

Interview Guide

1 Definitions of Key Terms to be used in Questioning

The following definitions are to be used throughout the interview when the participant is unsure of what is meant by a specific term:

- **Internet of Things** - The interconnection via the internet of computing devices embedded in everyday objects, enabling them to send and receive data
- **Internet of Things Enabled** - An object is Internet of Things enabled if it contains the capability to connect via the internet using various technologies
- **Digital Technology** - An umbrella term for computer-based products and solutions
- **Physical Security (Industry)** - The industry surrounding the protection of personnel, hardware, software, networks, and data from physical actions that could cause serious loss or damage to an enterprise, agency, or institution

2 Pre-Screen

The following question set and associated notes are to be applied during the pre-screening phase:

- *Question:* Do you work as a professional within physical security?
– *Probe:* Ask for job title
- *Question:* What types of technology have you used in physical security systems?
- *Question:* What do you understand by the term Internet of Things, or IoT?
- *Question:* Have you personally used IoT devices to facilitate a physical security implementation?

3 Preface

The following question set and associated notes are to be applied during the preface phase:

- Go over the purpose of the interview based on the information sheet and the expected timescale.
- Confirm the participant is aware that the full interview will be recorded, that they are ok with it being recorded, that they are aware when the recording will begin and end.
- Inform the participant that during the interview they are to anonymise any examples they give, however in the event that specific examples are given we will use all reasonable endeavours to anonymise the data in analysis and future reporting.
- Turn on the recording.

4 Background and Biases

The following question set and associated notes should be applied during the background and biases phase:

- *Question:* Could you please describe the role you perform with regards to physical security systems?
 - *Probe:* Any type of acronym/specific term?
- *Question:* Could you describe where you have used digital or network connected devices in physical security systems?
 - *Probe:* On descriptions and definitions
- *Question:* How would you define the Internet of Things?
 - *Probe:* Unusual or out of the ordinary terms
- *Question:* Can you give me an example of where you have, or have seen IoT being used in physical security?
 - *Probe:* Key terms

5 Experiences and Opinions on Integration

The following question set and associated notes are to be applied during the experiences and opinions on integration phase:

- *Question:* Based on your experience, what is the current state of the physical security industry, and what do you predict its future to be?
 - *Probe:* Why do you think this is currently the case
- *Question:* What is your opinion on the integration of the Internet of Things into the physical security industry?

- *Probe: The use of IoT in design*
- *Probe: The use of IoT in operation*
- *Probe: The use of IoT in upgrade*
- *Question:* How has the integration of the Internet of Things into physical security affected you professionally?
 - *Probe: Changes to considerations usually made*
 - *Probe: Why do you think IoT was integrated into physical security*

6 Devices Encountered

The following question set and associated notes are to be applied during the devices encountered phase:

- *Question:* In your professional capacity, what Internet of Things enabled devices have you seen in physical security deployments?
 - **Note: Remind the participant not to give any information about specific companies specific devices were deployed in**
 - *Probe: Make and/or Model*
 - *Probe: Do you tend to come across specific brands more often than not?*
 - *Probe: How often have you come across “less desirable” makes?*
- *Question:* What is the most prevalent type of Internet of Things enabled device you have seen in physical security deployments?
- *Question:* What is the least prevalent type of Internet of Things enabled device you have seen in physical security deployments?
- *Question:* How mature do you think these devices are in terms of the protections they provide?
- *Question:* Operationally, what enhancements do you think IoT enabled devices bring to physical security deployments?
- *Question:* Operationally, what problems do you think IoT enabled devices bring to physical security deployments?
- *Question:* What is the least common Internet of Things enabled physical security devices type you have encountered?

7 Blueprint

The following question set and associated notes are to be applied during the testbed blueprint phase:

- **Scenario:** A group of security researchers have recently moved into a new building and wish to secure their space. As a division they work within a larger organisation, but due to the sensitivity of the work the group needs additional physical security controls to limit access to only members of the security research group.

– **Note: Show participant the blueprint**

- *Question:* What are the design considerations you would take during this assessment?
- *Question:* Is there anything particularly challenging in this facility?
- *Question:* Is there anything typically common in this facility?
- *Question:* What functions do you think are necessary to secure this facility?
- *Question:* Would you consider the use of IoT enabled devices in the implementation of this space?
- *Question:* Technically, how would you provide those functions?
- *Question:* What technology would you deploy and where, indicating on the grid when necessary?
- *Question:* Does any of your solution require equipment elsewhere, for example some sort of server for processing?

8 Conclude

The following question set and associated notes are to be applied during the interview's conclusion:

- *Question:* During this interview, have you had any further thoughts regarding IoT and physical security that you consider relevant?
- *Question:* Has the interview changed your view of IoT in physical security in any way?
- Confirm that the interview questions have been completed.
- Turn off the recording, thank the participant for taking part in the research, and inform the participant that if at any time they think of any extra points that might be relevant to the discussed topic area they are free to contact me.
- Reiterate that they are free to withdraw within 6 weeks with no consequences whatsoever, as described in the participant information sheet.