

Horizon Prize on Easy, secure, privacy-proof login

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What are inducement prizes?

- A novel funding instrument, different from e.g. grants (a usual way to co-fund research projects).
- Prize contests address technological and/or societal challenges.
- A target is specified through award criteria.
- The reward goes to the contestant who (first/best) reaches the target.

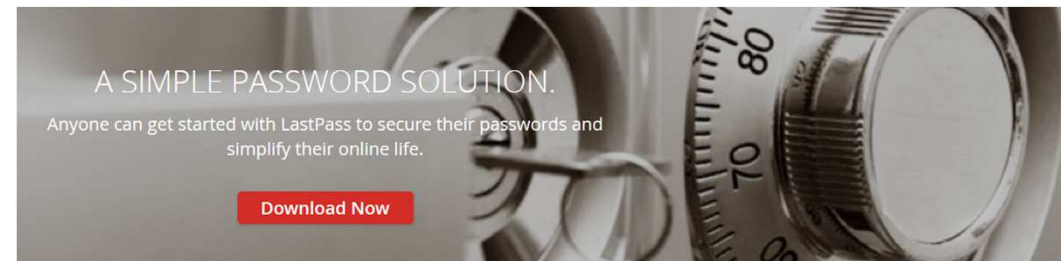




Why "Horizon prizes" matter?

- A way to induce and advance innovations for cutting-edge solutions to problems.
- Leverage research and innovation (R&I) investment from the private sector in a given direction.
- Simplification and outcome orientation, as only the outputs from the contestants are evaluated.
- Entrepreneurship: Reduce barriers to participation compared with traditional instruments.





- *Passwords are a daily burden for online users*
- *Password security can be compromised by*
 - Being guessed,
 - brute force attack, or
 - data breach.





- *Multi-factor authentication*
- *Concerns:*
 - Can be convoluted for the user
 - Need to have at hand another hardware gadget in addition to the main one used for the transaction



- *Biometrics are more convenient than passwords and multi-factor authentication methods.*
- *Concerns with biometrics:*
 - Lack of revocability after being spoofed.
 - When reliable, they require costly hardware infrastructure
 - Might be privacy intrusive



Expected results in seamless authentication prize

An information and communication technologies (ICT) solution that enables citizens to seamlessly authenticate themselves across a wide range of applications and devices.

The solution should be easy to use, reliable, robust against cyber-attacks, privacy-friendly and compatible as well as affordable and open.

It should be ready to benefit a wide range of the EU population, from healthy to impaired citizens of all ages.





Essential award criteria (1 of 3)

- significant contribution by the contestant in development and/or integration.
- The solution is **usable, convenient and easily accessible** by a wide range of users hence requiring low effort to adopt it from both end-users and service providers.
- The solution is **reliable**, satisfying high rates of accuracy for correctly authenticating users.
- The solution is **secure, robust and resilient** against state-of-the-knowledge cyber-attacks.



Essential award criteria (2 of 3)

- The solution takes into account the **privacy and data protection principles**.
- The solution is
 - **applicable**, working across a relevant collection of applications (including, but not limited to: social networks, email services, messaging services, online banking,...)
 - **compatible**, working across a relevant set of hardware devices and of operating systems
 - **affordable** for deployment in large scale and **cost-effective**, requiring low implementation and infrastructure costs for service providers and for end users.



Essential award criteria (3 of 3)

- The solution is **open**. The extent of open source software included in the solution should be maximum, in order to facilitate (a) its further tailor and development and (b) the assessment of its fulfilment of the award criteria (robustness, privacy and data protection principles).



Indicative timetable and budget

Stages	Indicative period
Opening of the contest	Second quarter 2017
Deadline for submission of application	Third quarter 2018
Evaluation and solutions demonstration	Fourth quarter 2018
Award of the prize	Fourth quarter 2018

Horizon Prize	Funding (M€)
Online Security- seamless authentication	4.0

