**Before the**
**Federal Communications Commission**
**Washington, D.C. 20554**

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| In the Matter of | ) | |
| | ) | |
| Expanding Consumers' Video Navigation Choices | ) | MB Docket No. 16-42 |
| | ) | |
| Commercial Availability of Navigation Devices | ) | CS Docket No. 97-80 |

## COMMENTS OF THE DIGITAL POLICY INSTITUTE AND SUBMISSION OF RESEARCH BY THE PHOENIX CENTER AND BY DR. THOMAS HAZLETT

Here the Digital Policy Institute ("DPI")[1] submits brief Comments in the above-captioned proceedings. DPI believes that the stated goal of the Federal Communications Commission ("FCC") to "unlock" the pay TV set-top box should be achieved through an approach based on sound economic theory and analysis.

To help ensure that the record in these proceedings includes the latest, most relevant and in-depth analyses, DPI wishes to enter into the record several pieces of research from the Phoenix Center for Advanced Legal & Economic Public Policy Studies and its researchers individually, as well as by Dr. Thomas Hazlett. We believe these documents will help guide the agency to a reasoned decision that best will serve the public.

### Creating an Economically-Efficient Market for Set-Top Boxes

The first such document being submitted to aid the Commission in its understanding of the set-top box marketplace is a thorough and relevant study – published in 2012 – by Beard, Ford,

[1] DPI is an independent digital communications research and policy organization established in 2004.

Spiwak and Stern.[2] The authors suggest that the set-top box conveys no additional market power to Multichannel Video Programming Distributors ("MVPDs"). They argue that MVPD customers have no independent demand for set-top boxes; they simply want to watch videos. To do so, under current technological standards, a set-top box is required. As video services and the box are perfect complements (they must be consumed together), the authors of this study contend that the full price of both the video and the box is all that matters to the consumer. When a customer shops, they observe, for MVPD services, the prices quoted include the video and the set-top box fees, and it is these full prices that consumers use to compare the offerings of MVPDs. Consequently, they maintain, the market power a MVPD has over set-top boxes cannot be greater than the market power it has in the MVPD market, and there is no opportunity to exercise independent market power over the set-top box.

Second, the authors argue that, given the nature of the relationship between the video service and the box, the MVPD has no anticompetitive preference for self-supply. They contend that box is a technical requirement – a piece of the network – and not a product desired by consumers, and a cost to both the consumer and the provider, not a benefit. Their report maintains that if the equipment can be produced more efficiently and sold at a lower price in a competitive retail market, then the provider will embrace such a market. They conclude that if a competitive market for set-top boxes was more efficient than the current arrangement, then the profit available from the video service rises.

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[2] T.R. Beard, G.S. Ford, L.J. Spiwak and M. Stern, *Wobbling Back to the Fire: Economic Efficiency and the Creation of a Retail Market for Set-Top Boxes*, 21 COMMLAW CONSPECTUS 1 (2012). For the Commission's convenience, we are submitting, with these brief DPI Comments, a full copy of this paper into the record of the two above-captioned proceedings.

Third, Beard *et al.* suggest that a government-mandated commercial market for set-top boxes is unlikely to provide any gains in terms of lower costs, lower prices or increased innovation. They maintain that if the set-top box can be made cheaper and sold at a lower price, or made better and sold at the same price, then the MVPD will embrace these changes because they increase the demand for video services and thus the MVPD's profits. The authors argue that high prices for set-top boxes cannot increase MVPD profits, but rather serve to reduce the demand for video services. They conclude that the MVPD's profit-motivated actions are aligned with consumer surplus with respect to the set-top box.

Former FCC Chief Economist Tom Hazlett also has written on the subject of the set-top box marketplace. In his 2011, article in the Minnesota Journal of Law, Science and Technology,[3] he contends that the FCC must consider how that agency has pursued the very same path on prior versions of STBs. Hazlett argues that these efforts failed miserably, did not appeal to consumers and that time, money and resources were completely wasted over a lengthy period of time.

Dr. Hazlett's article states:

> "Despite the FCC's 14-year regulatory effort to make STBs available through retail stores such as Best Buy or Wal-Mart, the vast majority of cable navigation devices are yet supplied by video service providers as part of standard service bundles... In other words, despite the earnest regulatory efforts, administrative expense, and considerable private

[3] *See* **Policy-Induced Competition: The Case of Cable TV Set-Top Boxes**. For the Commission's convenience, these DPI Comments attach a PDF version of that Hazlett article.

sector engineering cost, the policy initiative leaves between 97.5 percent to over 99 percent of STBs distributed just the way they were prior to the rules.[4]

Hazlett goes on to state:

> Despite a lengthy regulatory attempt by the FCC to implement a workable regime for creating a retail market for cable STBs, such market has not developed. Moreover, the stated concern driving this regulatory initiative, that bundling cable STBs with MVPD services impairs competition in either video or STBs, appears unwarranted. The attempt by competitive entrants, notably satellite TV providers, to operate with unbundled boxes was itself a dead-end; market evolution brought STBs back into the service provider's product bundle. Lacking market power, these firms ostensibly integrated to pursue efficiencies, not foreclosure."[5]

**Research Assessing Whether Set-Top Box Prices Are "Too High"**

The Commission's *Notice of Proposed Rulemaking and Memorandum Opinion and Order*[6] emphasizes the agency's conclusion that the price of set-top boxes is too high. In response, Phoenix Center Chief Economist Dr. Ford contends that, in some cases, set-top box prices are set

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[4] Id. at 300-301.

[5] Id. at 305.

[6] *Notice of Proposed Rulemaking and Memorandum Opinion and Order* in MB Docket No. 16-42 and CS Docket No. 97-80, released February 18, 2016, at paras. 13 et seq.

using an FCC formula designed to ensure that the rates for such boxes are based on "the actual cost of regulated equipment and installations plus a reasonable profit."[7]

To support the Commission's set-top box proposal, President Barack Obama[8] and the Commission[9] rely on an informal survey, conducted last year by Senators Blumenthal (D-Conn.) and Markey (D-Mass.), suggesting that multichannel video subscribers pay an average box fee of $7.43 per month, or $231 annually, for an assumed average of 2.6 boxes per home.[10] While these figures are central to the cause of expanding regulation, the survey relied upon by Senators Markey and Blumenthal provides no details as to how their figures are calculated. Some observers reviewing the survey data suggests that the statistics are too high and the analysis too informal to be considered as determinative.

Phoenix Center Chief Economist Dr. George Ford contends that the informal nature of the survey leads to inconsistent and incomparable responses. He notes that, for example, some providers' boxes always include a digital video recorder (which is costly); and some don't. Ford

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7 G.S. Ford, *The FCC's Cynical Set-Top Box Play*, THE HILL (February 3, 2016) (http://thehill.com/blogs/pundits-blog/technology/268004-the-fccs-cynical-set-top-box-play), submitted as an attachment to these DPI Comments. *See also* the Response of Bright House Networks to the Blumenthal-Market Survey (http://www.markey.senate.gov/imo/media/doc/Response%20--%20Brighthouse%20%2012-11-14.pdf).

8 *Obama Urges Opening Cable TV Boxes to Competition*, ALL THINGS CONSIDERED, NATIONAL PUBLIC RADIO (April 15, 2016) (http://www.npr.org/2016/04/15/474411576/obama-urges-opening-cable-tv-boxes-to-competition).

9 T. Wheeler, *It's Time to Unlock the Set-Top Box Market*, RE/CODE (January 27, 2016) (http://recode.net/2016/01/27/its-time-to-unlock-the-set-top-box-market).

10 *Markey, Blumenthal Decry Lack of Choice, Competition in Pay-TV Video Box Marketplace*, Office of Senator Markey (July 30, 2015) (http://www.markey.senate.gov/news/press-releases/markey-blumenthal-decry-lack-of-choice-competition-in-pay-tv-video-box-marketplace).

further maintains that some providers give customers the first box at no charge, while other providers present only a range of prices. Moreover, Ford indicates that many subscribers pay less than list price for boxes due to promotions, and that the Senators' survey responses include no details on such plans.[11]

Dr. Ford observes that the calculations made by Senators Blumenthal and Markey appear to ignore that several providers (e.g., AT&T and DISH) provide their customers with one free set-top box. Noting that AT&T customers get the first box for free and then pay $8 for additional boxes, Ford argues that the actual price per-box is only $4.92 if the subscriber has 2.6 boxes, implying a 60% overstatement of fees. The DISH fees are quite comparable, Ford observes, where accounting for the free box renders an effective average monthly price of only $4.20 and not the $7.43 Blumenthal and Markey appear to be employing in their calculations.

Furthermore, Dr. Ford contends that Senators Blumenthal and Markey, in what Ford suggests is in direct contradiction to the survey responses, assume that the subscribers for all providers in the sample have 2.6 boxes. Rather, Ford notes, a number of providers publish the actual count of set-top boxes deployed and their subscriber bases (also available publicly), and that these data may be used to compute the actual, provider-specific number of boxes per subscriber. Ford observes that Bright House Networks, for example, tells the Senators it has 3.8 million boxes on a subscriber base of 2.4 million, implying 1.6 boxes per subscriber. Similarly noting that Time

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[11] G.S. Ford, *The Obama Administration is Misleading Consumers on Set-Top Box Prices,* THE HILL (April 22, 2016) (http://thehill.com/blogs/pundits-blog/technology/276969-the-obama-administration-is-misleading-consumers-on-set-top-box). For the Commission's reference, we are submitting, along with these DPI Comments, Dr. Ford's analysis into the record of the two above-captioned proceedings.

Warner reports only 1.3 boxes per subscriber, Ford concludes that the Senators' assumed set-top box average for all providers substantially inflates the reported average of set-top box fees.

Ford goes on to suggest that the Senators did not account for differences in provider subscriber bases when computing the industry average. He notes that Comcast, for example, charges $2.20 to $2.50 per set-top box and serves 22.4 million subscribers – resulting in the largest subscriber base in the nation. Ford further observes that Cox services only 2.9 million subscribers and charges a higher price of $8.50 per box. Senators Blumenthal and Markey, Ford contends, appears to compute a simple average of set-top box fees, which for these two providers implies an average price of about $5.43. Yet, Ford argues, the subscriber-weighted average between the two providers is only $3.05. Ford suggests that if the Senators intend to provide an average price for the population, the subscriber-weighted average is the correct value.

Using the responses from the Blumenthal-Markey Survey, Dr. Ford paints a contrasting picture of prices (to the extent feasible from an informal survey) by using alternate methods and all the data provided in the responses. This Ford analysis suggests that subscriber fees for set-top boxes vary widely across video providers, with Comcast, the nation's largest provider, having an annual fee of $76.14 for 2.7 boxes per subscriber – a figure well below the $231 reported by Blumenthal and Markey and embraced by the Commission.

**Average Set-Top Box Fees from Blumenthal-Markey Survey Responses**

| Provider | Subs (mil.) | First Box | Add' l Box | Boxes/Subs | Annual Fees |
|---|---|---|---|---|---|
| AT&T | 6 | $0.00 | $8.00 | 2.6 | $153.60 |
| Bright House | 2.4 | $8.00 | $8.00 | 1.6 | $154.00 |
| Cablevision | 2.6 | $6.95 | $6.95 | 2.85 | $237.37 |
| Charter | 4.2 | $6.99 | $6.99 | 2.3 | $195.59 |
| Comcast | 22.4 | $2.35 | $2.35 | 2.7 | $76.14 |
| Cox | 2.9 | $8.50 | $8.50 | 1.8 | $186.41 |
| DISH | 13.4 | $0.00 | $7.00 | 2.5 | $126.00 |

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|---|---|---|---|---|---|
| DirecTV | 20.4 | $6.00 | $6.00 | 2.5 | $180.00 |
| Time Warner | 10.8 | $8.63 | $8.63 | 1.3 | $131.29 |
| Verizon | 5.5 | $9.67 | $9.67 | 2.2 | $251.10 |
| Average Annual | | | | | $144.98 |
| Average Per Box/Month | | | | | $5.15 |

The details of Dr. Ford's analysis are presented in the table above. Across all ten providers responding to the survey, the average annual fees paid for all boxes in the subscriber's home is $145, with an average monthly cost per box is $5.15. These averages are well below those reported by Blumenthal and Markey – $7.43 per box and $231 per year. Ford conclude that Senators Blumenthal and Markey overstate – by 60% – the fees related to set-top boxes. Ford extends these estimates of average fees to the entire multichannel video businesses, and concludes that the annual expenditures of the U.S. consumer on set-top boxes equals about $12 billion, almost half of the $20 billion claimed by Senators Blumenthal and Markey. [12]

Ford contends that it is well-accepted principle that price information alone says very little about the need for regulation or the benefits of a retail market. The relevant question, he suggests, is: are set-top box prices too high? To be "too high," Ford argues, these prices must be compared to some standard, such as actual costs as an acceptable marketplace benchmark (if available).[13] Ford asserts that the conclusions of the Obama Administration and the Commission

[12] *Id.*

[13] *C.f.* S. Wallsten, *FCC Offers No Economic Rationale for Set-Top Box Regulation*, Technology Policy Institute (April 18, 2016) (https://techpolicyinstitute.org/testimony_filing/an-economic-analysis-of-the-fccs-set-top-box-nprm).

that set-top box prices are too high,[14] have not been supported by evidence based on the true *cost* of a set-top box.

In another analysis by Dr. Ford, titled *Are Government-Owned Networks Abusing Market Power in the Set-Top Box Market? A Review of Rates,* the author examines the fees levied on customers by municipally-owned and operated video systems."[15] Based on an examination of actual set-top box fees of the government-run networks, Dr. Ford finds that the fees of these public entities average $7.65 per month, a figure slightly higher than that charged by private providers. The municipal-system price, Ford argues, is a useful benchmark and could suggest that a price of about $7.50 is reasonable for a set-top box.[16]

**Conclusion**

The Commission carefully should examine the research noted in these DPI Comments, particularly the research documents and articles being submitted as attachments to these Comments, to help inform the agency's understanding of the economics of the MVPD marketplace and the set-top box.

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14 N. Sinclair, *Obama to Sign Executive Order to Ignite Corporate Competition*, YAHOO NEWS (April 15, 2016) (https://www.yahoo.com/news/obama-executive-order-competition-093636744.html).

15 G.S. Ford, *Are Government-Owned Networks Abusing Market Power in the Set-Top Box Market? A Review of Rates*, PHOENIX CENTER POLICY PERSPECTIVE NO. 16-03: (April 14, 2016) (http://www.phoenix-center.org/perspectives/Perspective16-03Final.pdf). For the Commission's convenience, we are submitting with these DPI Comments a full copy of Dr. Ford's paper into the record of the two above-referenced proceedings.

16 *Id.*

DPI appreciates the opportunity to offer its broad, initial views and to enter these research findings into the record of these two Commission proceedings.

Respectfully submitted,

/s/ *Barry D. Umansky*
Barry D. Umansky, J.D.
Senior Fellow, Digital Policy Institute
Muncie, IN 47306
(765) 717-4928

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**<u>PDF ATTACHMENTS:</u>**

T.R. Beard, G.S. Ford, L.J. Spiwak and M. Stern, *Wobbling Back to the Fire: Economic Efficiency and the Creation of a Retail Market for Set-Top Boxes*, 21 COMMLAW CONSPECTUS 1 (2012).

G.S. Ford, *The FCC's Cynical Set-Top Box Play*, THE HILL (February 3, 2016).

G.S. Ford, *Are Government-Owned Networks Abusing Market Power in the Set-Top Box Market? A Review of Rates*, PHOENIX CENTER POLICY PERSPECTIVE NO. 16-03: (April 14, 2016).

G.S. Ford, *The Obama Administration is Misleading Consumers on Set-Top Box Prices*, THE HILL (April 22, 2016).

Hazlett, Tom, *Policy-Induced Competition: The Case of Cable TV Set-Top Boxes*, Minnesota Journal of Law, Science and Technology (Volume 12, Issue 1, 2011).