting efficiency in the priority areas
- Who will / should lead this work?
- How can you support this work?

Efficient delivery of network services

Effective energy management needs to:

- Consider the complexity and interdependency of multiple devices and products on a network
- Appreciate the relationships between all connected products
- Understand to gain savings in one part of the system may require action in another
- Power scaling or adjusting energy use to work required

Efficient delivery of network services

- Software
- Network design
- Network architecture
- Communication protocols
- Technical standardisation processes
- Service providers
- Product & component manufacturers

“Smart” meters and energy monitoring systems

- Installation of these systems are increasing globally
- Have potential to control and reduce energy use of equipment
- What is the energy consumption of these products?
- Are there energy savings over the whole system?

Demand response enabled products

- "Smart" appliances – interactive with the Grid
- Control power use to reduce peak power consumption
- Gives more flexibility to electricity supply
- Technology available – systems for implementation need development

"Smart" or Automated Homes

- Appliances are connected to a home gateway
- A home gateway connects its local area networks to the Internet or other wide-area networks.
- Home gateways allow automated or remote control of appliances
- Potential to incorporate automated energy efficiency

What is Beyond Network Standby?

- Energy efficiency of services
- Not only efficiency of data transfer but ensuring effective transfer of data (avoiding unnecessary transfer)
- Foresight studies
- "Putting whole buildings to sleep"
- Efficiency of ICT as part of zero energy buildings strategies and solutions
- Efficient plug and play

There is a continued need for industry policy dialogue role for SEAD, 4E, IEA