FDN Federation and Do-It-Yourself ISPs An alternative model for Internet access

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Fédération FDN

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ISP overview in France

Orange 10,108,000 subscribers

Free 5,640,000 subscribers

SFR 5,209,000 subscribers

Bouygues 2,013,000 subscribers

Numéricable 1,041,000 subscribers

(broadband subscribers in December 2013, sources: financial reports)

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tetaneutral.net 250 subscribers

FDN 200 subscribers

PClight 50 subscribers

franciliens.net 15 subscribers

(DSL and wireless subscribers, May 2014)

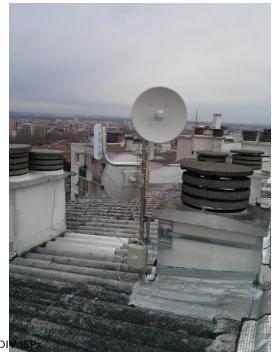
What we do

Network access:

- classical DSL, VPN or wireless
- ► neutral access, IPv6
- ▶ other services (Bittorrent tracker, UUCP, ...)

Cool projects:

- ▶ Distribute movies to cinemas through Bittorrent
 - ► The DCP Bay
 - ► http://www.tdcpb.org
- ► Réseaux du coeur
- VPN exchange



FDN Federation & DI

Our motivations The DIY way

- ▶ Doing things right: IPv6, no CG-NAT, BCP38, RPKI...
- ► Proximity: participative approach, building resilient networks
- ► Respecting privacy (personal data, network traffic)
- ► Controlling the infrastructure (not always possible)
- Network neutrality

Network neutrality

Network neutrality is fundamental for users: the ISP must not be a gatekeeper.

In practice: no incentive to breach network neutrality

- ▶ no commercial relation
- ► little congestion (invest in infrastructure)

When breaching neutrality is really needed, **involve the users** (e.g. congested radio local loop)

Fédération FDN



- ▶ 25 French ISPs, all of them non-profit
- ▶ 1700 members
- ► Annual physical meeting, monthly IRC meeting
- ▶ Tools and documentation













Other initiatives

- ▶ DIY ISPs all other Europe (Westnetz, Funkfeuer, ...)
- ► Individual Networks (DE)
- ► Community networks:
 - ▶ guifi.net (ES), 24,368 wireless nodes
 - ► Freifunk (DE), > 3,000 wireless nodes
 - ► Funkfeuer (AT)
- ► Bottom-up Broadband (EU)
- ► B4rn (UK)
- ► "Community Broadband Networks" (USA)
- ► Free Network Foundation (USA)

Difficulties

- ► technical setup
- backhaul (DSL, fiber). Wireless is easier
- ► legal constraints
- ▶ get bigger actors to talk to us

Not-for-profit does not mean unreliable.

Participating



Do-It-Yourself Internet Service Providers

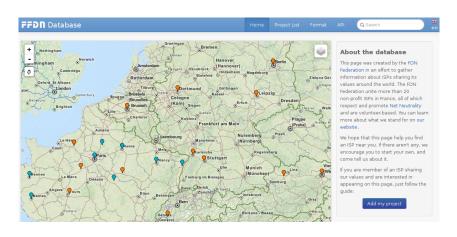
Participating for end-users:

- participate to a DIY ISP
- contribute to the DIY ISP wiki
- ► start your own DIY ISP

For operators: don't be afraid of us :-)

Tools

- ► participative map of DIY ISPs https://db.ffdn.org
- ► international mailing list http://1149.fr/diy-isp
- ► wiki and resources https://www.diyisp.org



Questions?

contact@ffdn.org



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Bonus (1)



Bonus (2)



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Bonus (3)



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