

Dear Dr. Bonsack,

I'd like to take the opportunity of answering your questions on the USDA rule and the 134.2 kHz chip. By way of background information, I'm the US delegate to ISO/TC23/SC19/WG3 and have witnessed the standard development process for ISO 11784/85, which defines the 134.2 kHz microchip.

(1) How would USDA new rule adversely affect millions of American pets?

If the USDA rule were to require the use of 134.2 kHz chips, it would mean that the installed base of readers in this country, in excess of 100,000, would need to be replaced. This is essentially an unfunded government mandate on municipal animal shelters, veterinary practices and not-for-profit animal recovery organizations and humane societies. Who will pay for this? It will be the vets, the municipalities, the non-profits.

How will this adversely affect pets? If all existing participants in the animal microchipping and recovery network do not acquire readers that can reliably detect the 134.2 kHz chip, animals will fall through the cracks and will be euthanized, even though they have a microchip and even though their owners believe they have done everything necessary to bring their pet back home.

What is more, no company has so far offered a reader that can reliably detect ALL the chips that would need to be detected: ie the American standard chips (125 Khz, 125 Khz encrypted, 128 Khz) PLUS 134.2 kHz chips. Animal recovery organizations that have worked with the BLACK LABEL multi-system readers that have been offered by Datamars/Crystal Import, which is seeking to enter the market with 134.2 kHz chips, state that they miss up to 50 percent of the microchips present. (see testimony at USDA/APHIS hearing in San Diego 5/10/06). This is clearly not good enough.

What does this mean in practice? Even if the USDA/APHIS were to mandate that licensees must use 134.2 kHz chips and assuming that every single reader in the country were replaced by the DATAMARS Black Label scanner, up to 50 percent of animals' microchips would be missed.

Furthermore, the 134.2 kHz chips are defined in ISO 11784/85, a so-called "open" standard, which means that any interested entity can manufacture products conforming to the published standard. This process of publishing "open standards" works well for modem protocols and copier paper, where the objective is 100 percent cloneability and functional interchangeability. While ISO 11784/85 transponders work well in many applications, they are not suited for applications where the objective is code uniqueness and traceability (identification of pure bred animals for registries, compliance with municipal licensing and vaccination regulations, dangerous dog control etc.). Code duplication and production of codes made to order are well-known and well-documented problems for ISO 11784/85.

(2) Isn't the 128kHz considered the Euro chip? (Which can be read by US scanners , Europe and other countries).

AVID markets a 125 kHz EUROCHIP. It can be detected by US scanners, scanners at European and Australian points of entry, Japanese points of entry etc. The 128 kHz chip is a TROVAN chip, which is part of the American installed base of microchips (the American standard). It too can be detected by US scanners in many shelters, as well as scanners at European, Australian and Japanese points of entry. The American standard consists of: AVID encrypted (125kHz encrypted), 125 kHz non-encrypted HomeAgain and EUROCHIP, Trovan (128 kHz).

(3) So why is the 134.2kHz being marketed as a universal/global chip , as I was detailed on in my practice?

The U.S. does not have an installed base of readers that can read the 134.2 kHz chip. Given that fact, it would be fair to say that the terminology "universal" or "global" to describe this chip is aspirational rather than actual.

(4) Who / what is pushing to add an "odd-ball" chip to a system that has been working for 20 years ??

Certain commercial entities that would like to market their existing products into the U.S. market, rather than supplying and supporting products that comply with the existing, de-facto American standard.

(5) History of microchipping in the U.S. and internationally.

Historically, 3 protocols have been available in the United States since the early 1990s: the 125 kHz chip (the HOMEAGAIN chip sold by Schering Plough, sourced from Destron, later called Digital Angel; and the EUROCHIP sold by AVID), the 125 kHz encrypted chip (sold by AVID), and the 128 kHz Trovan chip. This has evolved into the de-facto U.S. standard. Currently the 125 KHz HomeAgain chip and AVID encrypted chip predominate in the U.S. market.

The example of Europe is instructive. Before ISO 11784/85, Spain had two databases. After the introduction of ISO 11784/85 that number shot up to 22. At last count, there were eight databases in Belgium—a country

of roughly 10,000,000 people—each associated with a different ISO “manufacturer.” And so on in each of the EU countries. These databases do not communicate with each other and the burden is on the shelter to try to find the right one.

On the other hand, there are three databases in the United States. If a lost dog’s microchip is not in the one contacted, it will take the initiative and contact the other two to see if the dog is registered there.

I hope this information helps!

Best regards,

Barbara Masin
EID Ltd.
805-565-1288 tel
805-565-1127 fax