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Subcommittee on Digital Commerce and Consumer Protection

Summary of Key Points:

1. IOT technologies in security and surveillance systems reduce operating costs and improve security threat identification and response times.
2. Security technologies and increasingly data driven. Automated analysis of this data reduces the workload of security staff.
3. The risks of compromised IOT devices include, but are not limited to, data theft, data loss, violations of privacy, and loss of the device.
4. Growth opportunities exist for American companies providing IOT technologies in the security industry, especially through exports. Trade agreements can be modernized to address IOT technologies and industries.

Written Testimony:

Thank you, Mr. Chairman, Ranking Member Schakowsky. I am delighted to appear before the committee today to discuss the successes and challenges that Louroe Electronics has experienced with IoT technologies in the security and surveillance industry. We are proud to be an American manufacturer of audio technologies for security systems and have products used in almost 60 countries today. Since our founding in 1979, our technology has evolved from standalone analog devices to a current portfolio of integrated network connected devices and sensors.

The benefits of IoT technologies in security applications are numerous. Primarily, networked devices allow security officials to monitor larger geographic areas and take advantage of economies of scale to

reduce the operating costs of their security system. This design allows for faster identification of a security incident, faster response times to a security incident, and the ability to send relevant information and evidence to the appropriate authorities in near real time.

Technology growth within the security and surveillance industry is largely focused on the analytic capability of a system. Very few security devices are monitored in real time, which means that IoT devices are data sensors, and not surveillance equipment as they are more conventionally thought of. The analysis of this data will alert security officers and staff in the event of an incident. Louroe technologies including vocal aggression detection and gunshot detection look for certain acoustic patterns that represent security threats. Used alongside other networked security technologies, this type of system provides for optimization of security resources as it no longer becomes necessary for staff to monitor all areas at all times.

As IoT technologies continue their adoption in the security industry, there are certain risks that present themselves. Unauthorized access to data – either stored on recorders or being sent over a network presents challenges to be sure that Americans' privacy expectations are met. Certain basic security practices, especially in the consumer market, can be taken to make sure that unauthorized access does not take place. Most notably, it is recommended that users of IoT devices, security or otherwise, ought to add a password to their devices or change the default username and password that comes pre-loaded on an IoT device.

Without taking appropriate precautions, consumers put themselves at risk of their privacy being violated. Online websites and communities exist where non-password protected surveillance cameras, or cameras that still use factory default login credentials, are streamed live over the internet for anyone

to see. Certain malware and viruses scan networks for IoT devices that accept default credentials, and then use these devices to conduct large scale denial of service attacks.

Despite these risks, the adoption of IoT devices in the security industry continues to accelerate. For Louroe Electronics there are two key areas of success I would like to point out for the committee.

First, since late 2011 we have worked closely with the with the US Commercial Service within the Department of Commerce to export our technology. Thanks to the work of trade administration officials in American embassies, and especially the work of the West Los Angeles Export Assistance Center, we have more than doubled the number of countries we have exported to. In 2015 we were honored to receive the Presidents E Award for Export Achievement, the highest recognition a US entity may receive for export activity. This is an achievement that could not have become reality without our partnership with the Commercial Service.

Second, we have made advantageous use of free trade agreements for international market access. For a small business in America, the removal of trade barriers creates new opportunities to reach new customers with more affordable products. As the current administration has stated their intention to review our trade policies, I urge the congress to ensure that any change to trade agreements preserves that market access and that supply chains for American small business be maintained. Any change that restricts either will reduce exports and increase product prices to the detriment of American manufacturers. However, an opportunity exists to update agreements to address IoT industries and technologies, many of which did not exist when the agreements were enacted.

Our export success has been recognized by SIA, the Security Industry Association, a trade association of which Louroe is a long-standing member. SIA recently chartered an International Relations Committee to deepen industry ties abroad and facilitate exports for American companies. Due in no small part to our success with exports, this committee will be chaired by Louroe's CEO Richard Brent.

Louroe's long term strategy of innovation and manufacturing optimization includes an ongoing partnership with CMTC, California Manufacturing Technology Consulting. In affiliation with the National Institute of Standards and Technology and the Manufacturing Extension Partnership, CMTC has aided Louroe in implementing a product development roadmap and improving our competitiveness. These positive contributions have supported the company's growth and long-term outlook.

Mr. Chairman, thank you for the invitation to appear today before the committee. I look forward to answering your and the committee's questions on IoT opportunities and challenges.