



**Building your trusted
infrastructure**

Ready?



vodafone
business



IoT Test and Evaluation

As we all become increasingly reliant on the highly connected and distributed Internet of Things (IoT) and related systems, it is important that everything works seamlessly at all times and in all conditions.

Our independent, platform-agnostic IoT Test and Evaluation service ensures that your devices, platforms and infrastructure are protected from any weak link in your solution, and where there are vulnerabilities, these are assessed against the threats and risks of the organisation.

Our service can evaluate individual components or test the entire end-to-end IoT solution.

What do we offer?

We offer three areas of support:

1. Hardware qualification
2. Device, platform and mobile app security testing services (MAST) in our IoT and 5G-ready labs
3. Whole system penetration and advanced intrusion testing services

Our hardware, device and application testing centre with reconfigurable labs and conference rooms can accommodate individual projects as well as the capacity to host collaborative trials between industry partners.

We offer a bespoke service across a range of platforms, operating systems and infrastructure alongside a tailored test plan to complement your device development programme with the support and expertise of our in-house IoT consultants.

Experience at your service

As experts in mobile networks, connecting customers and third-party devices from across industry and around the world and through development of our own devices, we understand how your devices can best utilise our network and related infrastructure.

Our team of consultants have unparalleled knowledge and expertise in the testing of IoT systems and associated infrastructure.

With an exceptional partner lab, fully equipped and staffed by world-class security specialists, we provide you with exceptional test and evaluation services.

Test and Evaluation approach

Our Test and Evaluation services allow you to have confidence in your end-to-end IoT solution. This enables infrastructure, devices, communications and applications to be tested and evaluated in depth against industry standards, best practice, system requirements and designs.

Benefits from IoT Device Testing

With the help of our experts, we will ensure you have full confidence in your IoT systems, allowing you to deploy them into the field quickly, efficiently and worry-free. Ensuring all IoT components, including sensors, actuators, user interfaces, applications and network infrastructure are:

- Working securely in line with requirements and designs across the global Vodafone network
- Tested on their chosen connectivity solution (Wi-Fi/2G/3G/4G/5G/NB-IoT) against a range of threats and realistic scenarios
- Robust, resilient and reliable to maximise confidentiality, integrity and availability as required
- Optimised for deployment in harsh, high-threat environments, including those exposed to radio frequency and electromagnetic attack vectors

Prior to testing

- Our IoT consultant will work with you prior to testing to understand the threats, risks, constraints, goals and requirements for the outcome of your testing.
- We will **develop a detailed test plan** utilising the facilities available to achieve those goals and requirements you have set. In addition, we will make recommendations about complimentary tests where appropriate, so you can exploit the most value from our specialist testers and facilities.

During testing

- We will **perform the agreed tests** with focus on exploiting vulnerabilities and simulating attack techniques against your IoT solution.
- Where appropriate, we will adapt our testing to simulate a real-world attacker and report on the outcome.
- If critical or high-priority security vulnerabilities are found in a deployed system, we will notify you as quickly as possible and make recommendations for mitigation measures.

After testing

- On completion of the tests, our consultant will discuss any open issues and make **recommendations on next steps**.
- You will receive a full report documenting the tests and results to implement the necessary changes in your development plan and fix any issues, ideally prior to deployment.



In addition to lab-based testing and evaluation, we offer advanced intrusion testing to simulate a real-world attack against your organisation and supply chain. We incorporate open-source intelligence, social engineering and penetration testing to improve your organisation's readiness, better training for defensive practitioners and inspection of current performance levels. Advanced intrusion testing can provide a valuable insight regarding both the existence of vulnerabilities and the efficiency of defences and mitigating controls already in place, and even those planned for future implementation.

Why Vodafone?

Vodafone has more than 20 years' experience in the IoT arena with more than 1,300 dedicated IoT experts.

We bring unrivalled capabilities together as one of the world's largest mobile networks with outstanding customer experience and a long track record of success with more than 100 million IoT connections deployed.

Our customers are confidently connected, receiving unmatched services, experience and benefit from proven expertise.

Vodafone will enable you to harness the full potential of IoT technology with a range of professional services and keep your organisation ahead of the game.

Next steps

To discover more about how IoT Test and Evaluation from Vodafone can help your organisation optimise your IoT solution effectively and affordably, contact **IoT@vodafone.com** or visit **vodafone.com/business/iot**.

www.vodafone.com/business

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