Mozilla website pushes serious eIDAS misinformation to political decision makers and public

The discussion on the eIDAS Regulation has entered its most important phase in the European Parliament and Council. Mozilla has recently launched a campaign in the form of a website aimed at political decision-makers, but also the general public.

The campaign pushes serious misinformation on the eIDAS legislation in order to block changes to Article 45 covering the EU's Qualified Web Authentication Certificates ("QWACs). These certificates are used to secure AND identify websites for the highest level of EU consumer protection.

Mozilla's goal is to frighten Parliament and Council members that the European Union’s eIDAS law is bad for user security. That’s FALSE. Instead, the legislation will increase the online security of European citizens.

This is just another example of US big tech companies trying to control all decisions about security to favor their own commercial interests.

Here is what Mozilla says about eIDAS, followed by a statement of the actual facts.

MOZILLA SAYS:

“A new EU law would make website security weaker by imposing QWACs and expose users to more cyber risks. eIDAS article 45.2 will force browsers to accept QWACs — lower-security standard website certificates and providers that issue them.”

THE FACTS:

QWACs are just like all the every other webserver certificate that Mozilla already trusts — so QWACs are not in any way “lower-security” website certificates.

In fact, QWACs and the companies that issue QWACs are subject to MORE audits and security checks than non-QWAC certificates that Mozilla accepts. Finally — Mozilla already accepts QWACS — so how can Article 45.2 be a problem for Mozilla?
“When you see the padlock on the left side of the URL bar in the browser, you know your connection with the website is fully secure.”

**MOZILLA SAYS:**

“Supporting QWACs will mean that browsers will have to support providers that issue them without independently vetting their security practices. This would mean they could appear as being safe, even if they’re not due to being compromised by malicious actors. Forcing browsers to support these insecure certificates and the providers that issue them will make the internet less safe for users”

**THE FACTS:**

Mozilla likes to use the word “secure”, when all Mozilla is saying is that communications between a website and a user are encrypted (so they can’t be read by a third party in transit). Encryption is the bare minimum for user “security”, and QWACs enable encryption, like all other website certificates.

But encryption alone is not enough to actually make EU citizens fully secure when they visit a website — they also need to know the identity of the website owner who asked for their personal data, as required by GDPR. **QWACs do this**, most other certificates that Mozilla accepts do not.

Mozilla already requires all certificate issuers, including QWAC issuers, to present detailed annual audits that ensure the issuer is meeting ALL internet requirements. If an issuer fails its audit, Mozilla is already allowed not to trust their certificates. For most certificate issuers, an annual audit is all they do.

For QWAC issuers, **in addition** to annual audits the issuers must also undergo constant monitoring by their auditor as to all system or procedural changes that are made between audits, **plus** annual evaluation by an independent Conformity Assessment Body, **plus** monitoring and approval by a national Supervisory Body (e.g., a Ministry) before they are added to the EU Trust list and can begin to issue QWACs.

QWACs are actually **more secure** than other certificate issuers trusted by Mozilla.
“Qualified website authentication certificates, or QWACs, are a type of certificate that can be issued by providers who don’t meet security standards established by browser root store programs (link).”

MOZILLA SAYS:

“Major browsers use independent policies and vetting practices to certify only safe sites and block suspicious activity. Now imagine if some of those protections disappeared and your browser let you surf websites that were leaking your information due to unsafe connections. That’s what new EU legislation is proposing by insisting QWACs become the new standard.”

THE FACTS:

THIS IS AGAIN HIGHLY MISLEADING

Today, all certificate issuers must not only provide annual conformance audits to Mozilla, but they also meet additional browser rules. But the additional browser rules are entirely subjective and may exist to promote the browser’s proprietary commercial interests — another example of US big tech setting the rules for Europe.

Also, additional browser rules are not reviewed and approved by the internet ecosystem (e.g., the Certification Authority/Browser Forum (CABF), where all other certificate issuer rules are reviewed and approved by ballot of all the members, not just one browser).

The browsers have been asked to bring their additional rules to the CABF for approval by the internet ecosystem, but the browsers have refused and are holding on to exclusive power by themselves. This should stop, and certificate issuers, including QWAC issuers, as well as the EU should have a say in all the certificate rules.

While some browsers attempt to block some bad sites to protect users, a 2018 independent study showed that Mozilla Firefox only blocked 77% of phishing sites in the first two days (when most phishing occurs), and then only blocked 95% of phishing sites by the third day — meaning that Mozilla was delivering European users to malicious websites all the time, while still showing their “secure” lock symbol to the users.
QWACs are actually much safer than the other server certificates that Mozilla trusts because QWACs also do strong identity verification of the website owner and include the identity information in the certificate (studies show that identity websites have virtually NO phishing or malware. Another study, on the other hand, by RWTH Aachen University found that 99.6% of all phishing attacks originate from non-identity certificate-secured websites).

QWACs currently offer the highest level of consumer protection.

Amazingly, Mozilla even began to hide the QWAC identity symbol in the website address bar in 2019 so users could not tell the difference between an identity website (much safer) and an anonymous website (home of most phishing).

Mozilla removed its identity UI in 2019 even though the EU Commission asked Mozilla to show a special QWAC identity indicator to EU users. This was the reason why Article 45.2 now requires browsers to show a “user friendly UI [user interface]”. The bad behavior of Mozilla and other browsers made this happen.

QWACs offer full encryption and also do strong identity verification of the website owner and include the identity information in the certificate.

QWACs therefore offer the highest level of consumer protection.
When you surf the web, your browser encrypts your data to protect it from interception in transit. If article 45.2 passes, there would be fewer online protections, increasing the potential risks.

MOZILLA SAYS:

“When you surf the web, your browser encrypts your data to protect it from interception in transit. If article 45.2 passes, there would be fewer online protections, increasing the potential risks.”

THE FACTS:

AGAIN, A CLEARLY FALSE STATEMENT

QWACs encrypt website data the same as all other website certificates, and so the data is fully protected from interception in transit.

MOZILLA SAYS:

“What if a “safe” server is actually unsafe? QWACs can lull users into a false sense of security by making them think they are on a trustworthy website, even when the connection to them is unsafe. Your data will be at risk. If the proposed legislation passes, details like your passwords, credit cards, names, addresses, and message content can be intercepted and exploited. In short, it will be like riding a rollercoaster without a safety bar.”

THE FACTS:

THIS IS A COMPLETE FALSE STATEMENT

QWACs encrypt website data the same as all other website certificates.

So bad actors cannot “intercept and exploit” consumer data like passwords and credit cards — this data is fully encrypted by QWACs.

In addition to this full encryption QWACs also do strong identity verification of the website owner and include the identity information in the certificate.

QWACs therefore offer the highest level of consumer protection.
“Web browsers continually monitor the Certificate Authorities (CAs) that have been admitted into their Root Store. A Certificate Authority that fails to adhere continuously to the Root Program policies can be removed from Root Stores. For example, in 2014 Google Chrome spotted that an Indian certificate authority called National Informatics Centre (NIC) was issuing fake certificates to impersonate Google and Yahoo subdomains.

Certificate issuers are already forbidden by audit requirements from issuing a false certificate to someone who does not own the domain (e.g., a false google.com or yahoo.com certificate).

Any certificate issuer who issues false certificates will fail its public audit, and can then be excluded by Mozilla and Google. Nothing will change under eIDAS Article 45.2.

“eIDAS will open users up to attacks. Authoritarian regimes have long sought ways to spy on users, collect data, predict their behavior, and alter outcomes. One of their tactics is to alter the website authentication process so that they can conduct so-called “man in the middle” attacks and intercept web traffic.

“One notorious case happened in 2011, when users from 298,140 unique internet protocol addresses trying to access Google websites were redirected to falsified sites. The fake sites were certified as belonging to Google, according to false website certificates issued by Dutch company DigiNotar. The vast majority (95 per cent) of those IP addresses targeted originated in Iran.”

In 2011 Diginotar’s certificate issuance systems were completely breached by an Iranian hacker who issued a number of false certificates over a few weeks.

The false certificates were not QWACs. The hacker breach was so bad that Diginotar could not determine how many false certificates had been issued.
The only remedy was to “distrust” all Diginotar certificates and shut down the issuer, and the CA was revoked in coordination with the Dutch government. This had nothing to do with eIDAS which was only enacted three years later, in 2014.

In fact other certificate issuers who do not issue QWACs have issued millions of bad certificates — but Mozilla continues to trust the issuer and its certificates.

eIDAS has nothing to do with malicious foreign actors.

MOZILLA SAYS:

“DigiNotar is an important reminder of why there are now a series of checks and balances for webpages, but others have still attempted similar attacks. In more recent years, the Kazakhstan government and the Mauritius government have both tried to force browsers to accept government-backed certificate authorities. In practice this would bypass existing checks and enable surveillance of their citizens’ web traffic just like in the DigiNotar example.”

Moreover, in 2019 a certificate authority associated with the United Arab Emirates was blocked by Mozilla because the company has a history of working with the Emirati ruling family in surveillance operations targeting activists, political leaders and suspected terrorists.

“As the examples above show, forcing browsers to automatically trust government-backed certificate authorities is a key tactic used by authoritarian regimes, and these actors would be emboldened by the legitimising effect of the EU’s actions. In short, if this law were copied by another state, it could lead to serious threats to cybersecurity and fundamental rights.”

THE FACTS:

Mozilla is now saying the European Union is the same as Kazakhstan and the United Arab Emirates, and so QTSPs can’t be trusted?

Those two examples were cases where non-transparent governments were in control of the “roots” used to issue certificates in their countries, and were requiring their citizens to use those certificates. This potentially gave the two governments the ability to spy on their citizens. The browsers easily responded by “distrusting” their roots to protect users.

eIDAS is completely different. The European Union is not controlling the “roots” used by the issuers of QWACs, and so the EU can’t use the certificates to “spy” on EU citizens. Mozilla should be ashamed of itself for suggesting this.

Browsers including Mozilla have showed themselves to be capable of saying “no” to a foreign government when its rules for browsers actually harm user security — see the examples for Kazakhstan, UAE, and even China. If Mozilla actually ever finds the European Union is using QWACs to “spy” on EU citizens, it can and will stop the EU.

But that’s not what eIDAS does — it simply asserts EU digital sovereignty so that US big tech companies like Mozilla are not in control of all trust decisions in Europe.
Why is Mozilla spreading this misinformation

Mozilla is generally perceived as a Google satellite, paving the way for Google to push through its own commercial interests

Mozilla was once highly regarded as an independent browser in the 2000s — in 2009 it had a 30% share of the browser market worldwide. Today, Mozilla has only a 3% world market share, and is struggling financially. In contrast, Google now has a 65% world market share, so is the dominant browser in Europe and effectively sets the rules for everyone. Mozilla is now generally seen as only a Google satellite that follows all Google policies (it even included Google staff on the Mozilla committee in charge of trust of certificate issuers).

It’s unclear whether Mozilla could continue operations without the money it receives from Google. According to a December 2020 article, Mozilla signed a renewal agreement with Google by which Google will pay Mozilla $400m to $450m per year simply because Mozilla uses Google’s search engine behind the scenes for all searches made on Firefox — and despite Mozilla’s sinking market share and recent staff layoffs. According to an article, this represented roughly 92% of Mozilla’s regular revenue stream. Mozilla is heavily dependent on Google, and many in the industry believe Mozilla’s policy decisions are no longer independent of Google — the two browsers certainly act in concert.

The Company behind the website is associated with multiple controversial public relations campaigns

Even though Mozilla presented the website as its own, the website says: “This website is operated by Hill+Knowlton Strategies.” Here is what Wikipedia says about the agency:

“Hill+Knowlton Strategies is an American global public relations consulting company, headquartered in New York City, United States, with over 80 offices in more than 40 countries… The firm has been involved in multiple controversial public relations campaigns over its history, most notably the false testimony by Nayirah and PR campaign on behalf of the Government of Kuwait in the lead up to the Gulf War.”


So — this can be seen as just another example of US big tech’s attempt to control trust decisions for the European Union. Also, this may explain the numerous factual errors on the website about eIDAS.
Mozilla and Google are investors in a webserver certificate issuer that is in competition with all QTSPs

Mozilla (and Google) are de facto investors (Platinum level sponsors) in a webserver certificate issuer that is in competition with all QTSPs, called “Let’s Encrypt”. Let’s Encrypt only issues anonymous certificates with no identity information about the owner, and thousands of these certificates are used to show phishing and malware websites as “secure” in the Mozilla browser. In recent years, browsers including Mozilla have appeared to favor anonymous certificates, and as a result they removed the previous QTSP identity UI (user interface) in 2019 so that EU users can no longer tell the difference or know that a website is supported by confirmed identity information.

None of these potential reasons are good enough to justify the serious misinformation that Mozilla has posted on its eIDAS website.

Even Germany’s antitrust authority has expressed serious concerns that past browser actions and opposition to Article 45 eIDAS review may violate both EU and German antitrust law.

EU Parliament and Council members should ignore the false browser lobbying, and support eIDAS Article 45, which will increase online security of European citizens.

See also ESD position paper: German antitrust authority Bundeskartellamt raises serious concerns that Browser/EFF opposition to eIDAS Article 45 violates antitrust law