

"Why do technical requirements presuppose the necessity of an authentication system?"

- by Jan Niehusmann

To our understanding, WiFi4EU is supposed to be completely free and usable by any person within reach of the Wifi signals. Therefore, we don't see the necessity for any kind of registration or authentication.

According to the GDPR, Art. 5 (1) c), personal data shall be limited to what is necessary in relation to the purposes for which they are processed. Consequently, this principle of data minimisation implies that for a free Wifi installation, no registration should be done at all.

Without authentication requirements, the necessity of a captive portal vanishes. Therefore, the installations don't need to automatically recognize previously connected users. This further reduces the amount of personal data to be stored.

Another issue of access points requiring authentication through a captive portal is that users get used to entering their personal information into login pages presented by random access points. Users are generally not able to assess if a given access point or login page is legit, or if it's been set up fraudulently by some third party trying to collect login credentials or personal information.

Besides the advantages regarding data protection, operating the wifi access points without authentication and captive portals significantly improves user experience, as devices can connect to the network without user interaction.

Especially for blind users, captive portals may be difficult to use. Designing a captive portal which is easily usable by all persons, independent of individual capabilities and language skills, is a very difficult task. It can't be expected that individual operators will spend the effort necessary to create non-discriminating captive portals.

Captive portals also pose technical challenges: They are often only compatible to the most common operating systems, hindering technical diversity and progress. Important security techniques like DNSSEC are incompatible the DNS rewriting done by captive portal implementations, leading to difficult to debug error situations.

The only viable solution we see is to dismiss captive portals and registration / authentication entirely.

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