

# TRUST aWARE

### ENHANCING DIGITAL SECURITY, PRIVACY AND TRUST IN SOFTWARE

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101021377



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Programme	Horizon 2020
Grant Agreement	101021377
Торіс	SU-DS03-2019-2020 - Digital S Enterprises and Micro Enterp
Funding scheme	IA – Innovation Action
Budget	€ 5, 244, 997.50
<b>EU-Contribution</b>	€ 4, 645, 031.25
Start date	1 June 2021
End date	31 May 2024
Website	www.trustaware.eu
Social media	@Trustaware

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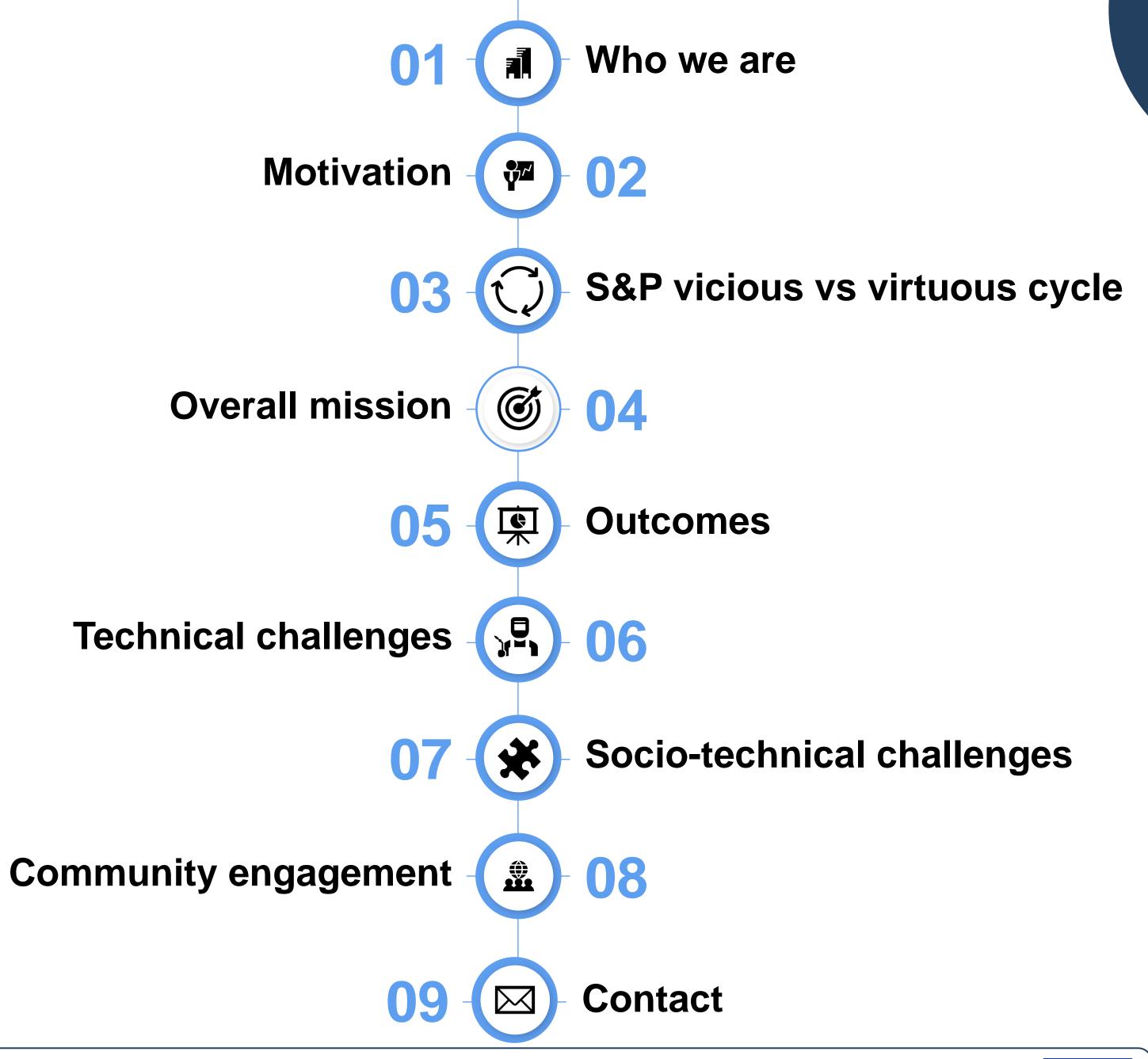


### Security and privacy for citizens and Small and Medium prises













### Who we are



# **TRUST** aware

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# 04 User associations 03 Industrial companies **O3** Research organisations O1 CERT body International platform ()1





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# Motivation

01

Users are not always aware of their exposure to Security & Privacy (S&P) risks when they use software. This results in bad usage habits and lack of risk prevention mechanisms.

02

**Developers are lacking best-practices for S&P**by-design in software engineering.



03

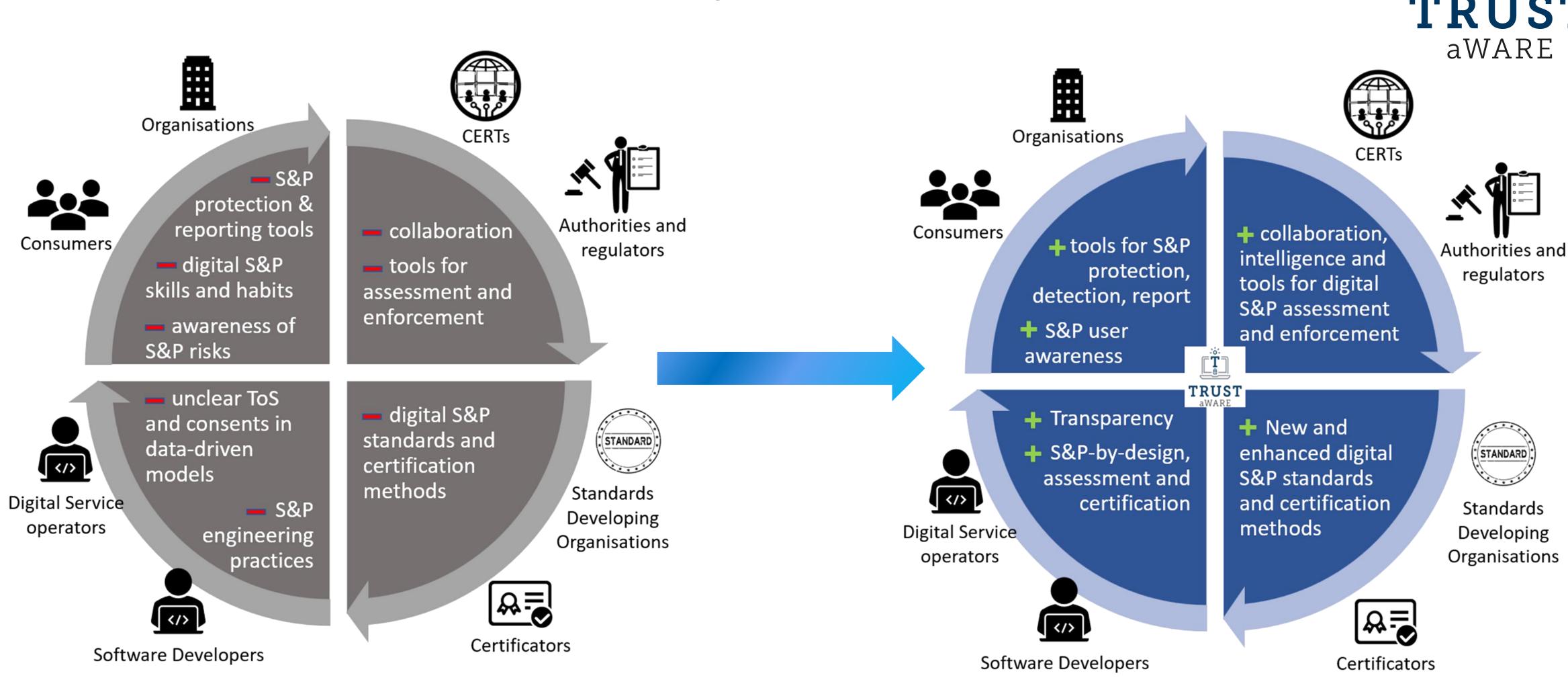
Standards and certifications are key enablers for assessing and assuring the level of S&P **protection** provided by modern software and their risks. However, developers and operators lack S&P certification methods and standards.

()4

Regulators and national agencies all over the world are defining and implementing new legal frameworks for protecting citizens against online S&P threats. But it is **unclear whether the** penalties are sufficient deterrent against S&P mispractices.



## S&P Vicious VS Virtuous cycle







### Overall mission



enhancing software trust and regulatory compliance.

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### TRUST aWARE's mission is to provide a holistic and effective digital Security & **Privacy (S&P) framework** comprising a set of novel and integrated tools and services co-created by citizens and stakeholders. This framework will help to identify, audit, analyse, prevent, and mitigate the impact of the various **S&P threats** associated with citizen's digital activities in a timely manner, while





### Overall mission



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TO FOSTER S&P-BY-**DESIGN SOFTWARE BY** SUPPORTING STANDARDS AND CERTIFICATION METHODS



**Collective intelligence for Computer Emergency Response Teams (CERTs) and** Authorities in collaboration with citizens, **Chief Information Security Officers** (CISOs) and Data Protection Officers (DPOs) to ensure and audit that digital products and their S&P practices are transparent, secure and in compliance with regulation.

### User-friendly tools to protect **consumers** against S&P cyberthreats

(attacks, abusive practices and inappropriate behaviours of digital services) to enable them to better understand, control, detect and respond to S&P threats and attacks in a timely manner, as well as configuring their own S&P protection settings.



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### Knowledge to foster S&P-bydesign in software engineering by

supporting developers and digital service operators with standards and certification methods for compliance with the European S&P regulation..





### Outcomes – The TRUST aWARE dashboard



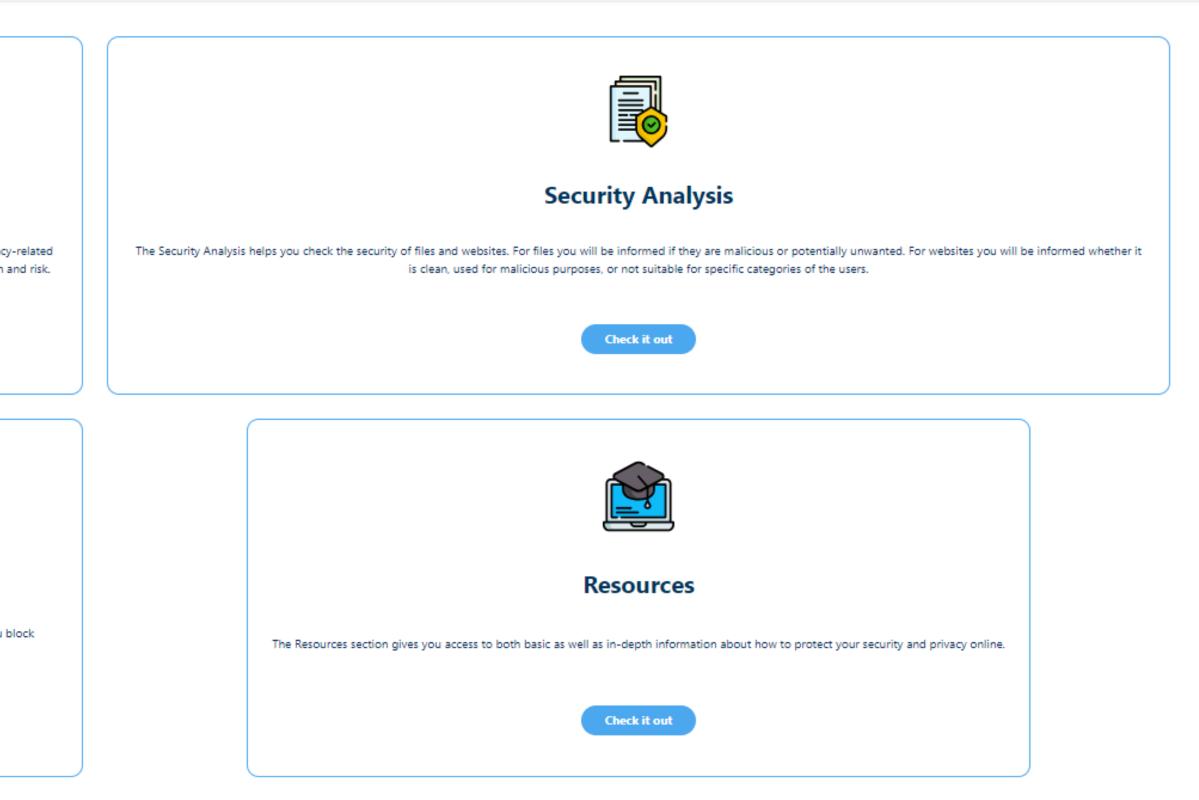
TRUST	
	POLICY
	Privacy Adviser
	The Privacy Adviser helps you understand information about your privacy from Android applications, so you can make more informed decisions about your privacy. It simplifies privacy documents and allows you to find the most important information within these documents. The tool also provides some recommendations to avoid any potential privacy implication of the privacy i
	Check it out
	Ad Analysis
	The Ad Analysis gives you information about the advertisement that you receive on Facebook and YouTube. It shows you why advertisers target you with their ads. It also lets you advertisers on Facebook when you do not want to see their ads.
	Check it out

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Privacy Adviser Security Analysis Ad Analysis Resources About







### **Outcomes – The TRUST aWARE MISP**



/login

TRUSTaWARE: Enhancing Digital Security, Privacy and TRUST in software.





### Potential privacy and security issues in the Android app Calculator version 8.0 (387657499)

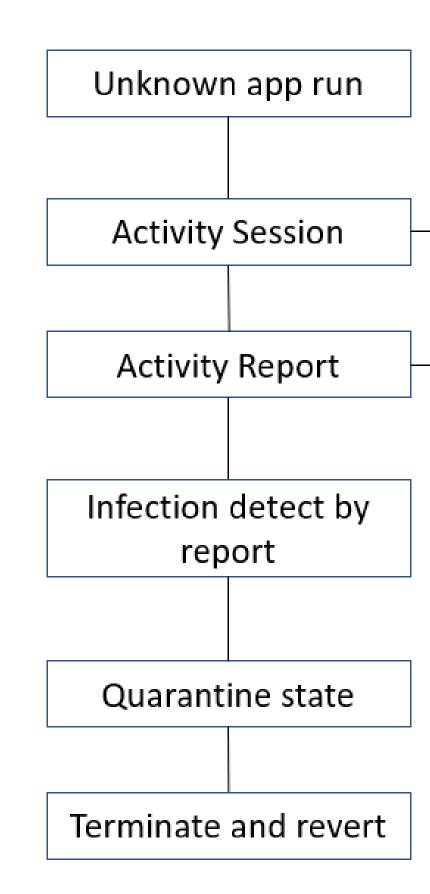
Event ID	111935	
UUID	b136796b-15b6-4a1a-a17d-9bb1f1787fef +	
Creator org	TRUST aWARE	
Creator user	api@api.test	
Protected Event (experimental)	Event is in unprotected mode.	
Tags	<ul> <li>Malware analysis \$\$" x  Privacy analysis \$\$" x  Static analysis \$\$" x  Dynamic analysis \$\$" x  Malware analysis \$\$" x  Privacy analysis \$\$" x  Dynamic analysis \$\$" x  Malware analysis \$\$" x</li></ul>	
Date	2023-08-09	
Threat Level	<mark>ጵ</mark> High	
Analysis	Initial	
Distribution	All communities 0 <	
Published	Νο	
#Attributes	206 (0 Objects)	
First recorded change	2023-08-09 10:17:29	
Last change	2023-08-09 10:17:29	
Modification map	•	
Sightings	0 (0) - restricted to own organisation only.	
-Pivots -Galaxy + Event graph + Event timeline + Correlation graph + ATT&CK matrix + Event reports - Attributes - Discussion		
× 111935: Potential p		





## Outcomes – The TRUST Activity Monitor





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Shadow backup

Report analyzer



## Technical challenges

- used by regular users (applications, websites, and browser extensions).

2 in the **DS&PA Lab** to identify a wider spectrum of risks

3 citizens, organisations, CERTs, DPAs, and developers.



A Digital S&P Analysis Lab (DS&PA Lab) will provide digital S&P assessment capabilities longitudinally and at scale to gain behavioural intelligence on S&P risks in digital products

**Digital S&P Enhancing Tools (S&PETs) for end users** augmented with the intelligence generated

Collective S&P Cyber Threat Intelligence (S&PCTI) for stakeholders, building bridges between



### Socio-technical challenges

2

3

**Build on a multidisciplinary analysis of the framework conditions** that determine the various S&P risks faced by EU citizens, addressing technical, social, economic, ethical, standardisation, regulatory and legal **aspects**. These are critical for informing the different software engineering stages (from design to production) towards the assurance of impact and adoption of TRUST aWARE's solutions. Additionally, this process will allow us to obtain evidence and insights for informing the cyberthreat, standardisation, and regulatory debates and efforts.

lack digital skills.

**Perform cross-disciplinary actions** in a holistic manner for assuring **impacts, sustainability and** adoption, fostering: training programs for citizens and stakeholders; certification methods (building on <u>Europrivacy</u>); liaison and contributions to relevant **standardisation** initiatives; and **exploitation** and **communication** actions.

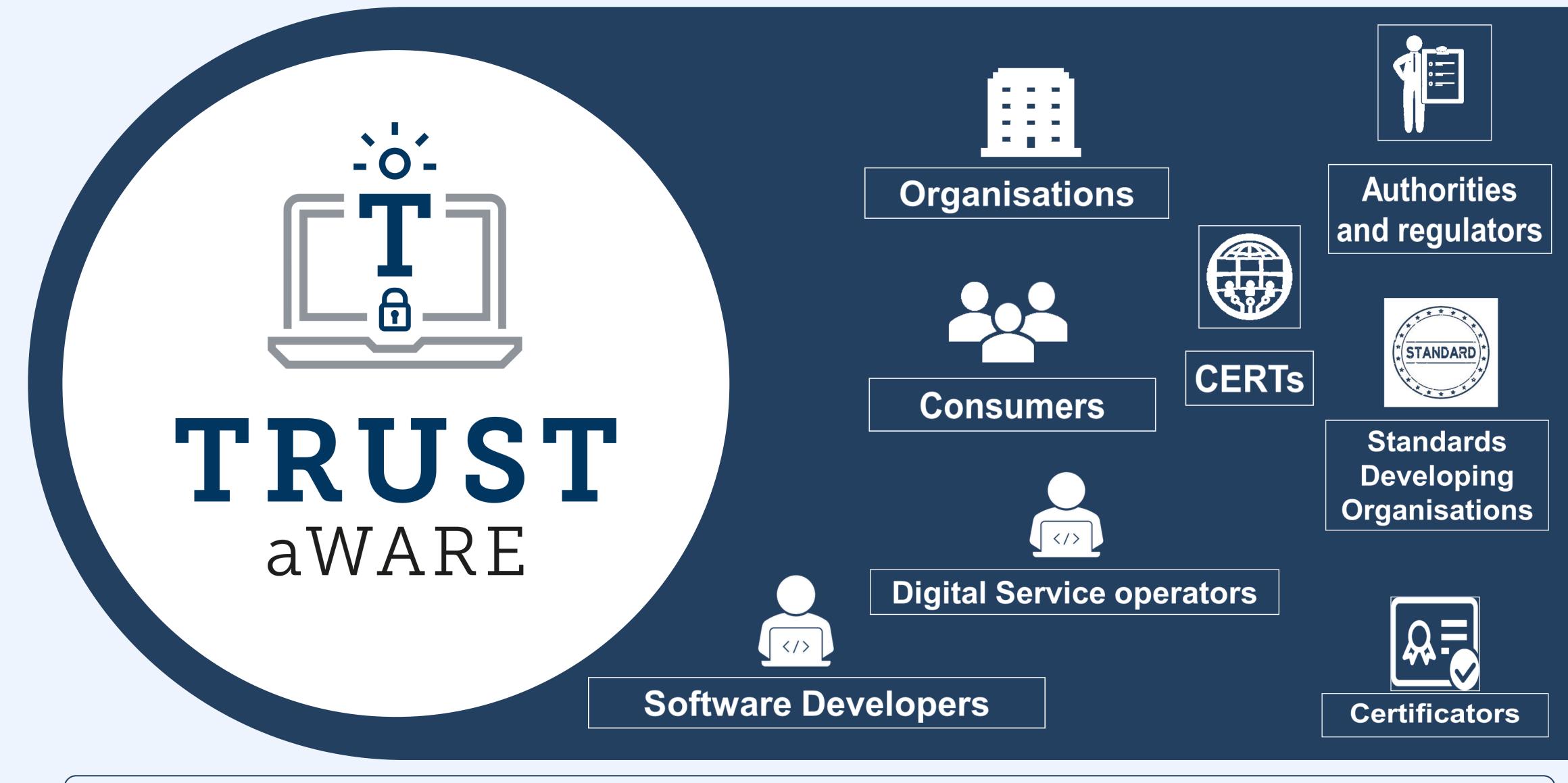




**Develop a user-centric co-creation and evaluation process**, with users and stakeholders involved for assuring the impacts of TRUST aWARE in **operational environment** (Technology Readiness Level: **TRL-7**). User-driven pilots will enable a continuous feedback loop. As TRUST aWARE will provide tools for all citizens, including vulnerable groups, our pilots will consider gender balance and diverse population groups, with specific focus on **minors** (<18 y/o), where special S&P protection is required; and **elderly** (>65 y/o), who often



### **Community engagement**









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### @trustaware

