How internet-connected devices can affect victims of gender-based domestic and sexual violence and abuse
About this Guide

Who is this guide for?
This guide is for frontline workers and support services working with victims of domestic and sexual violence and abuse.

What is this guide about?
It is about tech abuse, which means abuse that's made possible by technology. It hopes to:
- help people talk about abuse that's done using ‘smart’, internet-connected devices (also known as the Internet of Things, or IoT).
- explain common ways in which IoT devices work, in case abuse of this kind is suspected.

How should I use this guide?
Read this guide to become more familiar with IoT. It provides supplementary information and is not meant to replace advice from specialists, including the police.

About the authors
The guide has been developed by a socio-technical research team at University College London. The team's ‘Gender and Internet of Things’ study was funded by the UCL Social Science Plus+ scheme. Research collaborators included the London VAWG Consortium, Privacy International, and the PETRAS IoT Research Hub.

What is the Internet of Things?
The Internet of Things (IoT) is a term used to refer to ‘smart’, internet-connected devices that can share data with each other, creating a ‘network’ of devices. Going beyond laptops, phones and tablets, IoT includes smart watches and internet-enabled household appliances such as smart fridges, TVs, and locks.

How does IoT work?
IoT devices are ‘smart’ because of how they collect and send data, analyse this data, and take action, potentially without direct human intervention. For instance, IoT-enabled heating can be controlled remotely through your voice, smartphone or another internet-connected device, instead of with a physical switch.

How could IoT affect victims of domestic violence and abuse?
When IoT devices are connected to the internet they can communicate and share instructions with each other. This can result in privacy, security and safety risks, because devices assume all users trust each other. An abuser can potentially misuse the features of a device to monitor and control a victim. In the future, more of these devices may be part of public and private spaces.
Perpetrators may exploit IoT’s functionalities to monitor, control, and/or prevent victims from using devices. It is important that support services are aware of these occurrences, know about potential indicators, and consider information on IoT functionalities such as remote control, voice control, and location tracking. The STEaPP website provides up-to-date resources and information on the topic.

### Mitigation

- Devices may be remotely controlled, frequently through apps on phones, tablets and/or laptops.
- Devices with microphones can respond to voice commands.
- Devices with cameras can record videos.
- Devices with microphones can collect audio recordings.

### Information

- Devices may be linked to social media accounts.
- Devices learn patterns and preferences from the data they collect.
- Devices gather data that is often stored and saved in the cloud.

### Implication

Perpetrators may exploit IoT’s functionalities to monitor, control and/or prevent victims from using devices. As IoT devices and their functionalities are constantly evolving, further up-to-date resources and information on the topic are provided on the STEaPP website.