



Several billion people on Earth still have access to the Internet. One of the most important and honourable tasks for service providers is to make Internet access affordable. And Wi-Fi is the right low-cost technology to do just that. With this award we want to honour & recognise a service provider that is using Wi-Fi to connect the unconnected in emerging markets - or even in regions of the West, where Internet access is scarce or expensive or both. The category is open to any service provider: Private, governmental, educational, non-profit or for profit, etc.

Service: eduroam and govroam

1. Tell us about your affordable access service and why you think you should win this award

eduroam and govroam provide users free, friendly and secure internet access worldwide. Really free. No money, no sign up portals, no ads, no hassle: if you receive the signal, then you're connected!

eduroam and govroam are provided by non-profit organizations, and is a community based service: organizations provide internet access to guest users from this community and in return, those guests will provide their networks at home to their guests. Users are not charged for this service, nor do institutes charge each other.

The service itself is created through a network of trust between autonomous domains. Just like the internet itself, institutions using eduroam or govroam are in charge of their own networks and only agree upon interconnectivity for guests. In addition, they agree to support each other in case of problems such as misuse and vulnerabilities. Although there may seem similar concepts (e.g. FON), eduroam and govroam differentiates because it is a service for confederated user organizations. There is no dependency on a single provider.

So, why should we win the award? Winning the award will help us to show the world that there is a true, simple solution for seamless and secure wifi connectivity for organizations by cooperating and sharing Wi-Fi resources. Eduroam and govroam are great and valued services and the concept can easily be copied and used in other areas, such as libraries, health, small business, office workspace, public wifi spots, and so on! So, winning the award will contribute to worldwide sharing of the proven concept of eduroam and govroam.

2. Explain how your service is making optimal use of Wi-Fi technology

In our service, we support all Wi-Fi technology: 2,4 and 5 Ghz, 802.11ac and below. The community has built a very user friendly service for easy installation and configuration of your device (<https://cat.eduroam.org>), in order to support BYOD in a proper way.

Furthermore, we use 802.1X as port authentication mechanism in combination with WPA2-enterprise and a RADIUS backend. Based on the user credentials, the user gains access to a specific VLAN on the network. Therefore, eduroam and govroam can be used by home and guest users, eliminating the need of other SSID's.

3. Quantify and qualify how your service is making a socio-economic impact on the communities you serve (boosting commerce, education, creating jobs, etc.)

eduroam is used by at least 20 million users in more than 75 countries worldwide. The overwhelming success of eduroam has led to govroam, which is in the early adoption stage. In the Netherlands and several other parts of Europe. Govroam has over 50k subscribers among governmental institutes.

Eduroam and govroam enable cooperation worldwide between universities, science institutes, central and local governments and many other public services. By getting direct and hassle-free access to the wifi network anywhere and with any device, users do not save only mobile data costs, but also a lot of time, effort and frustration to obtain access to the internet. Deployment of a wifi environment can save costs on network resources: by using eduroam and govroam, institutions provide a secure network for their guests *and home users* with only one SSID, which implies less management and more efficient spectrum usage.

eduroam (and potentially govroam too) are also boosting commerce: it is allowed for commercial and other public companies (e.g. restaurants, libraries, museum, public transport, airports) to become a service provider. In that way, commercial companies attract more students, teachers and researchers.

4. If relevant explain how you think your project will scale and ramp-up to serve more people

eduroam and govroam are great examples of how a secure, free and friendly wifi service leads to happy worldwide roaming users. In current projects concerning public wifi, such as WIFI4EU, there are already discussions about how to use eduroam and govroam technology. It might therefore very well be used as model in order to have a federated, accessible and secure wifi service within other communities as well (healthcare, libraries, museum, ...).

The greatest scale-up can happen when initiatives start interfederating (i.e. wifi4eu-users can come online at eduroam hotspots and vice versa), as this will substantially increase footprint for all users.

Read more about eduroam: at <https://www.eduroam.org>

Read more about govroam: <http://bit.ly/2ddwh37>