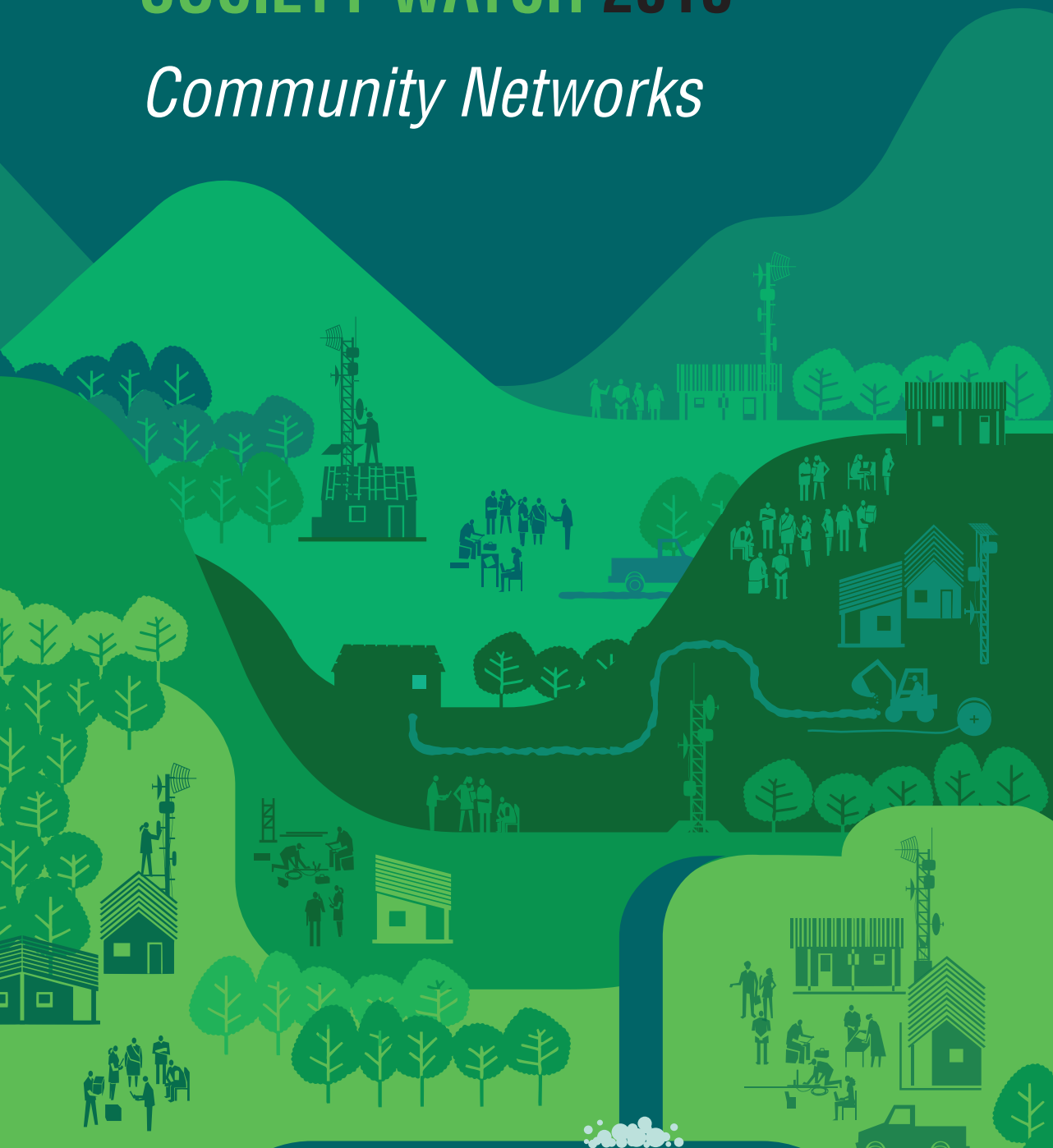
# GLOBAL INFORMATION SOCIETY WATCH 2018

## *Community Networks*



Association for Progressive Communications (APC)
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# Global Information Society Watch

## 2018

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*This edition of GISWatch came into being alongside a brand new baby boy. Welcome to the world, Ronan Diga!*

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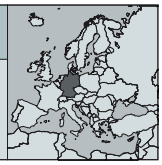
# GERMANY

## FROM THE SHELTER TO THE CLASSROOM: TWO CASES OF CIVIC PARTICIPATION THROUGH FREIFUNK BERLIN



**Freifunk**
Tim Schütz and Monic Meisel
https://freifunk.net

## Introduction

Whether campaigning for net neutrality, internet access as a human right, or civic engagement during the so-called refugee crisis, the "Freifunk" ("Free Wireless") initiative continues to receive attention from journalists, politicians and activists alike. By connecting over 300 refugee shelters and reception centres,[1] Freifunk could underscore the significance of its hacker practices for digital infrastructure politics in Germany. Yet what could be framed as an exceptional "humanitarian media intervention"[2] can be understood within an ongoing move to establish Freifunk as a legitimate form of "digital volunteering", which includes a sustained engagement with public institutions and a struggle in legally backing up its own emerging practices.

In our report we use two case studies to investigate the question of what "doing" free wireless network activism means in different contexts, drawing on Freifunk's engagement with youth centres and refugee shelters and reception centres[3] in Berlin. We discuss key problem areas, ranging from the influence of "humanitarian" logics on Freifunk activism to the challenge of involving teachers in passing on Freifunk practices in the classroom. We also consider the overarching restrictive legal regulations, broadband policies and the developments towards specific forms of participation and citizenship that currently affect Freifunk.

## Policy, economic and political background

Founded in the early 2000s, the emergence of Freifunk as an initiative and socio-technical practice is often framed as a response to the "market failure" of telecommunication companies to provide internet access in a recently unified East Berlin and rural Germany.[4] Early workshops included tinkering with wireless devices, free software, organisational forms and routing protocols. The proliferation of affordable broadband access in the mid-2000s then decreased the initiative to a set of core participants in Berlin's underground hacking scene. Surprisingly, there are now more than 100 active Freifunk communities in cities and towns all over Germany and other German-speaking countries.

Situated in close proximity to the growth of hackerspaces, fab labs[5] and other do-it-yourself (DIY) practices, the initiative emphasises its heightened political awareness, both through its activism and network policy advocacy. Under the slogan "Freifunk Against Fear", communities have sought to challenge the so-called "network liability law" in Germany which puts the legal responsibility for online activities on the clients of internet service providers (ISPs). After several years of challenging and subverting the law in written form and via devices that reroute internet traffic to countries outside of Germany,[6] the law was abolished in 2017. Although this opens new possibilities for free wireless networks in Germany, there are commercial practices and national and regional regulations and policies that still concern Freifunk:

- The overuse of licence-free spectrum by commercial players, coupled with a lack of frequencies for non-commercial public use.

1 Schröder, I. (2017). Freifunk Hilft. In W. Schiffauer, A. Eilert, & M. Rudloff (Eds.), *So schaffen wir das – eine Zivilgesellschaft im Aufbruch: 90 wegweisende Projekte mit Geflüchteten*. Bielefeld: transcript Verlag.

2 Kubitschko, S., & Schütz, T. (2017). Humanitarian Media Intervention: Infrastructuring in Times of Forced Migration. *Spheres: Journal for Digital Culture #3.* spheres-journal.org/humanitarian-media-intervention-infrastructuring-in-times-of-forced-migration

3 Reception and emergency centres are the first institutions where refugees have to register, before they are eventually relocated to long-term shelters or private housing.

4 Petersen, G. (2014). Freifunk: When Technology and Politics Assemble into Subversion. In J. Leach & L. Wilson (Eds.), *Subversion, Conversion, Development: Cross-Cultural Knowledge Exchange and the Politics of Design*. Cambridge, MA: MIT Press.

5 https://en.wikipedia.org/wiki/Fab_lab

6 To bypass the regulation, all traffic within the Freifunk network is rerouted through virtual private networks (VPNs). This extends the connection to countries where the liability law does not apply or to a collectively run server in Berlin. Additionally, the Freifunk initiative appeared as experts before the "Digital Agenda" federal committee and advocated for a reformation of the law on secondary liability of open Wi-Fi networks. They also used negative declaratory actions to reconsider the law. See also the Freifunk statt Angst blog at: freifunkstattangst.de

- Unused local frequencies which should be taken back for dedicated non-commercial use (e.g. TV white space or LTE).[7]
- The continuing need to make access to communication networks a basic human right, particularly for minority communities.[8]
- The problematic European Union (EU) radio and data retention directives that create hurdles for community networks.
- The EU funding regulations for community networks (such as Wifi4EU), which demand a central registration that conflicts with the newly enforced General Data Protection Regulation (GDPR) and Freifunk values of abstaining from collecting data.
- The pending implementation of the public benefit status of Freifunk communities, which was already included in the latest government coalition contract.[9]

While these struggles certainly impact Freifunk, the following cases mostly respond to the last point, namely, Freifunk's legal recognition as a civic entity, rather than an open and spontaneous collective of individuals. Our two examples render visible the limits and creative workarounds of doing Freifunk that emerged over the last few years.

## Case 1: Humanitarian interventions in refugee shelters

The "long summer of migration"[10] marked a turning point that entangled the struggles of the Freifunk initiative with the realities of people on the move. It became among the most visible "tech" projects in an upsurge of volunteer activism labelled as "Willkommenskultur" (a "Culture of Welcoming"). Yet a commitment to support refugees was itself not novel, since Freifunk participants in Berlin had already provided internet access to migrant camps in the Kreuzberg district.[11] In doing so, they amplified a stance shared by other non-governmental organisations, that digital devices are more than "luxury" items,[12] but are crucial for protecting (digital) communications as a basic human right. In parallel to the traditions of established hacker organisations like the "Chaos Computer Club",[13] the Freifunk initiative provided the socio-material practices to problematise the infrastructural politics of refugee shelters and reception centres, but also sought to actively reconfigure them.[14]

To shed light on this, we conducted an interview with Philipp, a 31-year-old master's student in computer science who, since the very beginning of the refugee crisis, was involved in refugee tech activism in Berlin's Neukölln district. His engagement began when an emergency camp was opened in his university's gym. As he recalls, the focus of most volunteers was to provide items for basic hygiene, clothes and social support. Philipp was interested in the digital infrastructure, but his idea to reroute access via the university's eduroam[15] network proved difficult for legal reasons. Nevertheless, the experience led him to bring his idea to a refugee support collective located in his neighbourhood. Together with two other friends, he contacted companies or individuals that would be willing to reroute their private internet uplink to refugee shelters and reception centres in the neighbourhood.

With improvised housing facilities for the refugees mushrooming all over Berlin, Philipp then began to assemble a public wiki to keep an overview on the "status" of different installations.[16] These were now organised collectively through a regular meeting at the "c-base", Berlin's most well-known hackerspace. At its peak, up to 30 people would gather for planning possible installations. While this included several supporters and managers of shelters, he acknowledged that refugees and asylum seekers only occasionally found their way to the crowded seminar room.

7 High-speed wireless for mobile devices. See: https://en.wikipedia.org/wiki/LTE_(telecommunication)

8 Kettemann, M. C. (2015, 16 October). Zugang zum Internet: Ein Grundrecht auch für Geflüchtete. *iRights.Info.* https://irights.info/artikel/internetzugang-fluechtlinge-voelkerrecht-verfassung/26266

9 Freifunk Darmstadt. (2018). Digitales Ehrenamt – Jetzt! www.digitales-ehrenamt.jetzt

10 Kasparek, B., & Speer, M. (2015). Of Hope. Hungary and the Long Summer of Migration. *Bordermonitoring.eu*. bordermonitoring.eu/ungarn/2015/09/of-hope-en

11 Andre. (2013, 22 October). Embassy of Hope. *hamburg.freifunk.net*. https://hamburg.freifunk.net/2013/10/532.html, accessed 28 May 2018.

12 Amnesty International (2017, 15 December). When smartphones are a lifeline, not a luxury. *Amnesty International New Zealand*. https://www.amnesty.org.nz/when-smartphones-are-lifeline-not-luxury

13 Kubitschko, S. (2018). Chaos Computer Club: The Communicative Construction of Media Technologies and Infrastructures as a Political Category. In A. Hepp, A. Breiter, & U. Hasebrink (Eds.), *Communicative Figurations: Transforming Communications in Times of Deep Mediatization*. https://link.springer.com/book/10.1007%2F978-3-319-65584-0

14 In a now offline document by the Berlin County Office for Refugee Issues, a provision of free wireless network access in public areas as well as two desktop computers (per 100 people) are designated as minimum quality criteria. See also: Landesamt für Flüchtlingsangelegenheiten. (2018). Qualitätssicherung. https://berlin.de/laf/wohnen/informationen-zum-betrieb-von-unterkuenften/qualitaetssicherung

15 https://www.eduroam.org

16 https://wiki.freifunk.net/Berlin:Refugees

According to Philipp, problems with doing installations in shelters are less legal than financial in nature. At first, many social workers and managers were sceptical about the legal status and technical details of Freifunk, particularly in relation to network liability. In order to persuade them he then needed to show how – through the use of VPNs mentioned above – liability laws can be circumvented. Concern then turned to budget issues, including what scale of the installation was possible (e.g. should it only be available in certain spaces or the entire building) and how running and maintenance costs would be covered.

Philipp found that there were only a few social service providers who fully integrated the digital infrastructure into the thinking behind newly built accommodation for refugees. Though some managers agreed to cover the full costs for the routers and antennas that needed to be used, others had to rely on the Freifunk initiative to provide donated equipment and time, as they did not have designated funding for media and communication infrastructures. Furthermore, improvised emergency shelters like the university gym are repurposed buildings that are expected to only be used for short periods of time.

Phillip says the initial rapid growth of "Freifunk for Refugees" was only experienced in the first stage of the project. Now, he says, only a handful of people show up to the meetings, while shelters have closed down, and migrants have been allocated to individual housing projects or deported. Though he still gets asked via word-of-mouth to help with installations, he founded a one-man enterprise through which he can now negotiate contracts and small reimbursements for installation and maintenance. He is aware that this is not an uncontroversial practice among Freifunk communities, since it violates traditions based on reciprocity, non-commerciality and passing on skills to others. To this criticism he responds that many shelters and reception centres simply demand a more "professional" service with clear responsibilities. Furthermore, he thinks that it would be unfair for them to "simply lie back and relax". Rather, he says, the management should be held responsible by at least covering the ongoing financial costs of the infrastructure.

The debate on how to make internet access possible by "any means", but in doing so having to negate some of Freifunk's principles, indicates how the DIY practices of Freifunk can become entangled with what anthropologist and medical doctor Didier Fassin calls "humanitarian reason".[17] For some Freifunk participants, this break with shifting established practices was only questioned at certain points. Frequently discussed examples were when social service providers urge them to install content filter software on the network or set an automatic shutdown of the network at certain times of the day. In this situation, many participants have resisted the request or stopped the installation altogether. By the same token, Freifunk routers and practices are turned into "humanitarian goods"[18] ready for philanthropic fundraising campaigns (with a peak in fundraising experienced in 2016). This also puts Freifunk projects in competition with a larger market focused on devices and funding opportunities for other "good projects".[19]

## Case 2: Bringing Freifunk to the classroom

With forced migration resonating as a major issue throughout wireless communities in 2015, many were in parallel looking to expand Freifunk practices to educational and social institutions. To explore this potential, Freifunk participants collaborated with the Media Institute Berlin-Brandenburg (mabb) to fund a joint project.[20] In its first round, the project focused on 10 youth centres in Berlin which already qualified for teaching "media competency" to kids and adolescents. The plan consisted of holding several empowerment workshops through which staff and teenagers would learn how to "flash" (install modified firmware) and set up routers locally. It was further assumed that the workshops would lead to the formation of working groups that would continue to expand the network into the adjacent neighbourhood.

One of the participants was Holger, a 47-year-old IT specialist, who we interviewed about his experience. Now employed as a system administrator for a company that provides IT solutions in social and educational institutions, he previously used to work as a media instructor in one of the designated centres. Sympathetic to the idea of community networks, he felt strongly about the specific notions of freedom that underpin Freifunk: not only should access to the internet be without costs, but it should also come without a content filter. Instead of tabooing "harmful content", the openness provided by Freifunk serves as a way to promote responsibility among the youth centre's clients.

17 Fassin, D. (2011). *Humanitarian Reason: A Moral History of the Present*. University of California Press.

18 Collier, S. J., Cross, J., Redfield, P., & Street, A. (2017). Preface: Little Development Devices / Humanitarian Goods. *Limn, Issue 9*. https://limn.it/articles/precis-little-development-devices-humanitarian-goods

19 Krause, M. (2014). *The Good Project: Humanitarian Relief NGOs and the Fragmentation of Reason*. Chicago: University of Chicago Press.

20 www.mabb.de/information/digitale-welt/freifunk.html

Even though Freifunk networks were established at eight out of 10 youth centres, running the workshops according to Freifunk values proved difficult for both the centres' staff as well as the attending kids. Due to his background in free software, Holger explained, it was easier for him to engage in Freifunk practices, which he classifies as rather "high level" compared to other activities at the centre. Still, several kids around the age of 12 actively helped him to set up the equipment.

Holger pointed out that compared to the cosmopolitan inner city, the centre is located in an infrastructurally marginalised district and that fostering participation is not an easy task. Yet he remains optimistic, especially when it comes to promoting gender equality through engagement with technology. Though the majority of participants in the Freifunk workshop were young boys, Holger has carried out coding classes at the centre where the gender distribution tended to be equal. This, he argues, can be linked to broader shifts in computing and the gaming scene, a trend that might also reach Freifunk.

To foster this development, Holger emphasised that Freifunk's DIY approach should already be part of the school curriculum to enable an in-depth learning experience using digital technologies. It is precisely this question that will be taken up in the second round of the project: to try to get the Freifunk model taught in schools in an interdisciplinary course covering computer science, physics, maths and ethics. The project is further driven by the fact that many schools in Germany are rather poorly equipped when it comes to digital media infrastructure. It is not uncommon that maintenance of IT systems heavily depends on the commitment of individual teachers. It is here that the second phase of the project resonates most closely with the first, given that it takes intensive training for teachers to become apt at "doing" Freifunk. One response is to develop open educational resource materials that can be used for teaching purposes.[21] For this, role models can be found in projects like the Junge Tüftler ("Young Tinkerers").[22]

Ultimately, the aim of the Freifunk schools initiative would be to offer an inroad for kids and young adults to question the commodified and privatised nature of contemporary digital infrastructures. In his article "There Is No Free Software", anthropologist Christopher Kelty points out the intense commercial extraction of "open source" practices to fit the needs of both large software companies and (precarious) software workers. According to him, the political significance of free software was derived precisely via its hybrid position "between the corporate forms of intellectual property-saturated IT industries and the cultural uptake of software and tools."[23] Therefore, the schools project is another fresh attempt to expand Freifunk in new contexts through workshops, educational materials and dialogue with key political players.

## Conclusions

Juxtaposing the two different cases above renders visible the multiple natures of the Freifunk initiative and how its traditional practices play out in different political and educational contexts. On the one hand, participants managed to challenge the precarious media infrastructures encountered in crumbling public institutions and facilities guarded by an oppressive German border regime. On the other, it presents room for the concerns of Freifunk participants about adjusting to humanitarian logics, facing unexpected "professionalisation" and translating their practices to differently situated communities. Some more than others might heavily limit what it means for Freifunk to assemble people around a shared concern

It is important to keep in mind the limits of our report, focusing predominantly on the experiences of relatively well-situated and educated middle-class activists. While indeed representing a significant part of the Freifunk community, the two cases can be linked to a transnational cultural form based on solving socio-political problems with means developed in Silicon Valley-influenced tech communities.

This phenomenon is rendered visible by science and technology studies scholar Lilly Irani in a beautiful article investigating a design event in Delhi, India, that centres on "hackathons". Encountering similarly well-situated middle-class Indians, she shows that the hackathon does not necessarily produce any functioning products but rather encourages the "entrepreneurial citizenship" of participating subjects.[24] Freifunk participants need to be aware of this when encountering middle-class imaginaries of the present and future, and engaging with differently situated adolescents or migrants who either struggle for citizenship or the means to overcome its limitations.

21 https://freifunkoer.github.io/Freifunk-OER

22 https://junge-tueftler.de/fuer-umdenker

23 Kelty, C. (2013). There is no free software. *The Journal of Peer Production #3*. peerproduction.net/issues/issue-3-free-software-epistemics/debate/there-is-no-free-software

24 Irani, L. (2015). Hackathons and the Making of Entrepreneurial Citizenship. *Science, Technology, & Human Values*, *40*(5), 799-824.

## Action steps

In sum, it becomes clear that Freifunk communities in Berlin and beyond are advocating for emerging forms of "digital volunteering" presented in the two cases. It is the unruly potential of Freifunk as an initiative to foster decentralised organisation, an infrastructural commons and public engagement without surrendering to the dominant Silicon Valley startup model. To keep this experiment going, we propose the following steps for policy makers, Freifunk communities and future wireless activists to consider:

### *Policy makers (EU and Germany)*

- Increase public funding for free wireless networks.
- Consider a separation of "network" and "service" to protect net neutrality (i.e. the Swedish model).
- Expand EU-based funding schemes to go beyond acquisition of hardware for installations, to also cover the running costs for maintaining networks, and their general sustainability.
- Acknowledge the role of Freifunk and other community networks in public participation and public education.
- Foster dialogue between Freifunk members and social/public institutions.

### *Freifunk communities and future wireless activists*

- Work towards reflecting the political dimensions of practices framed as "political" or "humanitarian" so as to question asymmetries between "givers" and "receivers".
- Leverage their role as political advisors and explore new means of fostering basic rights to access, particularly for minority communities.
- Interrogate the forms of subjectivity, citizenship and exclusion they produce in their institutionalised/commercialised practices.
- Strive for further transnational engagement.

GLOBAL INFORMATION SOCIETY WATCH 2018

# Community Networks

THE 43 COUNTRY REPORTS included in this year's Global Information Society Watch (GISWatch) capture the different experiences and approaches in setting up community networks across the globe. They show that key ideas, such as participatory governance systems, community ownership and skills transfer, as well as the "do-it-yourself" spirit that drives community networks in many different contexts, are characteristics that lend them a shared purpose and approach.

The country reports are framed by eight thematic reports that deal with critical issues such as the regulatory framework necessary to support community networks, sustainability, local content, feminist infrastructure and community networks, and the importance of being aware of "community stories" and the power structures embedded in those stories.

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