



## IoT Professional Services: Master your IoT business idea with our experience.

Enterprise IoT – Enable IoT Services

swisscom

**Swisscom provides a variety of professional services including customized planning, analyses, development, design and implementation as well as training and technical support to enable the deployment of your IoT solution and to maximize your return on investment in the most efficient and cost-effective way.**

### **What is IoT Professional Services?**

Due to the complexity of the internet of things 75% of IoT projects tend to fail and create more costs than planned. The most likely reasons for underestimation of a project include the lack of internal expertise, lack of planning and testing in the beginning of the design phase, too little experience as well as lack of integration opportunities into the existing environment.

With our dedicated IoT Professional Services we support in developing a robust IoT roadmap to efficiently reach the deployment of the IoT solution with on-budget cost transparency. We offer support in a testing phase for example through performing individual coverage measurements, designing the IoT network and solution structures. In proof of concept projects our experts support in individual development and implementation of infrastructures and designs. Our goal is to provide expertise where it is needed to avoid costly decisions at an early stage in the development cycle and enable a successful implementation and operation of our customer's IoT business cases.

We cooperate with selected IoT partners in all the IoT subdomains, thereby providing access to the best experts, skill-sets, know-how and resources to tackle any challenge.

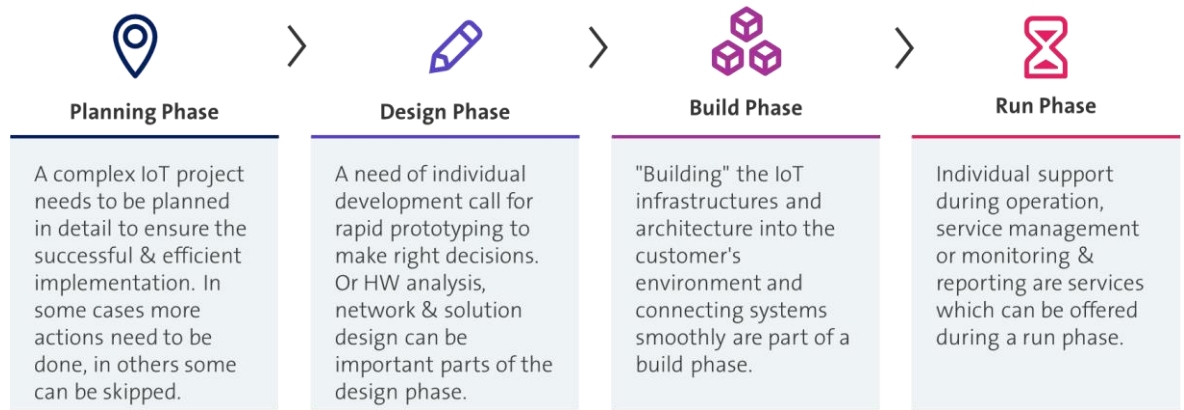
### **Your advantages with IoT Professional Services**

- Clear line of action thanks to a deliberate project design with the necessary building blocks for a smooth project flow
- Competitive advantage thanks to a shorter development life-cycle and faster time to market thanks to avoiding unnecessary steps but including important analysis and iteration cycles.
- Easy access to immense number of experts in Swisscom, IoT Partner Ecosystem and Academia resulting in a large range of skill-sets, know-how and developer resources
- A higher transparency on costs and adherence of budget goals due to better design

With our IoT services, we want to enable our customers and partners in the market and support a successful implementation of their IoT project.



## Typical project flow in a nutshell



## Professional Services Job Roles



### Engineers in practice

IoT projects are complex and require a lot of preliminary testing and design to make well-founded and cost-effective decisions. Many IoT realizations require specific knowledge or tools. Our experts have extensive know-how along the entire IoT value chain, which enables them to carry out any endeavor more quickly and customer oriented.





### Good projects require good planning

IoT projects are complex projects. Often the company lacks specific know-how, time capacity or both. This leads to higher costs, errors and a project delay. With our professional IoT know-how, our project management knowledge, we support you in your projects, so that they meet deadlines and costs, acceptance and project completion.



## Professional Services Packages

We deliver customized building blocks to ensure smooth progress and cost-effective decisions on hardware, technology and cloud-services from the proof of concept phase until the roll-out phase.

 <b>Solution Workshop</b>	<p>At the beginning of an IoT project, we advise to undergo a technical validation by experts to define and analyze the technical requirements for the customer's IoT use case.</p> <p>During a two-day workshop we provide a technical advisor to inspect the customer's technical environment and match it with the requirements. As a result, we deliver a specification document of the defined requirements, recommendations and measures to be taken in order to fulfill the customer's IoT use case.</p> <hr/> <p>Our technical experts have many years of experience in various IoT projects.</p>
 <b>Device Qualification and Configuration</b>	<p>Hardware and device qualification<sup>1</sup></p> <hr/> <p>Device is tested on performance and network issues and ensures proper compatibility with our network server.<sup>2</sup></p> <hr/> <p>Device configuration of communication modems (LoRaWAN devices and cellular modems)</p> <hr/> <p>Extra: All Swisscom IoT Qualified devices get featured on our official partner product catalogue</p>
 <b>Coverage Measurement</b>	<p>Advice on coverage, access technologies, analysis of device requirements and how to achieve best connectivity using our network</p> <hr/> <p>Self-reliant Measurement: Providing a field testing device to a customer for 3 months. Short introduction of 30 minutes and as an option also an individual debriefing and discussion of 60 minutes.</p> <hr/> <p>Automized Measurement: Analysis of coverage of individual number of sites with a standardized output of the measurement tool (remote). Optional the customer can have an individual report: results, statistics and recommendations based on customer use case</p> <hr/> <p>Individual Measurement: Coverage measurements by an expert on premise (CH) and measurement documentation as well as a written recommendation. Additional 60 minutes debriefing.</p>
 <b>Network Design</b>	<p>IoT Network Design by a dedicated solution designer: IoT network design involves evaluating, understanding and scoping the network to be implemented. The IoT relevant network design is documented as a network diagram to serve as the blueprint for physical network implementation.</p> <hr/> <p>Our engineers and solution architects support in the following areas:</p> <ul style="list-style-type: none"> <li>– Design of logical map of the IoT network</li> <li>– Guide on how to integrate IoT devices into a customer's existing IT infrastructure (e.g.: IP range overlap, dynamic routing protocols, etc.)</li> <li>– Advice on how to implement redundancy and extended input on dynamic routing, power saving mode and push vs. poll and more</li> <li>– Support with integrating any unrecommended<sup>3</sup> router into the network structure</li> </ul>

<sup>1</sup> Available for LoRaWAN devices. From Q1 2020 also available for NB-IoT and LTE-M devices

<sup>2</sup> In case of LoRaWAN: Server by Activity

<sup>3</sup> Recommended due to facilitated implementation: Cisco, Fortinet, Sonicwall



## Solution Design

In most IoT projects, we advise customers to have a Solution Architect analyze and design the architecture structure of the IoT solution before the implementation.

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Review of business and device requirements for final implementation

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Detailed plan, definition and design of the architecture of a IoT system in context of the IoT solution: E.g. data management, cloud, business process intergration, integration design and more



## Private Training Bootcamp

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Individual training session for the customer (single or group) on a topic.

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Specialized IoT topic: Access technology, management platforms, cloud, prototyping, business modelling, data analytics and more.



## Individual IoT Engineering Service

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Customer oriented IoT Engineering Service to support in successful operation of the IoT solution.

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Extended technical support services in differentiated tactical or technical areas from design to operation. Swisscom's IoT Design and Delivery Team can help and facilitate the customer on individual needs, issues, change requests or analyses.

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