

## RFID Policy – What does Congress Need to Know?

**Issue:** The realization of global container tracking and security will fail unless public policy and international standards evolve.

### Background/ Analysis

In the last 2 years a number of RFID pilots have been funded and executed by various U.S. government based agencies: Operation Safe Commerce, Safe and Secure Tradelanes, etc. to test the viability of global container tracking and security. While informative, these activities will not scale nor be adopted in the long term without “Wal\*Mart’ izing” the process. If we learn from the highly visible Wal\*Mart/ EPC supply chain initiatives, certain market conditions and processes must support the underlying technologies.

- A ‘channel master’ must drive global adoption of international standards for the technology. In this case, the U.S. government, not Wal\*Mart, must be the ‘channel master’ to push commercial shippers and carriers to deploy technology. Currently, no mandate outside of the DoD exists to encourage adoption.
- A single RFID tag technology standard must be ratified for container identification i.e. a common tag class and frequency that all participants may share. This must be a “standards backed” technology with open protocols from the tag to reader and reader to application. The current suppliers in the market e.g. Savi, Wherenet, RF Code, Wavetrend all use propriety tag technology with varying frequencies (2.4 GHz, 433 MHz, 915 MHz). Moreover, data ‘off’ the readers is often encrypted. The combination of these factors (propriety tag/ reader technology and lack of open data protocols) hinders wide-scale adoption, keeps technology expensive.
- A true business ROI, if not at least regulatory pressure, must be present to accelerate adoption. Commercial shippers and carriers will not fund the tagging of all global ISO containers nor pay for the infrastructure to ‘read’ tags without a value proposition based on increased visibility, higher security and regulatory compliance.

### Recommendations

- Encourage legislation to force open tag and reader standards around a single frequency (like Wal\*Mart and other suppliers created with passive UHF tags). We believe 433 MHz appears to have momentum.
- Encourage creation of a commercial shipper/ carrier initiative similar to EPC global to drive adoption.
- Provide funding to support deployment of technologies across the U.S. infrastructure.