

# Summary of Working Group Proposals from Day 1

# Principles

# Design Principles

- #1 re-drafting to make explicit adoption of efficient protocols
- #2-5 relatively settled
- #6 discussion
  - May need to tweak definition of networking functionality
  - Reflect that device may consume more so that others consume less (may need to redefine “main function”)
- #7-10 relatively settled

# Policy Principles

- #1 discussion
  - Harmonise all policy aspects
- Potential platform for global voluntary agreements
  - For consideration in next phase

# Implementation

- Range of options possible to disseminate
- Protocols - encourage individuals as well as organisations / committees
- ITI willing to promote / disseminate
- Question about commitment process

# Outcomes

- Encourage govt to make policy in line with policy principles
- Welcome industry initiatives to disseminate
- Endorse measures that reinforce principles
- Endorse further work on monitoring
  - Discussion: common to many WGs – perhaps a separate item

# Protocols

# Outcomes

- Key issue is adoption of efficient protocols
- Influence protocol adoption using principles
- Influence protocol development using principles+awards
- Identify technical gaps
- Discussion
  - Include service providers in above 3 items
    - E.g. Energy Star award for DirecTV
  - R&D funding
  - Leverage government procurement



# Energy Aware Devices

- Relatively inexpensive to build “energy awareness” into devices
- Useful for intelligent efficiency
- Influence device efficiency?
- Privacy concerns
- Popular in ICT
  - IETF EMAN
  - Energy star for servers
- Taking a foothold in consumer electronics
  - ANSI/CEA 2047
- Outcomes
  - Encourage for voluntary initiatives
  - Anything more to be done by this group?

# Centre of Excellence

- Advisory committee to avoid commerciality
  - “Light touch” review
  - Initially = members of working group, volunteers welcome
- Classify papers using a matrix system
- Discussion:
  - Use MDLE branding?
  - Encourage research and analysis, e.g. ACEEE
- Pilot by 4E to go live shortly
- Outcomes:
  - G20 confirm as useful
  - Support further development and funding for promotion
  - C20 countries contribute
  - Encourage G20 governments to use it to inform policy

# Goal, Vision, Definitions

# Definitions

- Unified set of definitions for all working groups
- Some further refinement required

# Vision

- Purpose of vision & goal to set an ambitious target that drives govt & industry action
- Vision: a world where devices and networking are optimized for energy management while delivering increased value, productivity and services, with the goal of reducing the global energy consumption of edge devices, networking devices and networks
  - Not under the control of stakeholders, difficult to monitor

# Goal

- Goal A: stop the growth in network standby energy consumption while maximizing the benefits of greater connectivity
  - Discussion:
    - May be perceived as negative
    - Numbers of devices & usage outside our control
    - Hard to monitor but could be extrapolated from case studies
- Goal B: 1W+ by 2025 for network standby and idle
  - + allows differentiation depending on type of connection
  - + also indicates separate metric for idle consumption as % of power at max throughput (goal 10%)
  - Simple, easy to monitor, under our control
  - Discussion: interpretation of “1W+”



# Outcomes

- Vision endorsed by governments and industry
- Goal not agreed, but could be framed as a challenge to industry
- Alternate vision: By 2025 networks will be reducing G20 energy consumption by at least twice the energy they currently consume
  - Ability to measure?
- Need more time to develop specific goals?

# Awards

- Product award
  - Single product: difficult except for SNE (Energy Star)
  - Most improved
  - Incorporate standby into existing awards
  - Discussion: need to take into account energy saving potential in networks and intelligent efficiency
- Protocol award
  - Winner take all, rank protocols, recognition (this was favoured)
  - Discussion: use principles as the “rules”
- Standards / program award
  - Discussion: include industry initiatives

- Outcomes:
  - Consider protocol award
  - Longer term: product / program award
  - Tie into SEAD global efficiency award
  
- Other Discussion
  - Leverage procurement of governments and service-providers
  - Competition nomination/submission can be onerous
    - Recognition of achievement does not require this
  - Recognise individuals (protocols)

# Intelligent Efficiency

- Outcomes
  - Case studies in Centre of Excellence
  - Measurement methodology
    - Leverage ongoing (early) research, e.g. ACEEE
  - Consider which policy types might support the maximization of IE benefits

# Proposals from Flavio Cucchietti

- Proposal 0
  - Require EMAN in all networked devices
  - Promote standards harmonisation
- Proposal 1
  - Extend Energy Star, CoCs and ITU/IEC specs
- Proposal 2
  - Require energy efficient ethernet for all interfaces
    - Discussion: not popular in residential
  - Promote solutions able to tune capability depending on demand
    - E.g. ETSI GAL



- Proposal 3
  - Promote proxying e.g. ECMA-393
- Proposal 4:
  - Extend 1 Watt initiative
  - Use Virtualisation
    - Discussion: need to make sure net energy savings
    - Discussion: latency problems

# In Conclusion

- Very positive first day!
- Engaging discussions!
- Large consensus on most items!

## Next Steps

- Mark Ellis to draft a proposal on Vision/Goal by w.b. June 22 for Working Group 1, requesting written comments
- Mark Ellis to convene WG 1 on July 2
- Mark Ellis & Steve Beletich to draft report for comment by stakeholders
- Report submitted to IPEEC by 24 July