

## IOT COMPETENCE CENTER

At SGS, we strongly believe in the huge potential of Internet of Things (IoT) to shape the way we do our core business providing innovative services, higher customer satisfaction, best operational efficiencies and new business models. IoT can help SGS to leverage on accumulated knowledge and experience on performing the standard portfolio of SGS' Inspection Services by introducing innovative and smart ways of doing business

SGS

WHEN YOU NEED TO BE SURE



BASED IN MADRID, OPERATING GLOBALLY



#### **SGS IOT COMPETENCE CENTER** PARTNERSHIP WITH SWISSCOM, **VODAFONE AND MICROSOFT**

The digitalization of inspection services is rapidly expanding as the IoT market is growing by 7% per year. To accelerate the digitalization of its services, SGS has partnered with leading telecommunications companies Swisscom and Vodafone to build an IoT Competence Center in Madrid.

Swisscom and Vodafone will provide a dedicated secured IoT network to send the collected data which will then be stored and analyzed by SGS inspectors" with "Swisscom and Vodafone will provide a dedicated secured IoT network to transport the collected data from the sensors to be stored on Microsoft's dedicated IoT Cloud Hub solution so to be monitored and analyzed by qualified SGS inspectors.

Our Mission is to lead and support the SGS Digital Transformation towards the Next Generation Monitoring Services through providing the state-of-the art IoT solutions and with the Vision to become the widely recognized point of reference, both internally (SGS) and externally (Business Stakeholders, Partners, Clients, IoT community) in providing the innovative, sustainable and cost efficient IoT solutions.



# GLOBAL SERVICES TAILORED TO INDIVIDUAL INDUSTRIES

SGS IS THE
WORLD'S
LEADING
INSPECTION,
VERIFICATION,
TESTING AND
CERTIFICATION
COMPANY







# INSPECTION **VERIFICATION TESTING CERTIFICATION** CONSULTANCY **OUTSOURCING**







**WORLD LEADER** 

95 000 **EMPLOYEES** 

2 400 **OFFICES AND LABORATORIES** 







**GLOBAL INDUSTRIES**  **GLOBAL SERVICE LOCAL EXPERTISE** 



### REQUIREMENTS AND RISK MANAGEMENT

SUCCESSFUL IOT IMPLEMENTATION STARTS WITH ASSESSING THE RISK STARTING FROM THE DEFINITION OF BUSINESS REQUIREMENTS

- Requirements are the functional properties that an application or system must support in order to fulfill its intended objectives efficiently and effectively
- Requirements can be broad and wide ranging, addressing everything from graphical user interfaces to engineering feeds and speeds. Security requirements are a (usually overlooked) subset of the overall requirements.



(NIST - 800-53r4, www.nist.org)

(Source - Tyson Macaulay, RIoT Control Understanding and Managing Risks and the Internet of Things; Morgan Kaufmann 2017)



## ASSET CLASSES AND STAKEHOLDERS

SGS IOT RISK ASSESSMENT FRAMEWORK

We're aiming to provide the whole data value chain in the IoT standard offering end-to-end from device to client services to ensure best inspection services to customers

ASSET CLASSES













#### **IOT DEVICES**

Providing the standard, configurable, scalable and extremely easy to implement and operate IoT Device, covering many SGS client scenarios in terms of variety of sensors - engineered by SGS for SGS

## TRANSPORTATION NETWORK

securing the standard solution for connecting the SGS IoT devices partnering with Swisscom and Vodafone on a worldwide basis

#### DATA COLLECTION

AND STORAGE

Industry leading IoT Cloud solution for collecting and saving the obtained IoT measurements through partnership with Microsoft

#### **EVENT MANAGEMENT**

24/7 monitoring services, preventive and predictive maintenance capable of increasing operational efficiency and reducing downtime and other value added services for our customers

#### DATA ANALYTICS

Industry leading IoT Cloud solution for modern cutting-edge data analytical services in terms of big-data analysis and Artificial Intelligence so to capture data patterns and offer innovative services like preventive maintenance

Users

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**TAKEHO** 

Service Provider

Manufacturer

**Network Operator** 

**Data Center Operator** 

Regulators

Independent 3<sup>rd</sup> parties

Users

Service Provider

Manufacturer

Network Operator

**Data Center Operator** 

Regulators

Independent 3<sup>rd</sup> parties

Users

Service Provider

Manufacturer

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**Network Operator** 

**Data Center Operator** 

Regulators

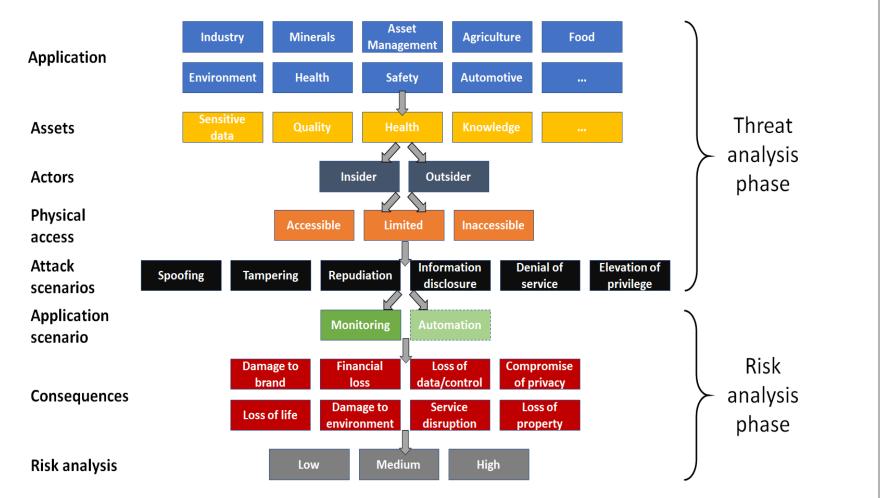
Independent 3<sup>rd</sup> parties



### IOT RISK ASSESSMENT AND MANAGEMENT

**GENERAL GUIDANCE** 

SGS Implements the Standardized Risk Assessment Framework



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