



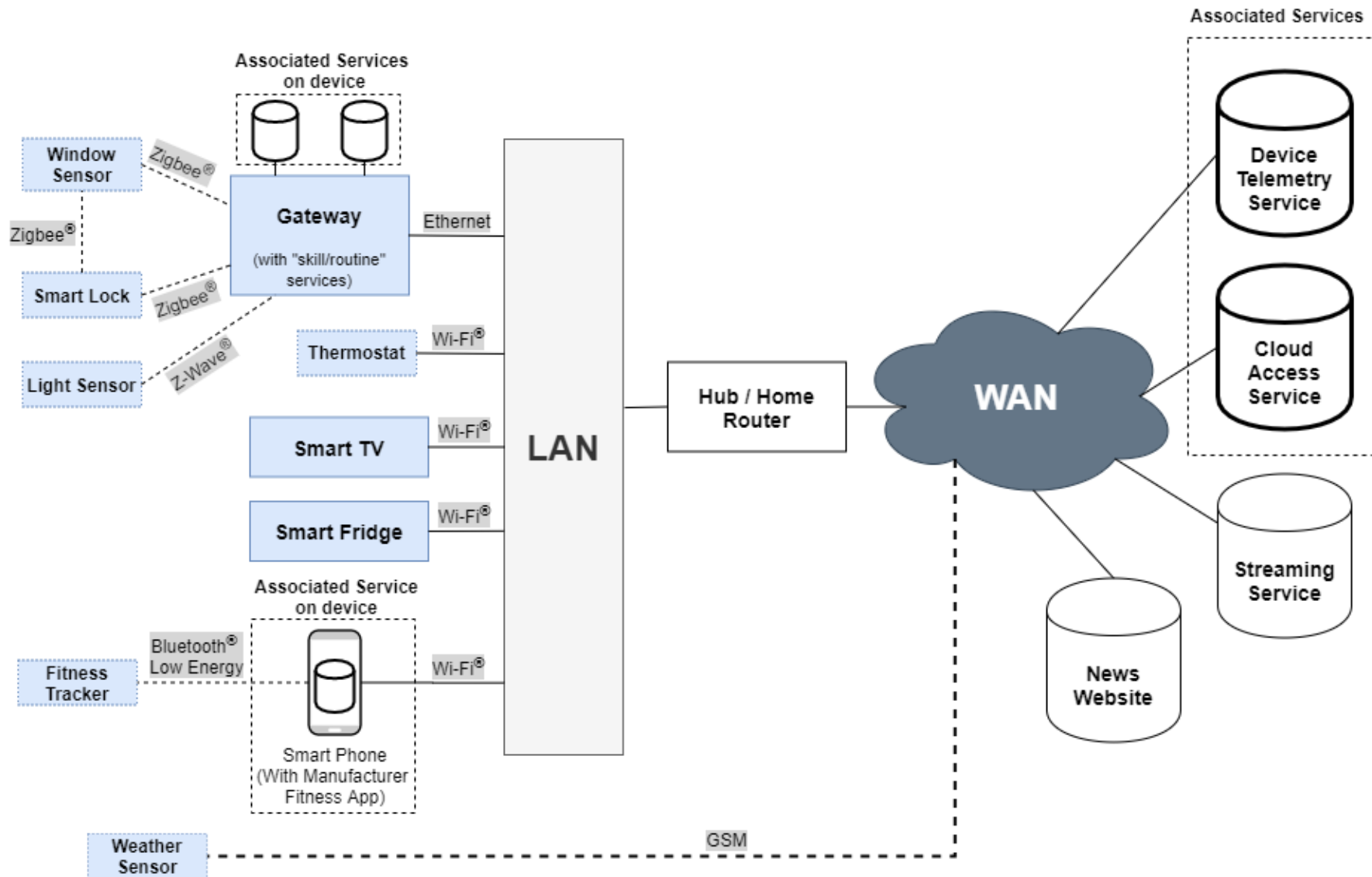
# Cybersikkerhed set fra et IoT perspektiv

Jeppe Pilgaard Bjerre

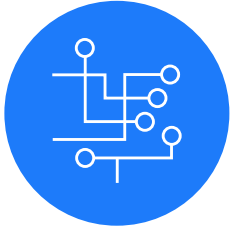
16 June 2021



# Scope



# Standarder



ETSI EN 303 645: Cyber Security for Consumer Internet of Things:  
Baseline Requirements

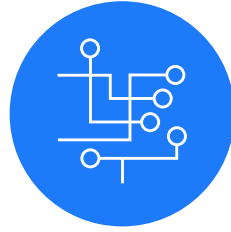


ETSI TS 103 701: Cyber Security for Consumer Internet of Things:  
Conformance Assessment of Baseline Requirements



ETSI TR 103 621: Guide to Cyber Security for Consumer Internet of Things

# ETSI EN 303 645

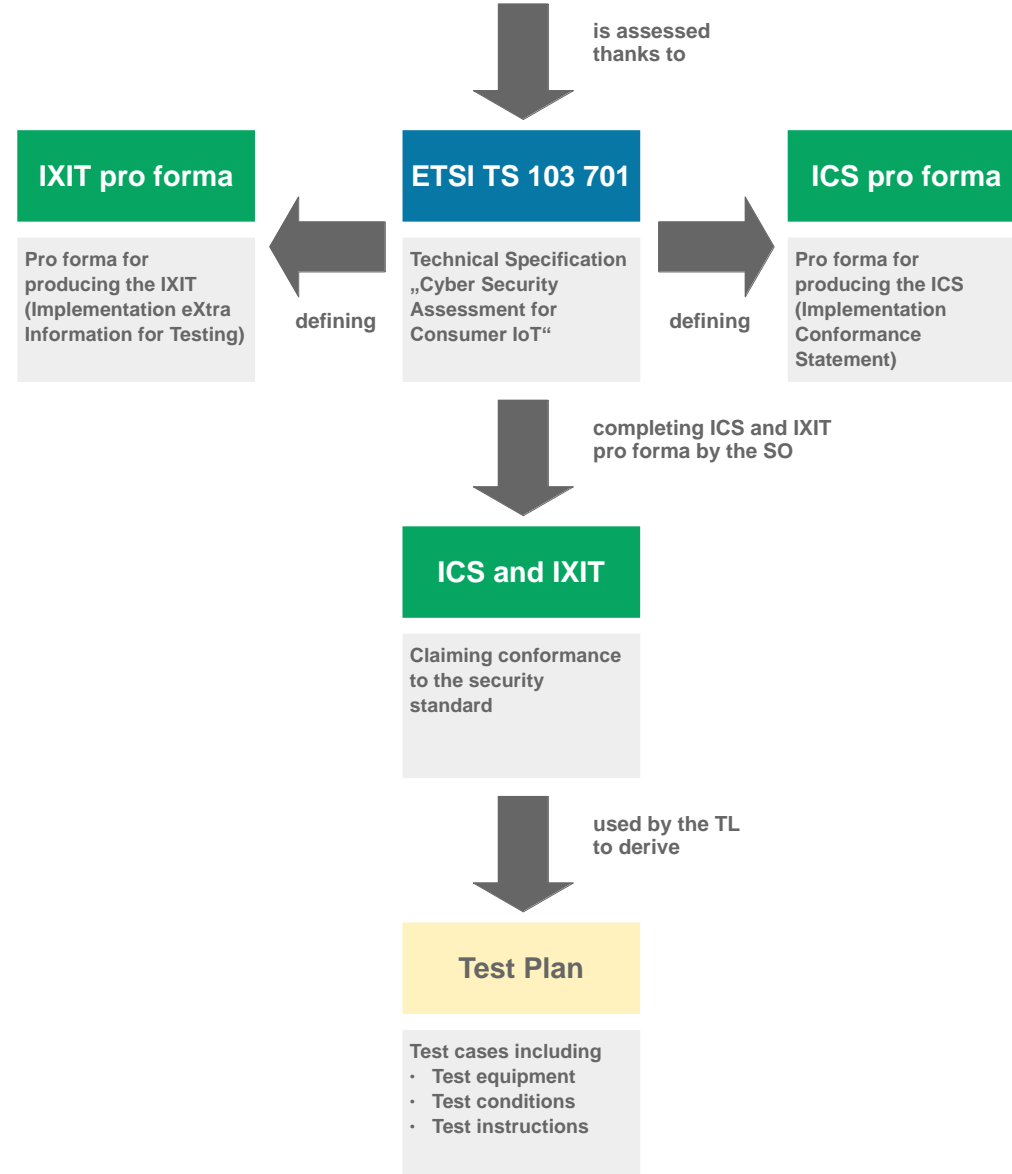


- Ingen universelle standard koder
- Sårbarheds rapportering
- Software opdatering
- Sikker lagring af følsomme sikkerheds parametre
- Kommunikér sikkert
- Minimér eksponerede angrebsflader
- Software integritet
- Beskyt persondata
- Monitorér telemetri
- Beskyt mod udfald
- Gør det let at slette bruger data
- Gør installation og vedligehold let
- Validér input data

# ETSI TS 103 701



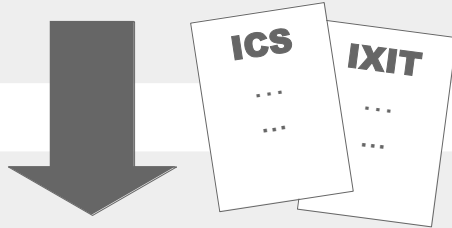
- Dokumentation og testplan
- Validering af implementering
- Kan være self-assessment



# SO

## Supplier

- Developer
- Manufacturer
- Further Responsible Party of the Supply Chain



# TL

## 1st Party

- Part of the Supplier\* (Self Assessment)

## 2nd Party

- User Organization

## 3rd Party

- Independent Testing Authority

\* in this case SO and TL coincide

# 1 Completing the Identification of the DUT

## Identification of the DUT

Date of Statement: (...)  
DUT Name: (...)  
Trade Name: (...)  
...

# 2 Completing the ICS

## ICS

- ✓ Provision 5.1-1 (M, C)
- ✓ Provision 5.1-2 (M, C)
- ...
- ✗ Provision 5.3-1 (R)
- N/A Provision 5.3-2 (M, C)
- ...
- ✓ Provision 5.5-1 (M)
- N/A Provision 5.5-2 (R)
- ...

# 3 Completing the IXIT

## Annex

Provision → IXIT

5.1-1	→ 1-AuthMech
5.1-2	→ 1-AuthMech
...	...
5.3-1	→ 6-SoftComp, 7-UpdMech
5.3-2	→ 7-UpdMech
...	...
5.5-1	→ 11-ComMech
5.5-2	→ 12-NetSecImpl
...	...

## IXIT

IXIT 1-AuthMech

ID	Description	...	...
...	...	...	...
...	...	...	...

...

IXIT 11-ComMech

ID	Description	...	...
...	...	...	...
...	...	...	...

...

# 4 Verifying the ICS

## ICS

- ✓ Provision 5.1-1 (M, C) ✓
- ✓ Provision 5.1-2 (M, C) ✓
- ...
- ✗ Provision 5.3-1 (R)
- N/A Provision 5.3-2 (M, C) ✓
- ...
- ✓ Provision 5.5-1 (M) ✓
- N/A Provision 5.5-2 (R) .7.

## ICS

- ✓ Provision 5.1-1 (M, C)
- ✓ Provision 5.1-2 (M, C)
- ...
- ✗ Provision 5.3-1 (R)
- N/A Provision 5.3-2 (M, C) 🔍
- ...
- ✓ Provision 5.5-1 (M)
- N/A Provision 5.5-2 (R) ✗
- ...

a) Mandatory Provisions

b)-e) Conditional Provisions, N/A Claims

# 5 Performing the Assessment

## ICS

- ✓ Provision 5.1-1 (M, C)
- ✓ Provision 5.1-2 (M, C)
- ...
- ✗ Provision 5.3-1 (R)
- N/A Provision 5.3-2 (M, C)
- ...
- ✓ Provision 5.5-1 (M)
- N/A Provision 5.5-2 (R)
- ...

## Test Plan

- ✓ Test Group 5.1-1
- ✓ Test Group 5.1-2
- ...
- ✓ Test Group 5.5-1
- ...

The TL **shall** assess for all password-based user authentication mechanisms in IXIT 1-AuthMech ... 🔍

The verdict PASS is assigned if ...

# 6 Assigning an Overall Verdict

## Verdict

✓ **PASS**  
FAIL  
INCONCLUSIVE

# ETSI TR 103 621



- Eksempler og vejledning for implementering af kravene i ETSI EN 303 645

*Where passwords are used and in any state other than the factory default, all consumer IoT device passwords shall be unique per device or defined by the user.*

NOTE: An example for this Provision is also provided in EN 303 645.

EXAMPLE 1: The consumer IoT device password for the factory default state is printed on a sticker under the device casing. During the initialization phase, the user is requested to provide a new password and the procedure cannot complete without the new password being different from the default state password.



# Andre standarder

- ISO 27400 serie – Basis krav for IoT
- IEC 62443-4-1/2 kan også bruges

# Keep in touch

Jeppé Pilgaard Bjerre  
Specialist  
jpbj@force.dk  
+4543251548  
forcetechnology.com

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