



Serving the Vending and Refreshment Services Industry

June 17, 2014

Coin Stakeholders Response  
Office of Coin Studies  
United States Mint  
801 9th Street NW.  
Washington, DC 20220

RE: Coin Modernization, Oversight, and Continuity Act of 2010 Federal Register Request for Comments

Dear Sir or Madame,

This letter is in response to your recent request, included in the Federal Register, for comments on potential alternative metal compositions for circulating coinage pursuant to the Coin Modernization, Oversight, and Continuity Act of 2010 (CMOCA) (Pub. L. 111-302). The CMOCA authorized the Secretary of the Treasury to conduct research and development (R&D) on alternative metallic materials for all circulating coins with the goal of reducing production costs.

Founded in 1936, NAMA is the association representing the \$42 billion U.S. vending and refreshment services industry. With 1800 member companies – including many of the world’s most recognized brands – NAMA provides advocacy, education and research to its membership.

Each day, millions of American consumers choose vending to purchase a broad range of products with the use of U.S. coin currency. Consumers are able to make their purchases with confidence, as the industry has a very high trouble-free vend rate due to consistencies in coin composition and currency-reading technology.

Paper and metallic currency continue to be the main form of payment used for buying food and beverages from vending machines representing over 90% of industry transactions. This fact further emphasizes the impact that recommended changes to coins will have on the vending channel and why they must be carefully researched and considered before being presented to Congress.

The vending and refreshment services industry understands and appreciates the U.S. Mint’s concern with cost containment for the production and distribution of circulating coinage, especially as it relates to the penny and nickel denominations. However the Mint is reminded that its overall coin production and distribution system creates a net profit and that its own data has shown that costs of metals fluctuate frequently within the commodity markets.<sup>1</sup>

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<sup>1</sup> Committee Memorandum; June 11, 2014, Subcommittee on Monetary Policy and Trade Hearing Entitled “The Production and Circulation of Coins and Currency”. [http://financialservices.house.gov/uploadedfiles/061114\\_mpt\\_memo.pdf](http://financialservices.house.gov/uploadedfiles/061114_mpt_memo.pdf)

When passed, NAMA supported the Coin Modernization, Oversight, and Continuity Act (CMOCA) because it was believed that the bill language protected vending operators and the coin acceptance community from potentially billions of dollars of unnecessary new coin validation costs. However, as a result of the Mint's 2012 Biennial Report to the Congress on the Current Status of Coin Production Costs and Analysis of Alternative Content and recent developments, NAMA is concerned it will be difficult for the Mint to recommend a metallic content that significantly reduces the costs to produce circulating coins while balancing the bill's requirement that the Mint must consider factors relevant to the ease of use and ability to co-circulate of new coinage materials, including the effect on vending machines and commercial coin processing equipment and making certain, to the greatest extent practicable, that any new coins work without interruption in existing coin acceptance equipment without modification.<sup>2</sup>

In addition to the costs concerns, there are other issues that should be considered during the Mint's research and development efforts.

### **Impact on Small Business**

There are an estimated 7 million food, beverage, and product vending machines in the U.S. and the costs to accommodate changes in these machines for new coins would range from \$100-\$500 per machine. As highlighted in the Mint's 2012 Biennial Report to Congress, changes in the metallic content of coins could create a financial burden on the vending industry, which is comprised of over 90% small businesses.<sup>3</sup>

"The vending machine industry estimates that the best and worst case cost scenarios to modify the vending machines in the United States to accept coins of the same size and similar weight as existing coinage but with a different electro-magnetic signature would be between \$700 million and \$3.5 billion, assuming a one-time, standalone, universal upgrade. CTC's analysis includes consideration of the refresh and maintenance cycles of existing vending machines and places the conversion estimate at between \$380 to \$630 million."

NAMA is opposed to any changes in coins that would place a financial burden on the vending industry or cause an interruption of service to existing coin acceptance equipment without modification.

### **Changes to Acceptance Rates of Coins**

Metallic content updates could change the acceptance rates of coins causing customer frustration resulting in lower sales and decreased revenue to all levels of government. A May 2012 Wall Street Journal article cites examples of this phenomenon following the release of Canada's new loonies and toonies—its \$1 and \$2 coins.

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<sup>2</sup> "For all denominations other than the one-cent coin, the current electromagnetic signature could be maintained with a slight reduction in nickel content, generating minimal cost reductions. Changing the electromagnetic signature potentially enables additional cost reductions that need to be confirmed with further research."

<sup>3</sup> SBA defines a small vending machine operator as one with annual revenue less than \$10 million, and this definition would cover at least 97 percent of the industry. Food and Drug Administration, 21 CFR Parts 11 and 101; *Food Labeling; Calorie Labeling of Articles of Food in Vending Machines; Proposed Rule*, Federal Register / Vol. 76, No. 66 / Wednesday, April 6, 2011 / Proposed Rules, Page 19238. <http://www.gpo.gov/fdsys/pkg/FR-2011-04-06/html/2011-8037.htm>

“Canada’s just-released new loonies and toonies—its \$1 and \$2 coins—are slightly lighter than the old ones. And that’s causing a lot of headaches (and expense) for vending-machine operators and city governments who have to recalibrate their coin slots and local parking meters. Ottawa may be saving money with the new loonies and toonies, but the Toronto Parking Authority says it will cost more than C\$1 million to recalibrate the city’s 3,000 parking meters, about C\$345 per machine. And Calgary says it’s budgeted over C\$30,000 to convert its meters. Vending-machine operators, not surprisingly, are not pleased, either. The Canada Gazette, the government’s official newsletter, estimated earlier this year that it’ll cost the vending industry C\$40 million to recalibrate what it calls “coin-acceptance equipment.” Canadian media are already carrying reports of vending-machine abuse as the new coins keep returning to the slot at the bottom of machines. One Laundromat owner in Toronto says she’s having to spend C\$5000 just to recalibrate the machines in her place of business.”<sup>4</sup>

Changes in metallic content may force coin validator manufacturers to increase the verification security level of coins thereby restricting and lowering the acceptance rate of the genuine coins to protect against counterfeiting or misreading of the coins. This could lead to customer dissatisfaction when apparently good coins are rejected and vending sales are negatively affected.

Reductions in sales could also create a negative impact on jobs, and less corporate taxes being collected from the vending channel at every level of government from local to federal. This impact on government receipts should be included in any cost-benefit analysis performed.

### **Impact on Vending Must be Considered**

We remind the Mint that it must consider the impact on the vending industry in any recommendation that it presents to Congress. We applaud the Mint’s excellent stakeholder outreach effort and hope that it will provide the needed information and data to meet the requirements of the CMOCA bill language concerning the impact on the vending industry on any recommendation(s). However, we remain concerned that technology and metallic content costs and other factors may make this a difficult requirement for the Mint to balance the impact to the vending channel and meet the cost savings intent of this directive.

The vending industry also has concerns with the impact that co-circulation of coins would have on the industry and its consumers. This issue was raised related to changes made in Canada, by Andrew Mills the Director of Circulating Coin for The Royal Mint, during a recent hearing before the U.S. House of Representatives Subcommittee on Monetary Policy and Trade.

“[T]he smaller 50p was introduced in September 1997 ready for coin demand leading up to Christmas that year. The larger 50p was removed from circulation in 6 months to assist the vending industry **as co-**

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<sup>4</sup> Bill Mann’s Canada, *New Canadian coins rejected by machines*, May 1, 2012. <http://www.marketwatch.com/story/new-canadian-coins-rejected-by-machines-2012-05-01?pagenumber=1>

***circulation of different specification coins of the same denomination can lead to lower reliability of their machines.”<sup>5</sup>***

As noted by Mr. Mills, co-circulation could lead to reliability issues. Furthermore, it would also create the need to expand the size of the coin acceptance device. The current configuration of vending machines, that accept U.S. coins, does not allow space for extra tubes to be added in its traditional location in vending machines. New vending machines and apparatus would have to be developed to create space for the extra tubes needed to provide acceptance and change functionality within the coin device. This would cripple the industry and NAMA strongly recommends that any recommendations for changes in coinage include that there be no co-circulation of different specification coins of the same denomination.

### **Transition and Compliance Period**

If changes can be made that don't negatively impact the vending industry, NAMA recommends that a long notice, transition and compliance period must be part of any recommendation that is presented to Congress. Changes without a limit on co-circulation may require that multiple versions of coins be accepted for many years. Circulation time periods of coins and the capability of coin acceptance devices and vending machines that accept multiple co-circulating coins, should be considered when assessing the transition and compliance period. The impact of co-circulation of coins should be fully vetted with coin acceptance device manufacturers before any recommendation as to transition and compliance period is made. The Mint's 2012 Biennial Report to Congress emphasizes that the industry should be provided with significant advance notice of two to three years.<sup>6</sup>

### **Reduction in Federal Government Revenue**

Changes in coins that create an expense for vending operators will lower revenues to the U.S. Treasury and add costs to the government. Business expenses for upgrading equipment have no return on investment (ROI). Therefore, those expenses reduce profit, lowering the amount of profit for the corporation and the corporate income taxes that the federal government will receive from the industry. For example, if upgrades to coin acceptance equipment have a \$1 billion cost to business, the U.S. Treasury's tax revenue will decrease by the amount of corporate tax it would collect on the \$1 billion in revenue. This cost to the government should be considered in any cost-benefit analysis performed.

### **Costs to Mint and Federal Government**

Any updates to coins will have a tremendous financial impact on the Mint and federal government agencies through the need to educate the public on the new coins. If coins are changed, massive amounts of public education and awareness campaigns would have to be created and performed. This tremendous effort will produce a financial commitment from the U.S. Mint and federal government agencies that must be considered in any financial analysis portion of a recommendation that purports to create savings.

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<sup>5</sup> Mills, Andrew, Director of Circulating Coins, The Royal Mint, Written Testimony to the United States House of Representatives Committee on Financial Services; The Subcommittee on Monetary Policy and Trade Hearing on "The Production and Circulation of Coins and Currency"; the Royal Mint's work to control the cost of producing circulating coins, June 11, 2014. <http://financialservices.house.gov/uploadedfiles/hhrg-113-ba19-wstate-amills-20140611.pdf>

<sup>6</sup> Benchmarking against other global economies shows that providing industry with significant advance notice (two to three years) is a best practice before changing the metallic composition of circulating coins.

Also, changes in the metallic contents of coins may have impacts on the production cost by impacting the die life of the equipment used to forge and create coins. Different metals could increase the frequency of die changes, which can be disruptive to the production process and create increased manufacturing costs for coins. This impact should be assessed as well.

## **Federal Register Notice**

The Federal Register Notice presents specific statements for comments. Below are our responses to these statements:

1. *A change to the diameter or thickness of U.S. coins would have a significant negative impact.*

**Comment:** Size and shape of coins is very important to the vending industry and its coin acceptance devices. The vending industry would oppose any change to the diameter or thickness of coins, as that would have the largest potential financial impact on the industry and cause interruption in existing coin acceptance equipment due to the extensive modification or replacement needed to accept coins with a different diameter or thickness.

2. *The quarter-dollar coin is the workhorse of circulating coins. Across stakeholders, any change to the quarter-dollar coin would bring about the most costly conversion to a new alternative metal quarter-dollar coin.*

**Comment:** The quarter-dollar coin is very important to the vending industry. Any substantial change to the quarter-dollar coin would have a significant financial impact on the vending industry. The Mint should closely survey vending and coin acceptance equipment to determine its ability to accept and make change for customers, with co-circulating quarter-dollar coins of differing specifications. As stated earlier, the current configuration of coin acceptors in vending machines does not allow physical space for expansion of the size of the coin acceptance device, a need that would have to be met with the co-circulation of quarter-dollar coins; especially due to their being the largest sized circulating coin.

3. *Aluminum alloy coins do not perform well at high speeds and high pressures of coin sorting and handling equipment.*

**Comment:** Aluminum alloy coins present significant problems for coin changers in the vending industry. The reduced weight of an aluminum coin, particularly smaller ones like dimes, could present difficulty with the coin properly traveling through the coin chute and the acceptor module for analyzing of value and authentication.

Furthermore, when faced with a similar rise in commodity prices on the world markets in the early 1970's the Mint tested alternative metals, including aluminum and bronze-clad steel. A composition of 96% aluminum with trace elements of stability was chosen for the new one-cent pieces. The proposal for this new one-cent piece was rejected in Congress mainly because of issues

raised by industries who felt the coins would cause mechanical problems.<sup>7</sup> The Mint is urged to review their Congressional recommendation and research from the 1974 Aluminum Cent proposal and refrain from moving forward with another attempt at aluminum alloy coins.

4. *A generous amount of communication and education is both needed and expected before implementing the use of alternative materials for the nation's circulating coins.*

**Comment:** For any changes in the metallic content of coins to be successful, the American public, international community and impacted industry must be fully educated on the new coins before they are released into circulation. This education will take time and financial resources. This time should be taken into account when determining transition periods and the costs should be considered in any cost/benefit analysis.

5. *If new coin handling equipment or software is needed, manufacturers of coin handling equipment need six to 12 months with production sample coins before they can begin shipping the new updated equipment to end users.*

**Comment:** A six to twelve month lead time for equipment or software manufacturers to begin shipping the new updated equipment to end users is acceptable as it relates to the limited issue of manufacturers lead time needed for shipping. However, the time needed for vending operators to update each machine, and to update the coin acceptance units, is much longer than the six to twelve months needed by the manufacturer to deploy the new equipment or software.

6. *The transition period for end users to implement an alternative material coin should be at least 18 months from the date the alternative material coin is announced and before it is put into circulation.*

**Comment:** Eighteen months is not nearly enough time for the transition period needed for end users to implement an alternative material coin. This is primarily due to the requirement of vending operators, and their limited staff of service technicians, to visit each machine to manually update them with the new equipment or software to accept the new coins. It is estimated that technicians could update 10-15 machines per day if the machines are widely dispersed geographically. Therefore if an operator owns or services 1000 machines, it could take 100 work days or roughly five to six months to update those machines. This estimate also assumes that the technicians are not responsible for answering other maintenance and repair calls at the same time, which is not a fair assumption in the industry.

Many vending operators classified as small businesses by the Small Business Administration, own between 1000 and 3000 machines. It could take a small business with 3000 machines nearly eighteen months to update their machines. There are many operators in the industry that own more than 300 vending machines. Therefore to ensure full adoption, a more reasonable time period for

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<sup>7</sup> Hernandez, Jaime, 1974 Aluminum Cent, June 7, 2011, Professional Coin Grading Service. <http://www.pcg.com/News/1974-Aluminum-Cent>.

the transition period for end users should be a minimum of 30 months from the date the alternative material coin is announced and before it is put into circulation.

7. *The total time period needed for a smooth transition is 18 to 30 months.*

**Comment:** The Mint's 2012 Biennial Report to Congress emphasizes that the industry should be provided with significant advance notice of two to three years. Therefore, we agree with the Mint that a transition period of 18 months is not acceptable for the industry and consumers and that it is closer to three years.

Assuming there is no co-circulation of different specification coins of the same denomination, NAMA recommends the time period needed for a smooth transition be set at between four and five years. This provides the six months lead time for manufacturers to disperse the new equipment and technology to operators, three years for vending operators to update equipment, and one to one and a half years for public education on the new coins. We are concerned that the industry and consumers will suffer greatly if the American public is not properly educated on the new coins before they are in circulation.

Thank you for allowing NAMA to comment on behalf of the vending and refreshment services industry. Please do not hesitate to contact me if you should have further questions regarding these comments or the impact of the potential change of coins on the vending industry.

Sincerely,



Carla Balakgie, FASAE, CAE  
President & CEO

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