



# Understanding the Energy Labelling Requirements for Smartphones and Slate Tablets



# Agenda

- |   |                                 |               |
|---|---------------------------------|---------------|
| 1 | Introduction and Housekeeping   | 10:00 – 10:10 |
| 2 | Overview of EU Legislation      | 10:10 – 10:25 |
| 3 | Overview of viSer Neo EEI Pilot | 10:25 – 10:40 |
| 4 | Testing Options                 | 10:40 – 10:45 |
| 5 | Q&A                             | 10:45 – 10:55 |
| 6 | Wrap-up                         | 10:55 – 11:00 |

# Our Speakers



**DEBBIE BOUFFLER**  
MarCom Manager



**SUSIE SIOUTI**  
CCO



**XAVIER FRERE**  
CTO



- You are in Listen only mode
- If you need any help please send us a message privately using Chat
- Feel free to type any questions throughout the session in the Q&A for the Q&A at the end
- (Any questions we don't answer live will be answered offline and share a summary Q&A document)
- We will send you the slides and a recording of the webinar



# Company Profile



## Foundation

Company Founded 2014  
By: Gilles Ricordel (CEO) and Xavier Frere (CTO)



## Core Business

Test Automation Products and Solutions  
Testing Services



## Market

Telecommunications, Media, Transportation and Logistics, Government / Defense, Utilities, Mining oil and Gas, Fleet management, Enterprise



## Vision

Help our customers succeed in today's world fast changing technology environments.



## HQ

**Rennes France**

Representatives in Europe, MEA, Americas, Asia



## Expertise

Telecom – Testing – Connected Systems –  
Automation Private, Public, Mission Critical Networks



## Experience

20+ Years in Telecoms  
Companies: Motorola, Mitsubishi, Nokia, Qualcomm, Sharp, Renesas, Ericsson, Siemens...



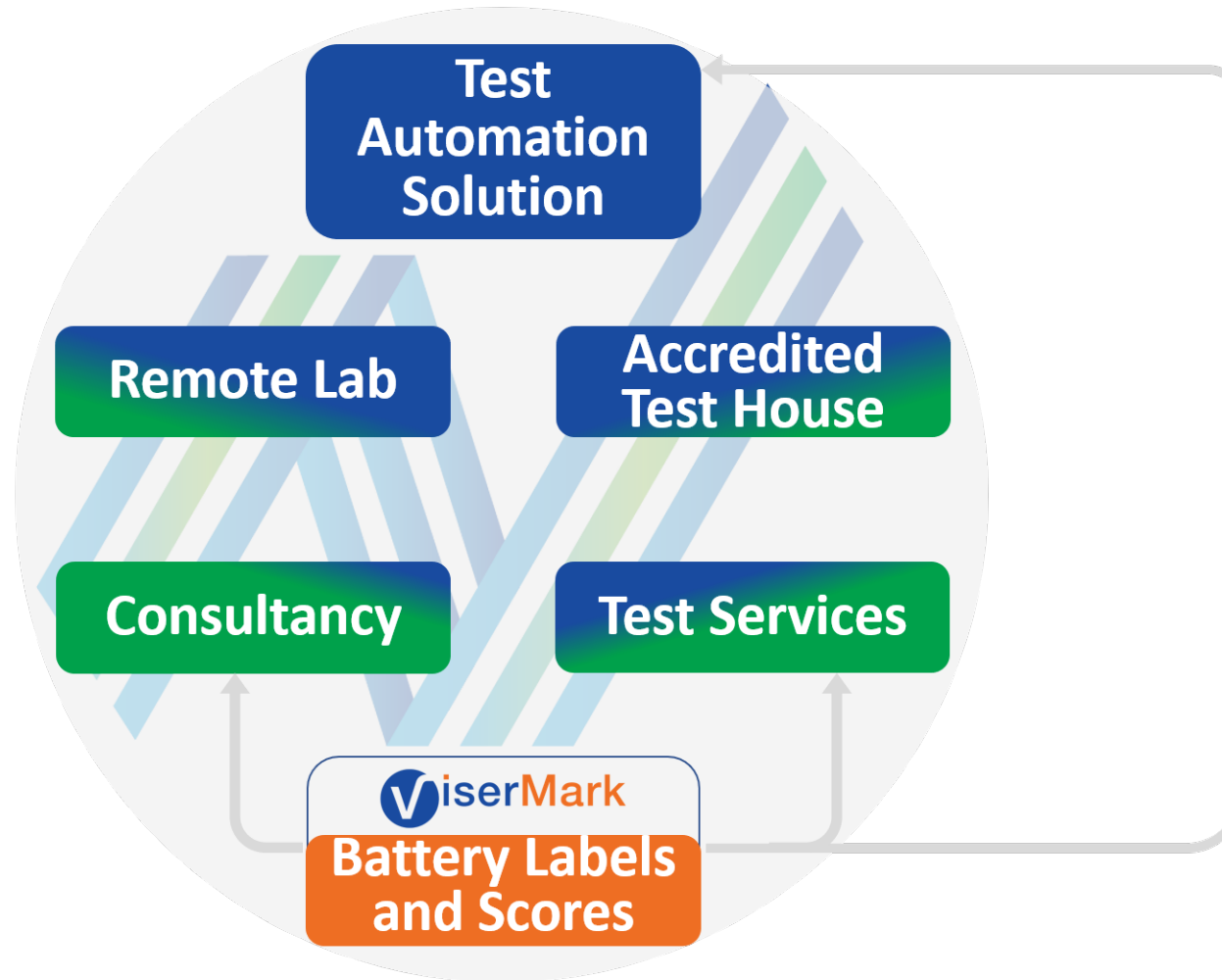
## Mission

Help our customers release products and services in the market on budget, on time with superior end user experience and quality

# Who We Work With



# Our Offerings



Automation

Services

# They Trust Us

## Carriers-Operators



## Media



## Manufacturers



## Enterprises-Public Organisations





# Agenda

1 Introduction and Housekeeping

2 Overview of EU Legislation

3 Overview of viSer Neo EEI Pilot

4 Testing Options

5 Q&A

6 Wrap-up

# EU Commission Updates and Key Dates

Eco Design and Energy Label EU  
Commission Regulations were  
adopted on 16/06/2023

From the date of entry there is a  
transition period of 21 months  
where they will become mandatory.

16 June 2023

20 Sept. 2023

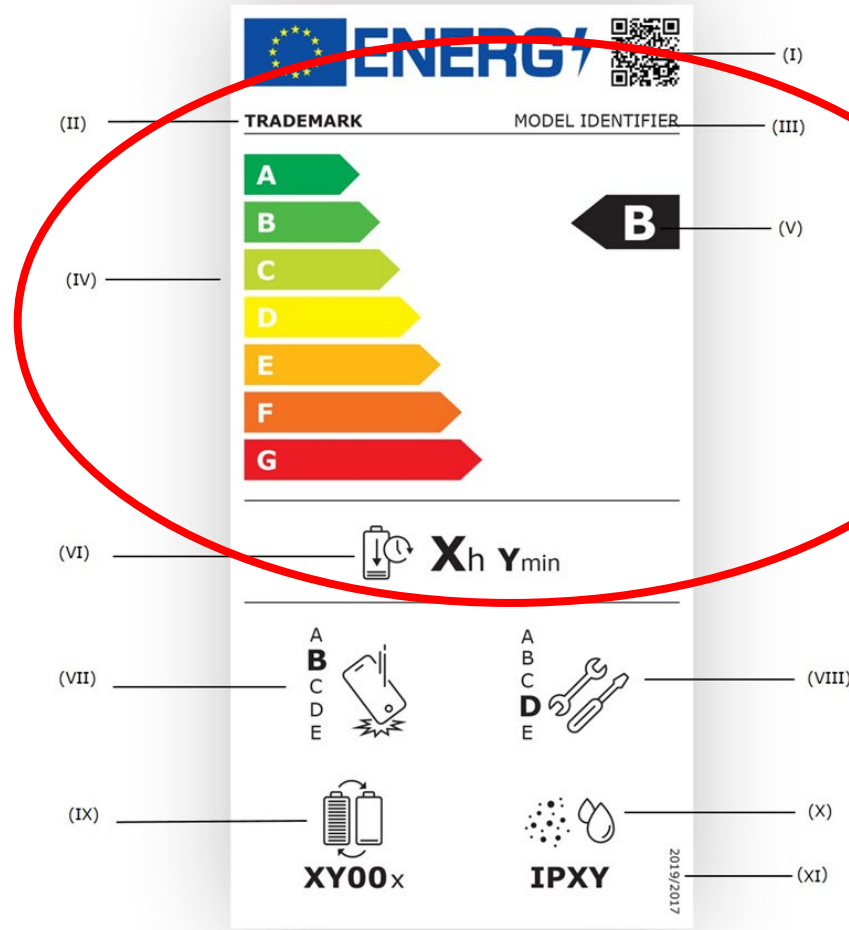
20 June 2025

After a 3 months objection/scrutiny  
period the Regulations were  
published in **the Original Journal of  
EU** effective from 20/09/2023

**Eco Design Requirements:** <https://eur-lex.europa.eu/eli/reg/2023/1670/oj>

**Energy Labelling Regulations:** [https://eur-lex.europa.eu/eli/reg\\_del/2023/1669/oj](https://eur-lex.europa.eu/eli/reg_del/2023/1669/oj)

# The Energy Label



# EEI Calculation - Testing Procedure

## 1.2.1. Test sequence for smartphones

From 100 % battery charge level to power off: repeat a cycle of:

- Phone call (4 min)
- Idle (30 min)
- Web browsing (9 min)
- Idle (30 min)
- Video streaming (4 min)
- Gaming (1 min)
- Idle (30 min)
- Data transfer: http upload and download (8 min)
- Idle (30 min)
- Video playback (4 min)

When device powers off: Terminate test.

## 1.2.2. Test sequence for slate tablets

From 100 % battery charge level to power off: repeat a cycle of:

- Gaming (5 min)
- Idle (66 min)
- Web browsing (11 min)
- Idle (66 min)
- Video streaming (6 min)
- Idle (66 min)
- Data transfer: http upload and download (2 min)
- Idle (66 min)
- Video playback (6 min)
- Idle (66 min)

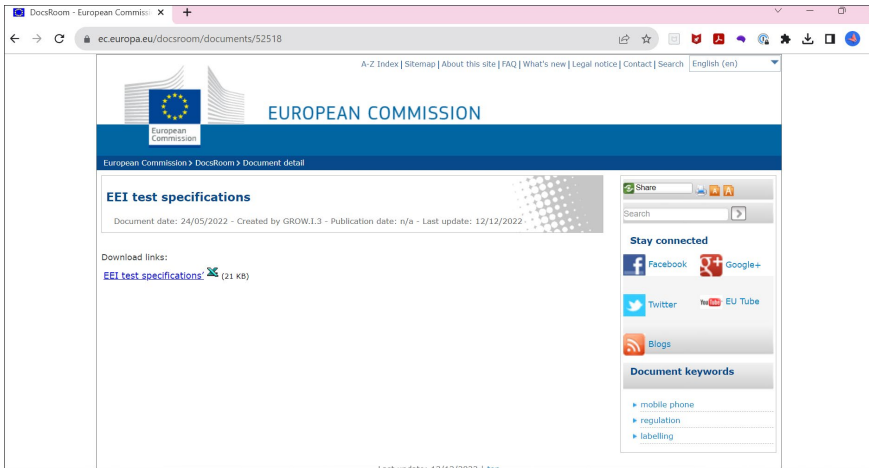
When device powers off: Terminate test.

**EEI Test Specifications Excel document**

<https://ec.europa.eu/docsroom/documents/52518>



# EEI Test Specifications Excel Document



## Excel Contains Three Tabs

1

### Network Simulator Set up

Information like LTE Band RSRP and RSRQ Levels

2

### Device Set up

Settings like media volume, screen brightness, screen timeout (Around 38 settings)

3

### Use Case Set up

viSer Neo EEI Pilot application already configured to this set up

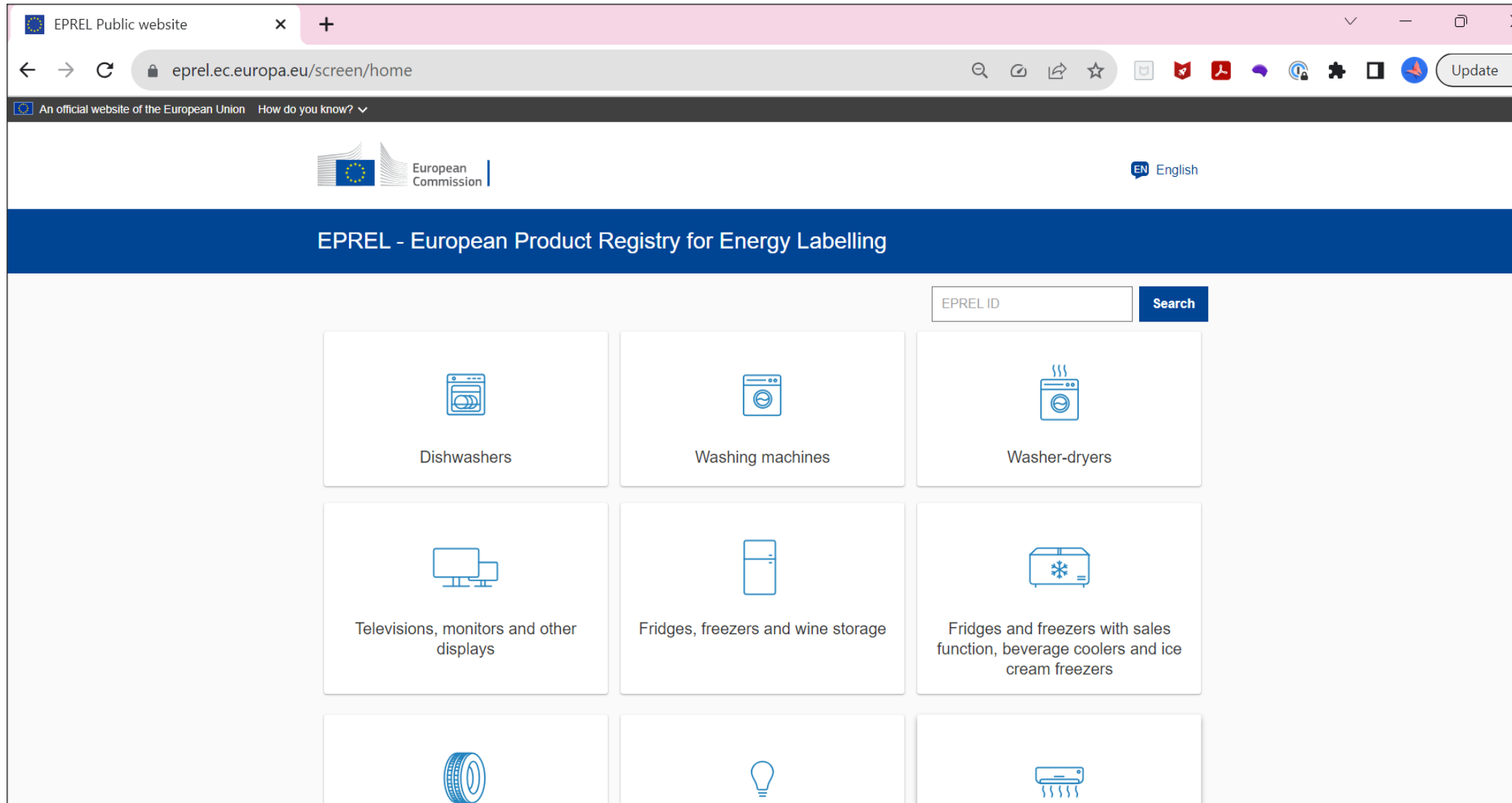
# Energy Labelling Classes - Smartphones

**Table 1a: Energy efficiency classes of smartphones**

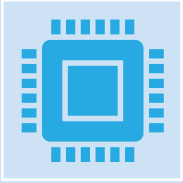
Energy Efficiency Class	Energy Efficiency Index (EEI)
A (most efficient)	$EEI > 2.70$
B	$2.30 < EEI \leq 2.70$
C	$1.95 < EEI \leq 2.30$
D	$1.66 < EEI \leq 1.95$
E	$1.41 < EEI \leq 1.66$
F	$1.20 < EEI \leq 1.41$
G (least efficient)	$EEI \leq 1.20$

$$\frac{END_{\text{Device}}}{U_{\text{nom}} \times C_{\text{rated}}} \times 1000$$

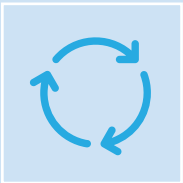
# European Product Registry for Energy Labelling



# Key Points



The **energy efficiency index** should be calculated with the operating system version installed on the product model at the date of placement on the market.



For the lifespan of the product, if an **updated version** of the operating system is installed on the same product model, the **energy efficiency index should be recalculated** and, where applicable, the value of any other parameter of the label and of the product information sheet should be reassessed.



Any change in the energy efficiency index, or where applicable in any other parameter value part of the label and of the product information sheet, should be considered relevant, in particular when this change is detrimental for the end users and **label should be revised**

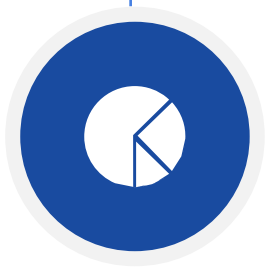


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# SmartViser EEI Application Timeline

JUN 2021



## Involvement in EU Energy Labeling Program

SmartViser joined the EU Project on defining the testing methodology for battery energy efficiency testing and endurance.

JUN - DEC 2021



## Testing Methodology

Worked on the testing methodology. Main Criteria Repeatable, Reliable Consistent, close to end user behavior.

JAN – DEC 2022



## Beta Release Program

Beta Program with several key industry players participating and providing feedback.

AUG 2023



## viSer Neo EEI Pilot Application

Viser Neo EEI following the updated from the Beta program was released. Available for ios and Android.

# viSer Neo EEI Pilot Application

Available until  
31/10/2023

The viSer Neo EEI Pilot is  
now available on ios and  
Android

If you want to take part to  
the Pilot Application  
(optional) you can reach  
out directly to SmartViser  
or contact the EU Policy  
Officer

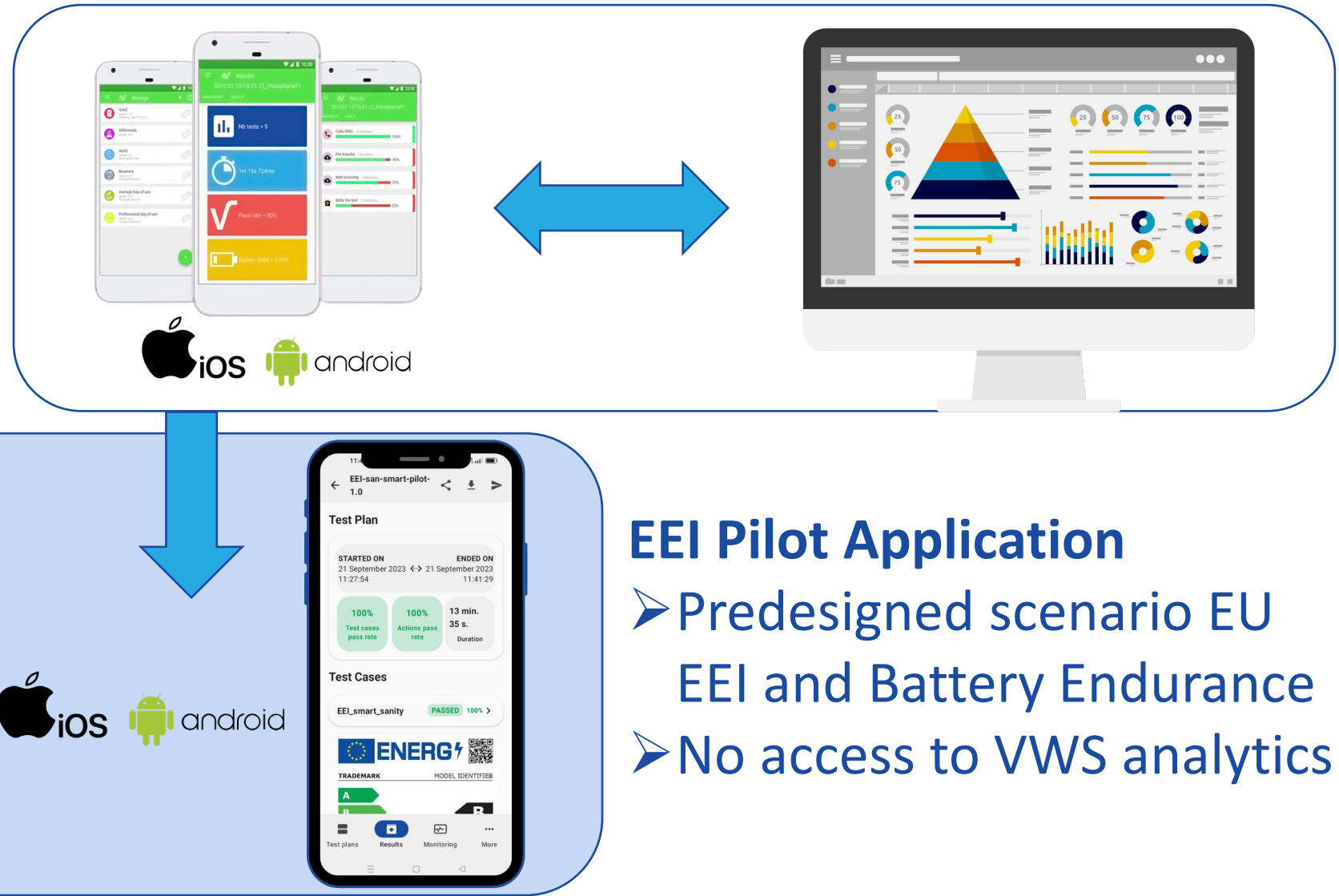
**Manufacturers**  
Smartphones and Slate  
Tablets  
**Market Surveillance  
authorities**

# viSer Neo EEI Spinoff from viSer Standard

## Standard

### SmartViser Solution:

- viSer with any scenario creation Capabilities
- Full Interactive Dashboard Analytics VWS (viSer Web Services)



## EEI Pilot Application

- Predesigned scenario EU EEI and Battery Endurance
- No access to VWS analytics



# Testing Process Overview – Smartphone Example

## Controlled Environment



viSer Neo EEI

Network  
Simulator



Detailed Set up of all  
parameters

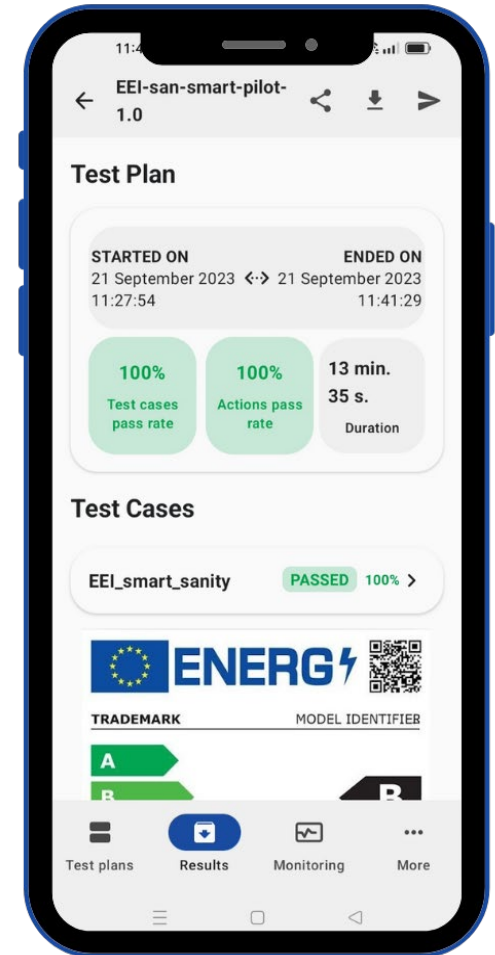
EEI Test Specifications  
Excel document

<https://ec.europa.eu/docroom/documents/52518>

## Device Test Protocol

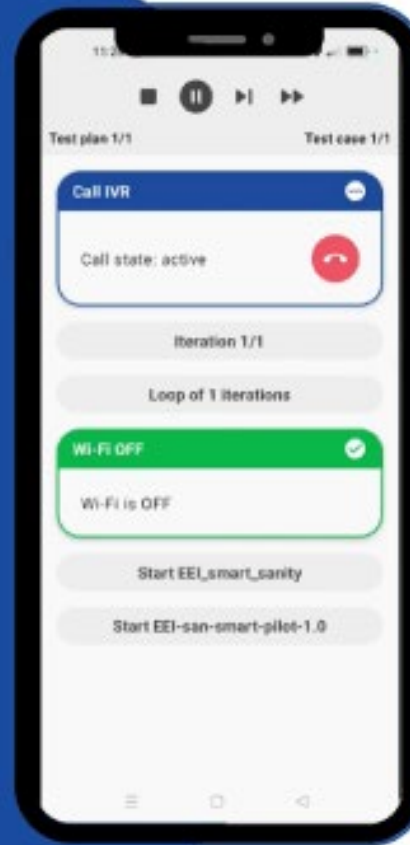


## Result Data



# viSer Neo EEI Application

- Start the test on a fully charged device.
- Launch the test.
- The test runs until the device is powered off.

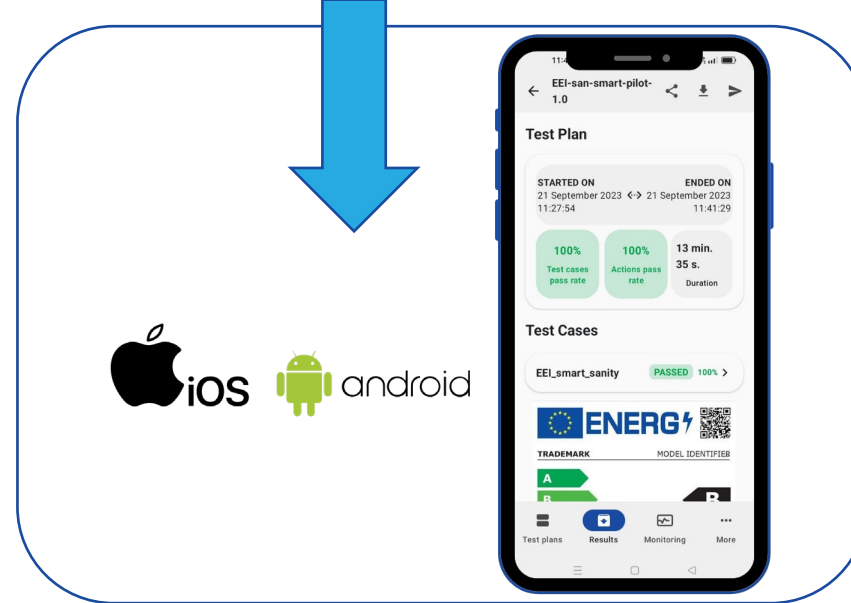
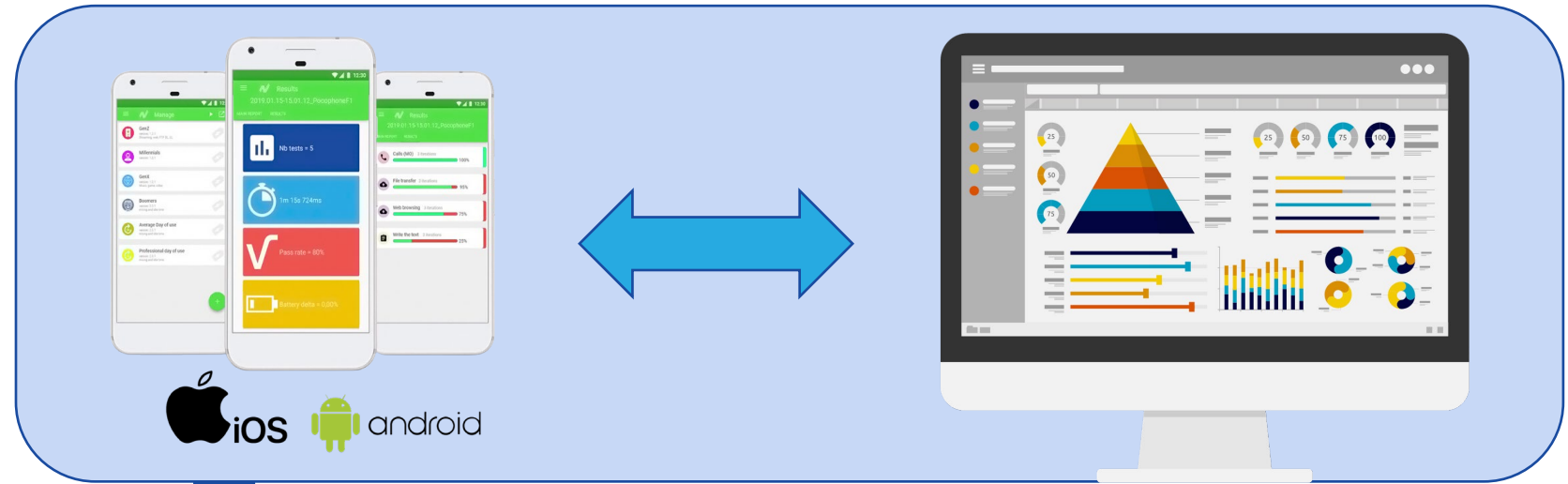


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# What is the viSer Application



## What is viSer?

**A device agnostic mobile Application – (viSer = Virtual User)**

- Available on ios and Android
- Converts any\* device into a probe offering a series of automated mobile service tests with an intelligent scheduler
- Allows to perform any user action the same way an end user will use the device
- Can be used on commercial devices, no jailbreaking, no impact on device
- Fully standalone, no equipment required
- No programing skills needed

## Any Test Cases / User Action



Voice



Data



Game



SMS/MMS



Web



Video



Coverage



Battery

## Any Technology



2G



3G



4G



5G



WiFi



LTE



VoLTE



VoWiFi





## Data Visualization

Visual representation of data making it easier to understand complex info at Glance. Visualizations like **Charts, graphs, maps, pie charts** and many more.



## Drill Down Capabilities

Granularity control, helping to view data at high level or focusing on deeper analysis on the information most relevant. Contextual understanding and root cause analysis.



## Customizable Boards

Create and customize boards to help for easier analysis of data. Ability to create several different boards and share with other team members.



## Benchmark

Compare different reports to check for performance between different software versions, OS Upgrades or competitors' performance.



## Data Performance

File Transfer FTP/HTTP (Min,Max Avg)

Speedtest, Multirab, Upload/ download, bi-directional, iperf



## Messaging

SMS, MMS, Email

Time to send (Min, Max, Avg)



## Web Browsing

Web loading time (Min, Max, Avg)

Fluidity, Multirab, loading timeout.



## Call and Voice Quality

Call set up time (Min, Max, Avg), VoLTE, VoWiFi

SRVCC, Failure cause, Audio/Voice Quality POLQA



## Battery

Power consumption per user action

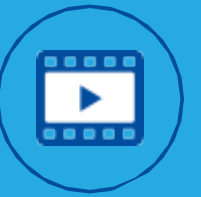
Battery capacity and voltage trends



## Game

Game quality, device temperature

Frame per Second (FPS), Battery Performance



## Video Experience

Streaming loading and buffering time (Min, Max, Avg)

YouTube loading time, buffering time and video quality



## Connectivity Assessment

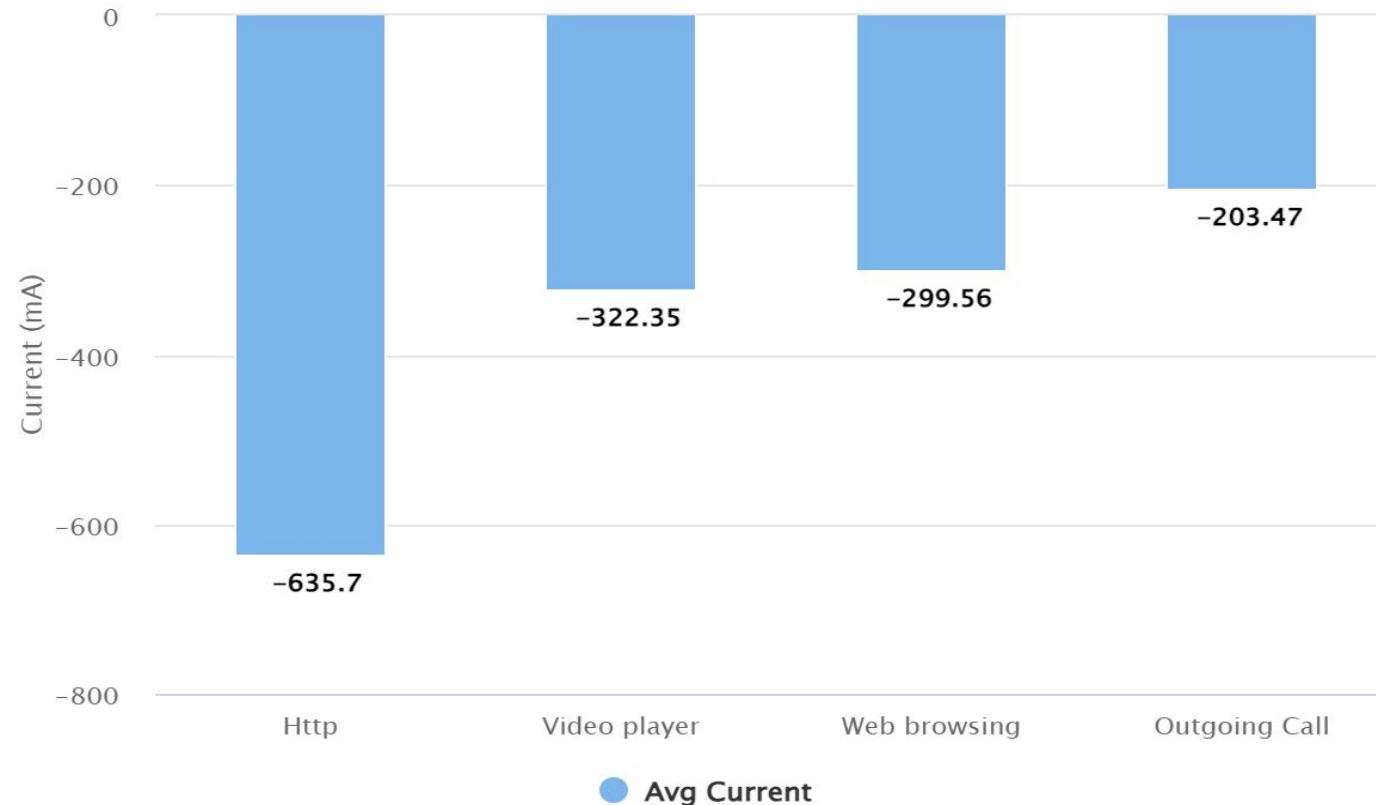
WiFi, Bluetooth, Cellular Network

CS/PS RAT distribution, 5G, Signal Strengths

## ✓ Power Consumption on all Key Usages

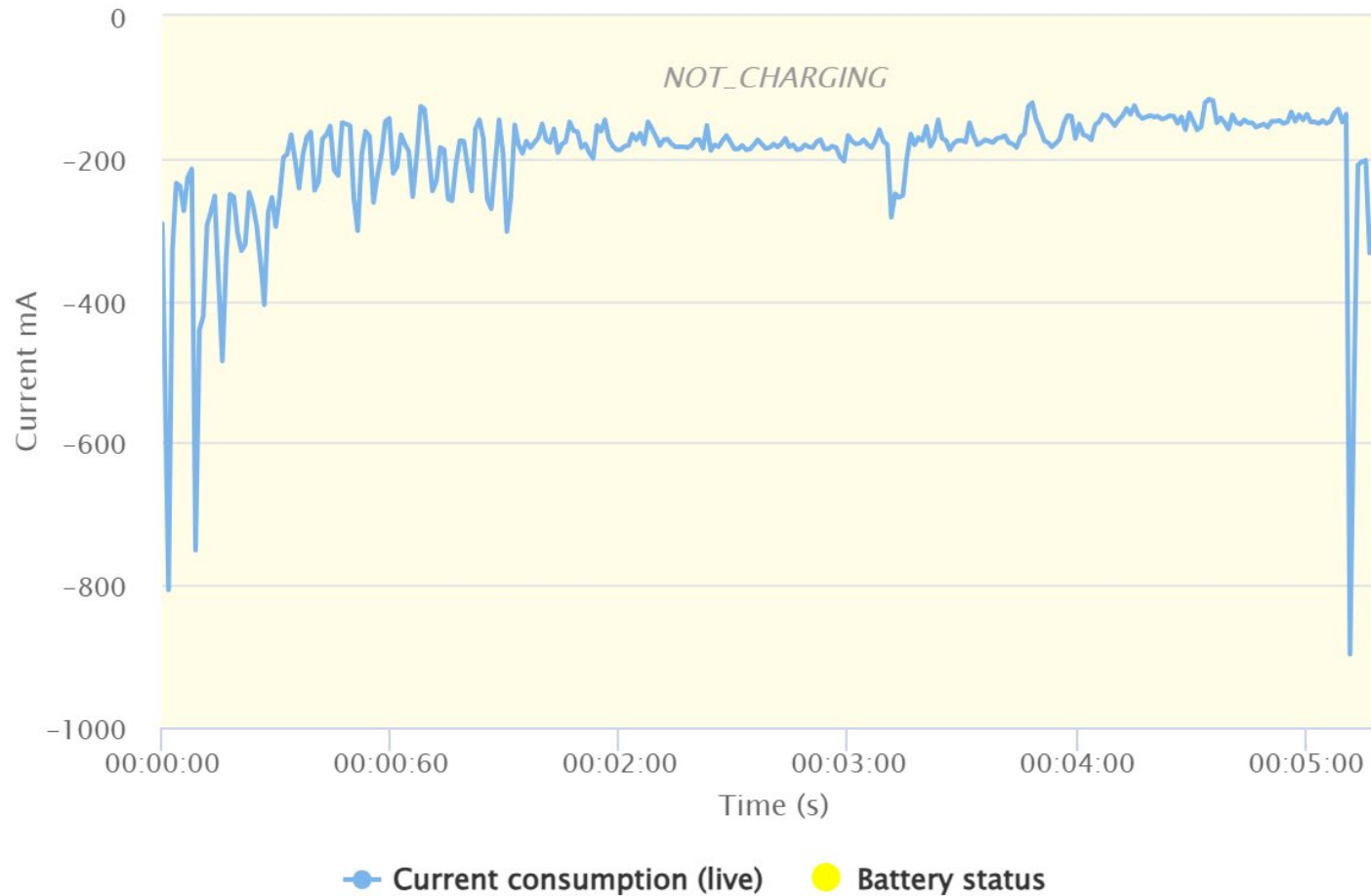
➤ Battery Power Consumption Sample Reports for each usage

➤ Accurate data to correlate the Power consumption with activities

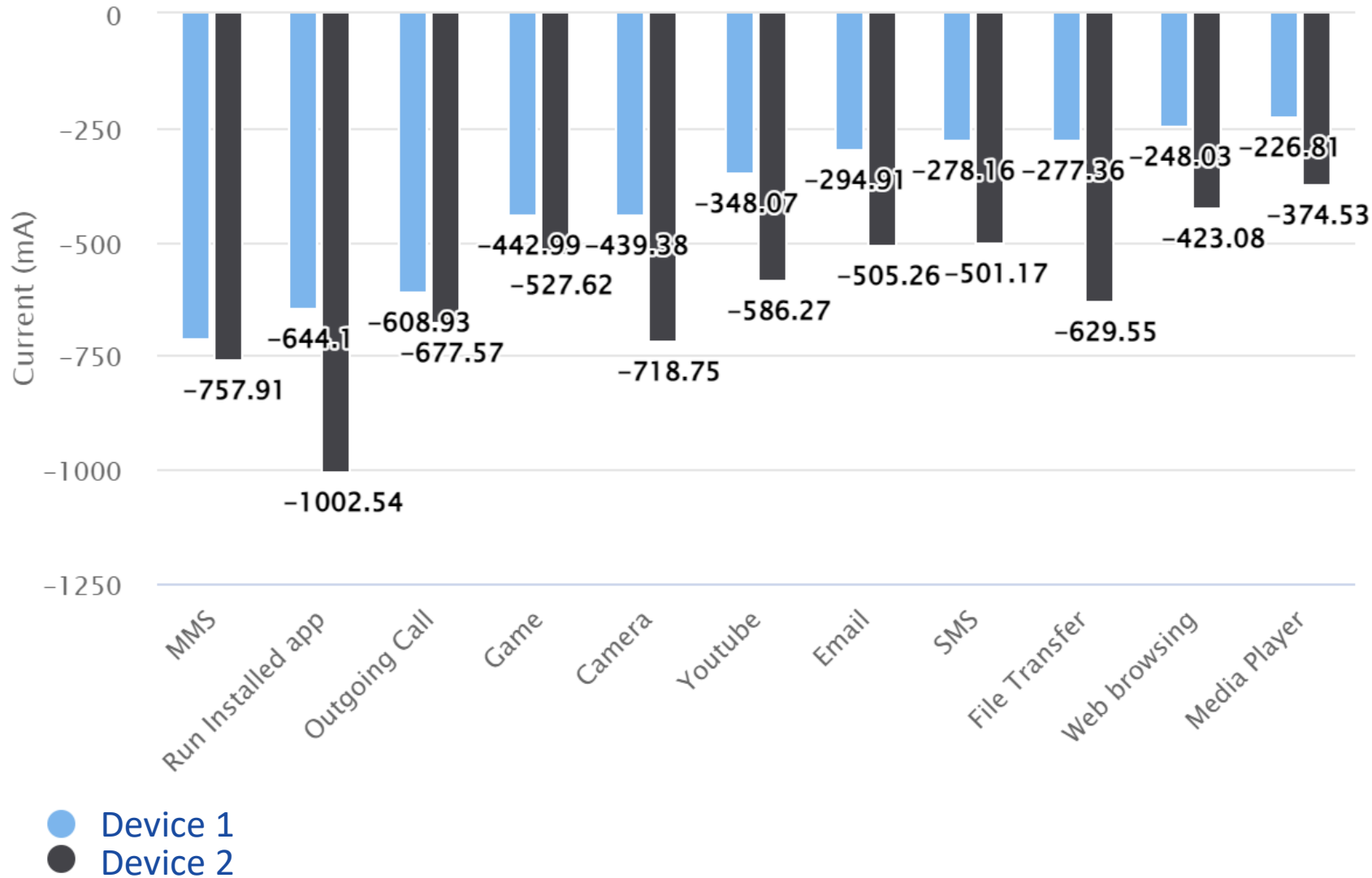




## Power consumption



# Studio Analytics – Comparison Two Devices



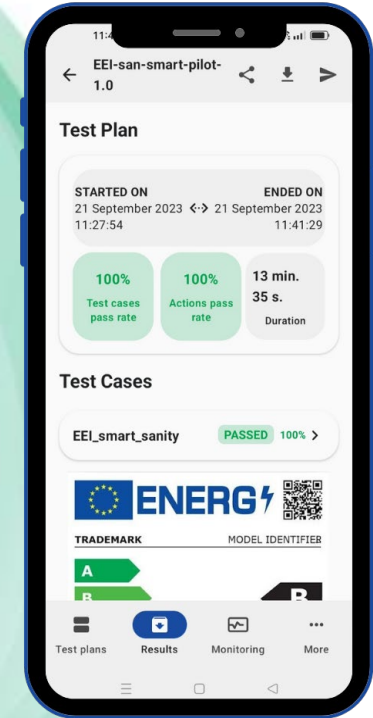
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1

## EEl Pilot Application

Available until  
31/10/2023





2

## viSer Test Automation + Dashboard Analytics



## 3

## Testing Services



# Overview of Options Available form SmartViser

## EEL Pilot Application

Free

No access to analytics

Limited Technical Support to viSer application only

## viSer Test Automation

Full access to viSer Test Automation + EEL scenario

Full Access to viSer analytics

Access to both ios and Android versions

Technical Support and Consultancy to set up EEL

## Testing Services

Lab set up with all EU Requirements for EEL testing

Receive Official Energy score and duration

Option for in depth report to identify weakness

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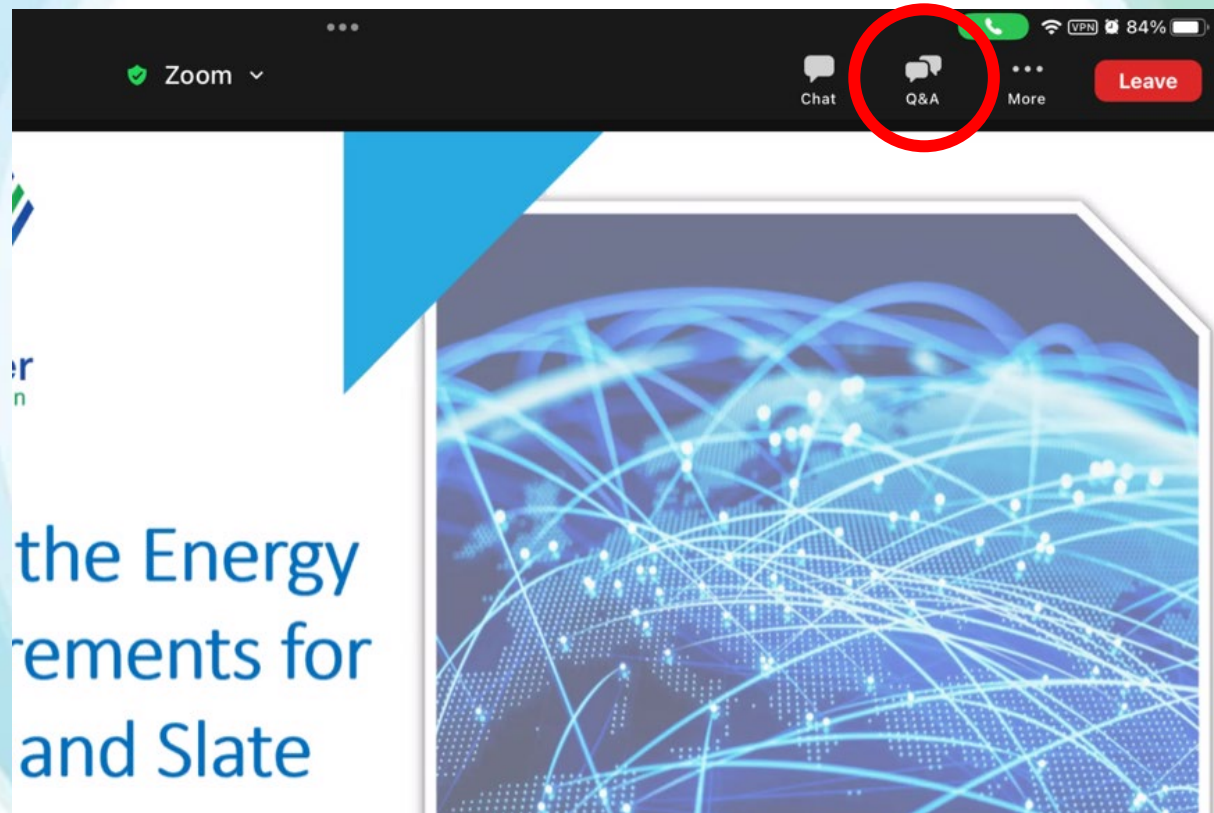
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Please submit any questions using the  
Zoom Q&A function



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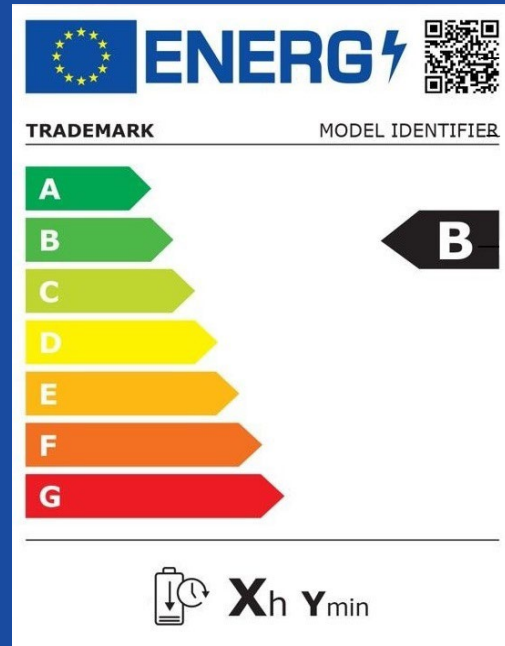
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# Wrap Up

Regulation now published and will come into force

20<sup>th</sup> of June 2025    How can SmartViser Help



 SmartViser

1

EEl Pilot Application

2

viSer Test Automation +  
Dashboard Analytics

3

Testing Services



# Thank you for joining!



For any further questions,  
please reach out to:

**info@smartviser.com**