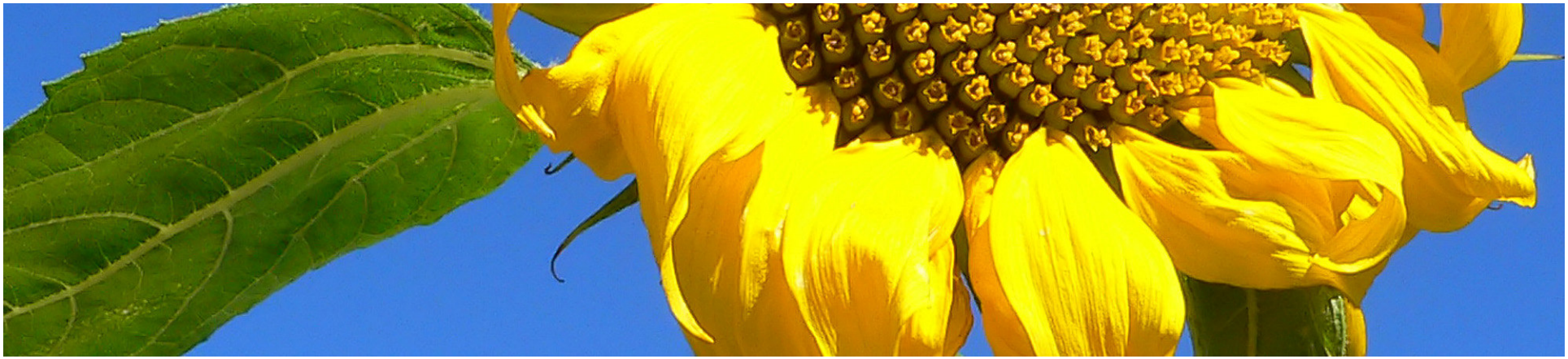

ErP Lot 3
Third Stakeholder Meeting

Games Consoles

Jonathan Wood

Introduction Task 7

- Definition
- Involvement of Game Publishers in a potential measure
- Relationship with draft computer measure
- Energy-efficiency requirements
- Other environmental impacts of games consoles
- Relevance of energy or eco labelling, benchmarks, public procurement
- Measurement requirements and existing test procedures
- Potential for self-regulation
- Policy scenarios
- Impact Analysis

Definition

- **Largely unchanged**
- **Small changes to allow scope for changes in future products (e.g. Inclusion of optical drives)**

Game Publishers

- Important consideration for auto power down functions
- Would be required to support auto-save in future games
- Risk of changing the gaming market by allowing “cheating”

Relationship with computer measure

PC Type	GPU Teraflops Processing	GPU Idle (W)	Approx. GPU Allowance Idle (W)	Approx. Base Unit Allowance Idle (W)	Approx. Total Allowance Idle (W)
Desktop PC Category D	1.36	18.0	16.8	65.0	81.8
Desktop PC Category D	2.09	27.0	23.1	65.0	88.1
Notebook PC Category C	1.12	9.3	0.5	32.0	32.5
Notebook PC Category C	2.24	18.7	6.6	32.0	38.6

- **Category D products highest specification**
- **Games Consoles would not meet technology requirements of Category D**
- **Games Consoles would come under Category A – where idle mode requirements are significantly lower.**

Proposed Energy-efficiency requirements

- **Active mode – proposed limits on power could impact functionality**
- **Idle mode – proposed requirements based on inclusion of currently available technology**

Function	Power Modes	Estimated Power Demand (W)
Gaming	Game Play - 1 Player	108.3
	Game Play - 2 Player	106.1
	Game Pause	107.2
	Game Play Idle	107.2
System Idle	System Idle	89.7
Media Playback	Media Play	91.3
	Media Pause	89.1
	Media Play Idle	89.1
Internet Browsing	Media Play	89.7
Audio Listening	Media Play	90.8
	Media Pause	92.9
	Media Play Idle	89.7

	Reduction Active Mode Power Demand						
Active Mode (W)	-20%	-32%	-43%	-55%	-66%	-78%	-89%
60	48	41	34	27	20	13	7
80	64	55	46	36	27	18	9
100	80	68	57	45	34	22	11
120	96	82	68	55	41	27	13
140	112	96	80	64	48	31	15
160	128	110	91	73	54	36	18
180	144	123	103	82	61	40	20
200	160	137	114	91	68	45	22
220	176	151	125	100	75	49	24
240	192	164	137	109	82	54	26
260	208	178	148	118	88	58	29
	Potential Idle Mode						Power Demand (W)

- **Idle mode requirements suggested at 45W to meet draft ENERGY STAR specification**

Proposed Energy-efficiency requirements

- **Idle mode – proposed requirements for secondary functions**

Tier I	Media Play (W)
DVD playback	≤ 55.0
CD, BD and MPEG playback	≤ 62.0
Internet browsing	≤ 62.0

- **Idle mode requirements based on the inclusion of power management in current components**

Proposed Auto Power Down Requirements

- **Tier I – Implementation to be 6 months after publication of the ecodesign measure**
  - All high definition games consoles in any power mode other than Game Play, Game Pause, Game Play Idle or Media Play must auto-power down to a sleep/network standby/standby mode within 30 minutes of user inactivity.
- **Tier II – Implementation date in line with the APD requirements date in Commission Regulation No 1275/2008 (2013)**
  - All games consoles in System Idle, Game Play Idle, Game Pause, Media Play Idle and Media Pause, or any state other than Game Play or Media Play must auto-power down to a sleep/network standby/standby mode within 30 minutes of user inactivity.
- **Tier II – Implementation date in line with the APD requirements date in Commission Regulation No 1275/2008 (2013)**
  - All games placed on the market on or after the Tier II implementation date must support auto-save ahead of a games console powering down to a sleep/network standby/standby mode after a period of inactivity not exceeding 30 minutes.

Proposed Energy-efficiency requirements

- **Sleep/Standby Modes**
- **ENERGY STAR recognised different modes described as "sleep mode"**

Tier and Effective Date	Sleep Mode (W)	
	Wireless AP/Router Functions not engaged:	Wireless AP/Router Functions engaged:
Tier 1 (Effective July 1, 2010)	≤ 2.0 W plus an additional 0.7 for WOL enabled devices	≤ 10.0
Tier 2 (Effective July 1, 2011)	≤ 1.0 W plus an additional 0.7 for WOL enabled devices	≤ 5.0
Tier 3 (Effective July 1, 2012)	≤ 1.0 W plus an additional 0.7 for WOL enabled devices	≤ 5.0

- **Network standby remains an issue**
- **Proposed requirements based on Tier 2 from 2012**

Other environmental impacts of games consoles

- Other impacts from resource extraction, material content, manufacturing, recycling and final disposal.
- Product light weighting
- IEC 62075
- Truncated life cycle assessment methodologies for electronics products
- Suggestion horizontal measure

Relevance of energy or eco labelling, benchmarks, public procurement

- EU ecolabel
- Benchmarks
- Financial incentive
- Public procurement

Measurement requirements and existing test procedures

- **Draft ENERGY STAR specification includes a methodology**
- **IEC 62075 standard starting point for other environmental impacts**

Potential for self-regulation

- **Small number of games console manufacturers beneficial for voluntary agreements**
- **Large number of software developers not beneficial for any auto-power down voluntary agreements**