



July 17, 2017

*Sent via email to:* [GMOlabeling@ams.usda.gov](mailto:GMOlabeling@ams.usda.gov)

Re: Proposed Rule Questions Under Consideration, National Bioengineered Food Disclosure Standard

To USDA Agricultural Marketing Service:

We submit these comments in response to the United States Department of Agriculture Agricultural Marketing Service's ("AMS") Proposed Rule Questions Under Consideration, issued as part of AMS's rule-making process under the National Bioengineered Food Disclosure Standard (Pub. L. 114-216) (the "**Legislation**"), under which food manufacturers will be required to disclose the presence of bioengineered food (the "**Disclosure**").

By way of background, Digimarc Corporation (NASDAQ: DMRC) is a pioneer in the automatic identification of virtually any media, including print, images, and audio. Digimarc provides retailers and consumer products companies the means to provide improved packaging and other marketing materials by allowing scanning via smartphones as well as industrial computer scanning devices to enable retailers and brands to provide meaningful disclosure information to consumers in the manner and timing of the consumer's choosing. By giving these materials a digital identity, consumers can reliably and efficiently discover rich content and information, including bioengineered food information.

Our legacy began nearly 20 years ago in our development of a banknote counterfeit deterrence technology on behalf of a consortium of leading central banks. The company expanded the technology to authentication of U.S. driver licenses and other international identification documents. The advent of the smartphone transformed the use of Digimarc's platform by allowing any person to scan an enhanced image or sound with their smartphone to immediately access additional information. Most recently, Digimarc introduced its 'connected package' solution, giving products a simple always-on internet connection to benefit consumers, brands and retailers.

Digimarc's technology represents the next generation of carriers of barcode information. To that end, Digimarc is collaborating with GS1, the international licensing authority for barcodes and other forms of auto ID, to ensure compliance with global supply chain standards. The Digimarc Barcode is replicated throughout packaging artwork in a manner that is generally imperceptible to consumers in normal use. Please see the Appendix to this response for a visual representation of this technology. This creates greater efficiency and reliability in scanning and minimizes the time people and machines waste trying to accurately identify objects. We accomplish this through subtle adjustments to the brightness and intensity of colors in artwork or the sounds and tones in audio. We license software to application developers, creating an ecosystem of connected devices, such as smartphones, checkout scanners, machine vision systems, and computer networks to easily identify content or materials and deliver information. We are working with some of leading retailers and consumer products companies in the world and their suppliers. For example, a consumer could use a smartphone, internet kiosk, or other device with similar capability to scan anywhere on the package and receive the bioengineered food information in the Disclosure.

Digimarc's comments focus on food manufacturers' use of a digital or electronic link to provide the Disclosure. A few general principles frame these comments:



9405 SW Gemini Drive, Beaverton, OR 97008 USA

T 503 469 4800 F 503 469 4777

[digimarc.com](http://digimarc.com)

First, the regulations should be technology neutral; this means that the regulations should not proscribe a particular technology as the only way to meet the statutory and regulatory standards for using a digital or electronic link. To do so would unnecessarily hinder technological progress.

Second, and related to the first principle, the regulations should be flexible enough to allow for technological innovation. Technology has already and will continue to evolve and shape the way we interact with the world around us. In order to prevent the regulations from being outdated as soon as they are finalized, we recommend constructing regulations with a focus on delivering good outcomes, and not the process by which regulatory requirements are met.

Third, the regulations should focus on consumer choice, meaning that the regulations should allow the consumer to obtain the additional information that the consumer wants in the manner that the consumer wants. By focusing on outcome, rather than technology, AMS would allow for and encourage technological innovations that would provide consumers with the required disclosure in an efficient and effective manner that is most useful to the consumer.

We have focused our responses on the questions where we believe our experience and expertise may be most helpful to AMS. We have included the language of the question along with the context AMS provided, followed by responses.

We thank AMS for the opportunity to provide additional information that is intended to help AMS draft proposed regulations. We look forward to working with AMS on the proposed regulations to craft regulatory solutions that are flexible and workable for all parties involved.

Kind regards,



Robert P. Chamness  
Chief Legal Officer and Secretary

## Digimarc's Responses to AMS's Proposed Rule Questions Under Consideration

### 14. If a manufacturer chooses to use an electronic or digital link to disclose a bioengineered food, what requirements should AMS implement for an electronic or digital link disclosure? (Sec. 293(b)(2)(D))

*Context: See Questions 23-25.*

**RESPONSE:** AMS should ensure that the requirements AMS establishes for the electronic or digital link are technology neutral and allow for the evolution of technology over time. In order to do this, it is important that the requirements be outcome-focused, not process-focused. The desired outcome is that consumers should be able to easily identify and understand the on-package language (or, the desired call-to-action, which may be communicated through a symbol or iconography), which will prompt consumers to trigger some digital or electronic functionality that will allow them to access the Disclosure.

The statute establishes only a couple requirements for the digital or electronic link on the package: (1) that on-package language / call-to-action — “‘Scan here for more information’, or equivalent language that only reflects technological changes” — accompanies the electronic or digital link; and (2) that “the electronic or digital link is of sufficient size to be easily and effectively scanned or read by a digital device.” Sec. 293(d)(1), (5).

1. **On-Package Language:** AMS should require that the on-package language be clear and concise enough to direct the consumer to take some action to access the Disclosure. Digimarc supports the idea of AMS establishing and maintaining a list of approved alternative language, as well as creating a pre-approval process for food manufacturers to submit alternative language. This would build in flexibility around determining the exact on-package language that a food manufacturer can use.

As with other labeling regulations under the Federal Food, Drug, and Cosmetic Act (the “*FDCA*”), AMS could require the on-package language text to be a certain text size or in proportion to other label claims (e.g., one-half the size of some other label claim). The *FDCA* also provides an example of how AMS could establish an outcome, but not prescribe the method as it relates to the on-package language. Section 403 of the *FDCA* states that information required to be on a food label must be disclosed in a prominent and conspicuous manner.<sup>1</sup> Prominence and conspicuousness will depend on the size, shape, and design of the package. This provides reasonable discretion to the food manufacturer producing the food package and label. It also allows for flexibility in how food manufacturers meet the statutory and regulatory requirements. AMS could follow this example and require that the digital or electronic link be made prominently and conspicuously on the label.

2. **Sufficient Size:** The “sufficient size” requirement for the electronic or digital link itself will be affected by the technology that is used. Setting a size requirement for the electronic or digital link itself may end up limiting the technology that can be used to meet the statutory and regulatory requirements. For example, Digimarc’s technology places digital information across most of the package design. The information is imperceptible to the consumer’s naked eye while enabling smartphone and other capable scanning devices to read the data anywhere on the package. The information is essentially invisible so limiting the encoding to a specific size in a specific place could be inapplicable, and actually make access to the Disclosure less convenient or reliable. Size and location parameters of the call to action should not impose unnecessary limitations.

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<sup>1</sup> A food will be misbranded “[i]f any word, statement, or other information required by or under authority of this chapter to appear on the label or labeling is not prominently placed thereon with such conspicuousness (as compared with other words, statements, designs, or devices, in the labeling) and in such terms as to render it likely to be read and understood by the ordinary individual under customary conditions of purchase and use.” 21 U.S.C. § 343(f).

**15. Should AMS specify in the regulations the type of electronic or digital disclosure manufacturers, e.g., QR code, can use to disclose bioengineered food? What steps should AMS take if an electronic or digital disclosure method becomes obsolete? (Sec. 293(b)(2)(D))**

*Context:* AMS recognizes that disclosure technologies may quickly surpass regulations. AMS is considering what terms will ensure the regulations keep pace with technological changes and how AMS can notify stakeholders about changes in technology as they occur. AMS is also considering what the most appropriate electronic or digital disclosure technologies are currently and how to deal with obsolete technologies.

**RESPONSE:** AMS should not specify in the regulations the type of electronic or digital link that manufacturers can use to make the Disclosure. With a regulatory focus on outcomes, i.e., effective access to the Disclosure, technology can continue to evolve without risk to policy. This approach also addresses uncertainties about consumer adoption wherein certain approaches may not find favor with consumers, in turn limiting their adoption. Food manufacturers should have the option of choosing the technology that best fits their goals, budget, and label parameters, among other considerations, as long as the technology can provide the public policy outcome required by the statute and regulations. Digimarc's technology, for example, can apply digital signals that are invisible to the eye over visible package printing and also is agnostic as to the type of symbol to be scanned. Therefore, requiring a certain type of electronic or digital link would limit future technological advances from meeting the requirements of the statute and regulations.

**16. What kind of text, symbol, or electronic or digital disclosure should AMS require for bioengineered food that is not purchased from a grocery store shelf, such as food for sale in bulk (such as fresh produce in a bin or fresh seafood at a fish counter), in a vending machine, or online? (Sec. 293(b)(2)(D))**

*Context: In some situations, disclosures may not be easily located when such products are on display for sale. AMS is considering disclosure practices for these and other non-conventional purchasing or packaging scenarios.*

**RESPONSE:** Digimarc encourages AMS to consider how an outcome-based regulation would provide needed flexibility to account for all of these various scenarios. As AMS determines the requirements for providing the Disclosure through text, a symbol, or an electronic or digital link, Digimarc supports AMS imposing general consistency requirements in the text, symbol, and electronic or digital link used to make the Disclosure across various types of bioengineered food. These requirements should be balanced with flexibility for food manufacturers in determining what technology is best used to achieve the required Disclosure based on the specific characteristics of the food and delivery mechanism. Digimarc believes that using different text, symbols, or digital or electronic links for different foods would cause confusion for consumers. AMS should consider possible applications of printing technology that could provide a digital link for labels on bulk food or deli items printed in store as well as printed in-aisle and point-of-sale materials that can provide an electronic link as the consumer is making a purchase decision.

**18. What are the reasonable disclosure options AMS should provide for food contained in very small or small packages? (Sec. 293 (b)(2)(E))**

*Context: AMS is considering the disclosure standards for very small or small packages. FDA regulates nutrition labeling on very small or small packages differently. For example:*

- a. Could disclosure requirements for very small packages be met by providing an address or phone number where consumers could obtain the information?*
- b. Could disclosure requirements for small packages be met by providing abbreviated text disclosure or a Web site address where consumers could obtain disclosure information?*

**RESPONSE:** Whatever AMS decides are reasonable disclosure options for small or very small packages, Digimarc requests that those options not be the exclusive options from which a food manufacturer can select for its small or very small packages. AMS should consider a regulation that allows flexibility for technological solutions to the problem of limited space on certain packaging. If there is a technology, such as a scanning technology, that can be used on the package along with on-package language (perhaps abbreviated language) or symbolic call to action such as a cell phone icon, a food manufacturer should be able to use that technology.

**23. Is there other equivalent on-package language that AMS should consider to accompany an electronic or digital disclosure besides “Scan here for more food information”? (Sec. 293(d)(1)(A))**

*Context:* The word ‘scan’ may or may not be relevant for each type of electronic or digital disclosure in the present or in the future. AMS is considering if it should issue guidance to identify equivalent language as technology changes and what that equivalent language would be.

**RESPONSE:** From Digimarc’s perspective, “scan” is the operative term, whereas the term “here” may not clearly represent the functionality of a digital scanning technology. Digimarc supports AMS’s idea of providing equivalent language in guidance so that the language can evolve over time. Another option is to provide a process by which equivalent language is submitted to AMS and approved prior to use, for AMS to approve as long as it accurately describes or reflects the technology that is being used. AMS could maintain a list of these approved equivalent language statements that food manufacturers can use. Some examples of equivalent language are as follows: “Scan the front for X,” “Scan the nutrition panel for Y,” “View with Z app to get W content,” and “Scan package for X.”

**25. How should AMS ensure that an electronic or digital disclosure can be easily and effectively scanned or read by a device? (Sec. 293(d)(5))**

*Context:* AMS is aware that electronic or digital disclosures need to be effective, that requirements will vary for each specific type of electronic or digital disclosure, and that the technology for electronic or digital disclosure may change faster than AMS will be able to update its regulations. AMS is determining how to address these issues given the variety of electronic or digital disclosures currently available in the marketplace, along with the specifications for these disclosures to be used effectively in a retail setting.

**RESPONSE:** Digimarc recommends that that AMS focus on the outcome of the use of the technology, specifying conditions under which the Disclosure is effective. Accordingly, AMS should create a regulation that requires that the electronic or digital link can be reliably scanned or read by a device to connect the consumer to the required information, but that allows maximum flexibility for food manufacturers in deciding which technology bests achieves their goals and in *how* various technologies achieves those outcomes.

**30. What should the requirements for imports into the United States of products covered by the Law/regulation be? (Sec. 294(a))**

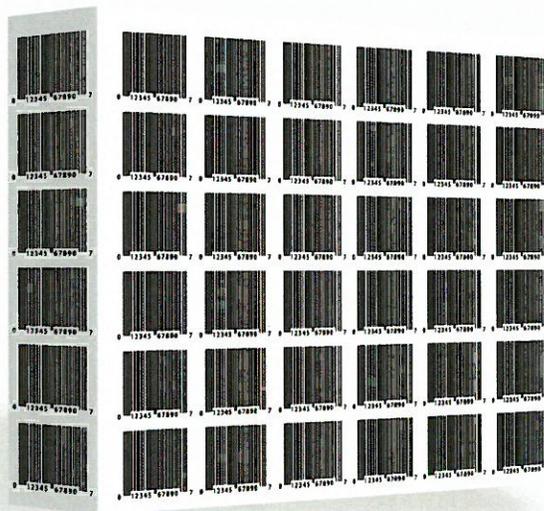
*Context: AMS considering how the disclosure requirements should be applied to imported products.*

**RESPONSE:** Imported foods must already meet other food labeling requirements established under the FDCA. Digimarc supports requiring imported food to likewise be held to the same disclosure requirements established by AMS for domestic food. Allowing for a variety of technologies and digital or electronic links to satisfy AMS's regulations also benefits food manufacturers in their cross-border business endeavors. Outcome-oriented regulation of electronic or digital links provides more flexibility in conforming to varying jurisdiction-specific disclosures to be displayed. Different countries may require different bioengineered food information to be disclosed in different ways, but a digital link allows for disclosures to be tailored for the local jurisdiction, including the requirements of the Disclosure for U.S. distribution. Accordingly, the digital link could be a powerful tool for food manufacturers that export food to meet the requirements of the Legislation when selling product in the U.S., but to also provide a different form of disclosure electronically in a foreign country, while reducing production and printing costs by using the same physical packaging. Additionally, we think the similarity of approaches may support eventual uniform global practices and standards for an increasingly smartphone-centric consumer. In the case of a scan-able package, AMS may want to consider whether to allow a consumer to self-select their physical location on the scanning device, and thereby access all required information under the Legislation and the FDCA.

# How it Works



Looks like this



Performs like this