



30 August 2011

California Energy Commission

Dear Sirs,

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I am sorry I will not be able to attend the meeting on the 31st August on the proposals for minimum energy efficiency of set-top boxes due to other commitments, but I would like to submit the following comments on behalf of Pace.

Pace is the world's largest supplier of set top boxes for the pay TV market, supplying products for major US pay TV providers across the three major delivery modes (cable, satellite and IP). Pace is pleased to have been recognised as a world leader in the development of energy efficient STBs for over 12 years, being one of the founding members of the European Code of Conduct on the energy efficiency of digital TV devices (and the only company that has remained committed to this EU Commission voluntary program since its inception). Pace was also the first company to have products endorsed under the original Energy Star program for STBs at the beginning of this century, and also the first company to get products endorsed under the version 2 program. Pace is also one of the key companies involved in the Voluntary Industry Agreement to improve the energy consumption of Complex STBs within the EU, having drafted much of the technical documentation for this.

Pace is firmly committed to designing and manufacturing energy efficient STBs, and as such our public environmental policy includes a commitment that 100% of all new products developed will be capable of complying with either the EU Code of Conduct or the Energy Star limits, subject to customers software. Having looked at various proposals throughout the world to regulate energy efficiency, we are of the opinion that for the STB industry, a simple legislative approach is not effective as the rate of change of technology is greater than the ability of regulators to keep up; however we are also very aware that we have a responsibility to design products that minimize the resources consumed whilst satisfying consumers demands for greater functionality.

When legislation was proposed in Europe, industry and regulators recognised that this industry was evolving rapidly, and that a legislative instrument would be inappropriate, as it would not be able to keep up with the changing technologies. Therefore a joint industry/regulator approach was formulated, with all the industry stakeholders proposing limits based on functionality, with the active involvement of both regulators (national Governments and the Commission) and NGOs (particularly the environmental lobby). This has resulted in a high 'buy in' from industry (it is estimated that over 80% of shipments in the EU will report and comply with this measure), whilst at the same time achieving flexibility and power savings that go significantly beyond 'business as usual' (source Bio Intelligence Service study for the EU Commission). The voluntary agreement provides annual reporting of sales and consumption data, with independent auditing of results, to ensure the scheme is effective, along with an annual review of consumption allowances to ensure that the limits are still appropriate and relevant (e.g. the first published version of the agreement includes an energy allowance of 20kWh/yr. for high definition decoders up to June 2013, when the allowance for HD drops to zero).

The utilisation of a voluntary approach will enable energy consumption limits to keep pace with the changing market as technology moves from a simple standalone STB, to DVR, to HD-DVR and Multiroom by permitting the quick addition of new functions that are not yet on the market to rapidly be brought within scope. The alternative with legislation would be for products with innovative features to either be outside of scope and therefore completely unregulated, or for new features to be impossible within the energy



constraints leading to a consumer having to purchase two products (a regulated STB plus an unregulated box just to incorporate the additional unforeseen features), this, of course, would result in an overall increase in energy consumption from the two power supplies (with associated PSU losses) and some duplication of circuits, plus the additional costs to the consumer.

Whilst the Energy Star program for STBs is clearly a good starting point for any measure, it has to be noted that all Energy Star schemes aim to highlight the best performing products in any category, and as such Energy Star is not suited to preventing just the worst performing products from being marketed, particularly as the Energy Star limits are periodically tightened when the percentage of compliant products increases, to try to keep to the 25% market coverage target.

We would therefore propose an approach to limiting the energy consumption of STBs in California similar to the European voluntary agreement, and would be pleased to participate with other stakeholders in developing this, should it be agreed.

Yours sincerely,

Robert Turner
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