SMART TAGS DRIVEN SERVICE PLATFORM FOR ENABLING ECOSYSTEMS OF CONNECTED OBJECTS

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Consortium

- **Serbia**: DunavNET, Univerexport
- **UK**: Fujitsu Laboratories of Europe, Univ. of Surrey, Evrything ltd., Unilever
- **Finland**: VTT, UPC Consulting ltd.
- **Italy**: Univ. of Padova
- **Romania**: Siemens srl.
- **Sweden**: Thin film Electronic AB
- **Austria**: Durst Phototechnik Dig. Technology GmbH
- **France**: Pôle des Industries du Commerce
- **Spain**: Lmental Sostenibilitat i Futur, S. Coop.
- **Netherlands**: Resonance Design

Web: [www.tagitsmart.eu](http://www.tagitsmart.eu)
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TagItSmart video

https://www.youtube.com/watch?v=oLV13iKRswU
Overall objective

Connected mass market products with unique identity that can report on their environment
Overall vision

1. Functional ink and printed NFC
2. Optical tags
3. Crowd sourced readers
4. Cloud
5. IoT for mass-market domain
Consumer Oriented Ecosystem

**SmartTAGS**
- Manufacturer
- Quality Review
- Production Line
- Factory data
- Destination Market

**SmartTAGS**
- Temperature
- Humidity
- Delivery Time
- Destination

**SmartTAGS**
- Time in shelf
- Authenticity
- Food Conditions

- Functional inks & Passive Tags
- Opportunistic, Reliable Monitoring
- Authentication, Data Quality
Manufacturing
When products are manufactured, SmartTAGS are attached to the products. Information about the manufacturing process is attached and monitored.

Transport & Logistics
SmartTAGS are able to sense environmental conditions to guarantee proper delivery management.

Retailers
Retailers can integrate SmartTAGS in their systems to control time-on-shelf, authenticity of products or food conditions.

SmartTAGS
Serving
Temperature
Storage conditions
Usage
Warranty
Expiration Date

Connected Objects
Security, Privacy, Incentives

SmartTAGS
Promotions/Offers
Allergy Information
Lifestyle
Consumers At Home

Sensing and identification properties can be used for recommendations on usage, storage, as well as linked to smart appliances, enabling the creation of innovative home services, such as self-repairing appliances.

Consumers In-store

Consumers experience before buying is enhanced with SmartTAGS, providing information that can be linked to the consumer profile and social network to provide better services and engagement.

SmartTAGS

Open APIs

Third party services

TagItSmart! open platform enables the connection with additional third party services or applications that can use the information of the life of the product and user interactions in additional ways.

SmartTAGS

Recycling Engagemement

Recycling and disposal

SmartTAGS can give advice about how and where to recycle the product based on local regulations. SMARTBins can read the products disposed and give rewards to consumers to promote recycling.
FULL CONTROL OF COLD SUPPLY CHAIN

- Item-level tracking
- Product condition monitor
- Consumer engagement
- SKU level dynamic pricing
- Life-cycle management
- Behavior analysis
Lifecycle and Consumer Engagement
Brand protection

On an Aspirin box a TagItSmart "Proof me if you can!" QR code is embedded to the package. By reading the QR code using a common QR code reading software you get information on the product and a link to either downloading a secondary software / plugin or cloud access for the advanced readout: the "Proof me if you can!" originality proof. In the above QR code you just read "0".

The new information received from the 2nd reading interconnects to manufacturer data (such as date, place of production, batch number ...) that furthermore decides if the data are approved and match to existing products. If there is a "match" in data, the "Proof me if you can!" app / plugin / cloud access reveals originality of the product – it is what it is.

Originality Proof!

Yes, I am an original ASPIRIN®!
Get well soon!
Home services

Retailer as a service provider or a trusted third-party.

This DIY use case specifically

• Facilitate the “inhabitant’s life” at home
Research challenges

**Composition as a Service:**
- Objects linking (WoT, SDKs)
- Service templates
- Complex information

**Consumer:**
- Contextual Information
- QoS, QoI
- Security and Privacy
- Lower barriers
- Incentive
- Augmented Reality

**Smarter Objects:**
- Contextual Information
- Object Identity

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- Scale/Heterogeneity
- Busines Intelligence
- FunCODES
- FC - Scanners
- IoT / Connected Objects

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Last, but not least...

<table>
<thead>
<tr>
<th>2 open calls</th>
<th>budget 1,200,000.00EUR</th>
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</thead>
<tbody>
<tr>
<td>Open call #1: Q1 2017</td>
<td>Extending TagItSmart platform</td>
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<tr>
<td>Open call #2: Q1 2018</td>
<td>Piloting services utilizing TagItSmart! functionality</td>
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Functional ink + optical tags + crowd sourced smartphones + cloud =

IoT for mass-market products

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