### **Getting Lika Connected**

Project Proposal, version 1.0, November 2022

for searching Funding, & for confirming partner organisations & individuals => to result in modified proposal versions & names

Raw text notes, structure & order to be added later

===

### Getting Lika Connected, Short Summary

- \* Idealistic goals: rejuvenation & reconnection of the remote rural communities, while following "Environmental Justice in Tech" principles (Limitations / Reparations / Solidarity)
- \* Practical goal: bringing internet connectivity to (villages near) Gubavcevo Polje
- \* Duration: 3 years (November 2022 November 2025)
- \* Performed in cooperation with family, local community, emigrants, international communities of hackers, activists, artists and friendly experts
- \* Funded by "Digital Rights & Climate Justice" funds
- \* Core Team: 3-5 people

===

### FIRST TASKS

- review this project proposal, by Nikolina, Nana, Arnd (7-17. November)
  - => make a new version we all agree on! (17. Nov 17. Dec)
- look for more / other core team members! (17. Nov 5. December)
  - => get input from other potential team members
- => make a NEW version (version 3) with their input!
   promote at HR.NOG event, informally (10. November), Vesna
- promote at 17-th November meetup in Amsterdam, informally, Vesna
- request initial funding, for "exploration phase", from Fieke & Maja (Vesna)
- have a first team meeting on 7th December?! then, monthly
  - => BUY A LOCAL SIM & get a second phone to have a Croatian number!! (Vesna) (e-sim??)
- come up with (even) better name :) // Connecting Lika? Puh-net ? Connecting Puh & Squirrel // Povezano Polje // ??
- MAKE A TRANSLATION (of a short version!)

### TIME PLANNING

## => 4 phases

Total duration :: 3 years from the start! => November 2025

\* Phase 1: Exploration & Negotiations (6-9 Months)

Time: November 2022 - August 2023

- Including!!
  - (informally) introducing project at HR.NOG 1, (10-November 2023, Zagreb)
  - Promoting project at SEE-11, April 2023, Split
     Promoting project at IETF / GAIA, (2023)

  - Promoting project at Electric Wonderland (Summer, 2023)
  - Promoting project at HR.NOG 2, (2024)
  - Promoting project at BalCoNN (September 2024)
- \* Phase 2: Building (1-3 Months)

Dependig on the phase 1

Possible Time -> September-October 2023 Earlier Possible Time -> April-June 2023 Later Possible Time -> April 2024

\* Phase 3: Maintenance (0.5 - 2.5 years)

Time: 6-12-18-24 months after the building.

- + Reporting on the project progress at HR.NOG 3??, (Early 2025)
- + Reporting on the project progress at IETF/GAIA, (Early 2025)
- + Progress reports to Funders
- \* Phase 4: Final Review & Closing (6 months)

Phase 4: May-November 2025

- + Final interviews with local communities
- + Replicate, to be repeated in other villages
- + Final reports to funders, to partner communities

### GOALS

- \* Main goals
  - Practical goal: bringing internet connectivity to villages near & in Gubavcevo Polje (G.P.)
- \* Idealistic goals: rejuvenation & reconnection of the remote rural communities, while following "Environmental Justice in Tech" principles (Limitations / Reparations / Solidarity)

#### \* Other goals:

- practicing creation of "mesh networks" : rural networks, community networks, decentralised networks...
  - => WHILE focusing on LOW TECH & SLOW TECH (offering MINIMUM VIABLE SERVICES) (????)
- enabling "remote working" for temporary visitors, and thus invigorating local community interactions attracting more people to MOVE IN & create new (intentional) communities!
- making organisation of "camps" & "gatherings" easier

#### \* More detailed social goals

- keeping (online) connections / communication between locals & emigrant population / families
- strengthening local community by sharing a common infrastructure
   making sure that the project & service is NOT-FOR-PROFIT / non-commercial
- rejuvenation of the local communities by attracting youth back to the area (or at least attracting grandchildren to visit!) making local community more connected with the region, country, Europe & world
- making local produce available to the remote "markets"

#### \* Stretch Goals

- adding other equipment to the "sites", with sensors & measuring (Klimerko, Atlas... LIGHTNING DETECTORS?)
  - -> making this ^^^ data available to locals
- monitoring & alerting & STOPPING deforestation, water abuses, illegal hunting, forest fires...
- producing & sharing local content & media

## \* Possible Goals, to check with others:

- attracting new inhabitants -> refugees from Syria & Africa?! increasing "property value" by making the area more lively attracting more tourists into the area

## **Problem Statements**

G.P. area, and the municipality of Gracac, has been suffering a lot in the last 30 years (and the more distant past has not been easy, either): Ravaged by war (1991-1995), De-population, Isolation, Climate & Environmental Crisis, Economic Crisis, Political crisis... This resulted in displaced people, disconnected families, and destroyed nature. (OTOH... see way below).

- Ravaged by war (1991-1995)
  - people killed or injured or raped
  - houses ruined
  - farms abandoned, livestock died
  - ALL of the inhabitants were expelled (or murdered) in August 1995, becoming refugees, mostly in Serbia (or US, Australia...)
  - only a few of the original population returned (most died as refugees)
- "other" refugees (from Bosnia) were resettled near Gracac by populist & nationalistic political leaders leading to new conflicts

## De-population

- youth was already (before the war) leaving for cities, other parts of Croatia / Yugoslavia / Europe
- Fragmentation of ownership after the death of owners
- hard life for sustenance farmers, who need more helping hands or technology (tractors, fertilisers...)

## Isolation

- this is a very remote area of Croatia, near Bosnian border out of way, out of attention of state
- train is hilly, so the valleys are separated from each other by mountains, and bad roads
- THERE IS NO WIRED TELEPHONE SERVICE
- mobile telephony coverage is patchy and weak
- there is not much public transport infrastructure nor service
- Climate & Environmental Crisis
  - Impacted by climate change (draughts, storms)
  - extractivist meat production leads to water shortages
  - (possible problems) Deforestation; forest fires; .
  - hard life for sustenance farmers , who might over-use destructive technologies (tractors, fertilisers...)

## - Economic Crisis

- "Globalisation" impact & extractivist production...
- néo-libéral capitalism exploitation, leading to inequalities (& isolation)
- there is not much public transport infrastructure nor service
- elements of the "neocolonial" state that just joined EU (land grab, crime, corruption...)
- ... going back to political crisis => recent wars...

## **CHALLENGES**

## **Area Challenges**

- hilly
- hard to access

# **Technical Challenges**

- getting "backhaul"
- securing electricity supply
- negotiating with land owners
- getting funding

## **Principal Challenges**

- creating a structure for shared ownership
- engaging in decentralised decisions making (using NVC)

- ONLY using repurposed / reused / recycled equipment!
- using ONLY renewable energy / fossil-fuels free
- balancing between keeping the existing advantages & creating beneficial changes

### Possible Partners

- \* Networking Hardware Suppliers & Donations
  - TechInc, Amsterdam Hackerspace (confirmed)

#### To Be Confirmed

- "Keep Ukraine Connected" project, by Global NOG Alliance -> Jan Zorz, Sander, Rene
- Radiona, makerspace in Zagreb -> Deborah
- Valentin & his not-for-profit refurbishing business in Heidelberg
- other Dutch hackerspaces
- \* Connectivity suppliers?!?! / Friends
  - CARNET!!!
  - HR.NOG members :)
- \* Networking Knowledge & Expertise / Friends

  - Elektra
  - Sebastian
  - William W. (Scotland)
- \* Possible Partner Communities / Friends
  - NSRC
  - "GAIA" mailing list (Jane Coffin)
  - Slovenian W-LAN group

  - RIPE connect-WG
     hackathon mailing list
  - Trans-Hack (Mecsio etc)
  - Petite Singularities (Natacha & Hellekin)
  - XHH -> MCH, SHA, OHM...
  - HfH
  - BalCCoN (Novi Sad) (Milosh & Jelena) FreiFunk (many...) Rhyzomatica (Keith)

  - EngineRoom (Becky)
  - ISOC!
  - /etc & GCA (Donna)
  - Calafou (SpiderAlex)
  - APC (hvale vale)
  - (etc)
- \* Local Knowledge & Expertise
  - Nikolina
    - (& Nikolina's "udruga")
  - Kruno
  - (& Kruno's "udruga")
  - Climbers:
    - Vedran & "Vrač Tehnike)
    - Camiel (not local, but related)
  - Further in Croatia
    - Brane
    - Rajko
    - Deborah / Radiona
- \* Local ("frontline") Community: Households
  - Nada
- \* Visitors, with the house in the village:
  - Zoki (Zagreb)
  - Sark (Zadar)
  - Djuro (Zagreb)
  - Djuka (Slovenia)
  - (Danica & Milena Maricic) (?) (Beograd)
  - Rada?
  - Nikolina & Vedran (Zagreb)
  - me & Arnd (Amsterdam)
  - Nana (Amsterdam)
  - Ilija Surla!!! (Amsterdam / Surle ;-)
  - doctor from Zadar
  - Ruzica, Mileva; Milica; Milodarka; Nena & Miso from Ohio;
- \* Youth to benefit from it
  - Kaja, Jura, Nik
  - Alisa, Charlie
  - Iris, Lara
  - (Nada's grand-daughter)
- \* Who should be excluded / discouraged

- hunters
- foresters
- hotel builders
- commercial agriculture
- criminals

### \* Partners in Gracac

- Micerete -> local cafe owner, baker & friend
- "mechanicus" ;-)
- Library Lady (Nina's contact)

### \* Negotiators & Meditators

- NVC people => who can speak local language(s)
  - Matej from Ljubljana

### \* Possible Funders

- (CJ x DR group of funders)
   CFP (if someone else applies; 2024?!)
- (others -> see Meshing/Funding list)

### BUDGET

### Elements

- equipment
- connectivity fees
- travel expenses
- stipends for experts (part-time) salary for core team

#### **TASKS**

- "exploration" PHASE
  - recruiting more team members :)
     research & planning
  - - technical plans
    - social plans
    - project planning (Vesna)

  - grant applications translating documents to/from Croatian, English
  - making agreements between all the partners
    - calling people!
    - sending SMS, Viber, Signal messages...
    - emailing
  - documentation
    - sharing this document
    - making several wiki pages
    - taking photos
  - making presentations
  - attending conferences (online & in person) to promote the project

  - learning from similar projects! (strategy)
     exploring existence of the "green energy" from the grid?)
     CREATING / registering / reusing a local structure for shared ownership (to be reused for the water management??)

# - building PHASE

- buying / collecting equipment
- making appointments with people (A)
- securing electricity supply! (solar panels? windmills? water-works? "green energy" from the grid?) placing the poles / towers / antennas
- digging
  - dragging

  - climbing
- installing equipment
- setting up connectivity between "sites"
- setting up network at people's homestroubleshooting

# - maintenance

- fine-tuning
- monitoring network connectivity
- checking quality of service, by calling peoplefixing problems

## ADMIN

- looking back at the goals, making project review & progress report
- reporting back to funders attending conferences (online & in person) to report on the project
- talking with all involved parties, to get their feedback & project review

#### **CORE TEAM & ROLES**

- \* Project Planner & Keeper & Coordinator
  - (Vesna -> Someone Else??)
  - (this)
  - keeping track of projects times, milestones, phases
  - keeping documentation
- \* Community Coordinator (Vesna)
  - connecting: being in touch with technical & activist community friends, partners
  - being in touch with LOCAL community
  - TALKING at conferences :)
  - connecting people to funders, to techies, to locals, to each other
- \* Grant Coordinator (Vesna ? -> someone else??) (Nana?)

  - request fundingreport back to funders
- \* Technical Planner (ARND?)
- \* Technical Doer(s) (ARND & Others)
- \* Local Admin Support (Nikolina?)
  - register local structure for shared ownership
  - translate to/from Croatian
  - make appointments with locals
- \* Team Coordinator (Nana?) (Nina?) (Vesna?)
   keeping the team organised & in touch with each other
  - organising regular meetings (online)
  - organising trips, when needed
- \* Budget Administrator (Nina?) (Nana?)
  - manage budget

## "Environmental Justice in Tech" Principles: Limitations / Reparations / Solidarity

- \*\* Limitations
  - limiting extractivism
    - ONLY using repurposed / reused / recycled equipment!
    - using ONLY renewable energy / fossil-fuels free (Solar & Wind)
  - making sure that the project & service is NOT-FOR-PROFIT / non-commercial
  - \* decreasing growth
  - Limiting project duration to 3 years => DEFERRING all the other aspects / projects to NEXT PHASE (after 2025)
  - \* investing in durable tech & slow tech & low tech
    - focusing on LOW TECH & SLOW TECH (offering MINIMUM VIABLE SERVICES) (????)
    - ONLY using FLOSS solutions (Free/Libre Open Source Software) & open standards HW
  - \* divesting from fossil fuel products & services
    - using ONLY renewable energy / fossil-fuels free (Solar & Wind)
- \*\* Reparations
  - giving back to the most affected communities
    - -> rural, isolated, disconnected, affected by climate change, de-populated
  - -> using offers from the "developed" world : equipment, expertises, volunteered time \* removing harms to the most affected communities from products & services
  - - ONLY using repurposed / reused / recycled equipment!
  - using ONLY renewable energy / fossil-fuels free (Solar & Wind)
  - \* supporting public infrastructure & commons
    - ONLY using FLOSS solutions (Free/Libre Open Source Software) & open standards HW
    - creating shared / commons infrastructure
- \*\* Solidarity
  - \*acting in solidarity with frontline communities; centering marginalised groups
  - -> rural, isolated, disconnected, affected by climate change, de-populated
  - \* engaging in decentralised decisions making
    - determining local needs & local potentials; requests & offers
  - using NVC
  - \* rejecting false solutions
    - rejecting capitalism, commercialism, consumerism
    - making sure that the project & service is NOT-FOR-PROFIT / non-commercial
    - creating shared / commons infrastructure

### **Great Local Potentials Activities**

OTOH (On the Other Hand), the human-desolation has led to REWILDING! Beautiful "nature", untouched forests & fields, peaceful surrounding (no people!), far away from "civilisation" — and this has its own advantages — so much so, that we have to be careful with this project to bring "just enough" change, but not to introduce too much change.

This area has wonderful resources and great potentials! (copy from my wiki ;-)

- Social Potential - People are warm, hospitable, resourceful & smart (e.g. Nikola Tesla ;-) (when they are not hot-headed, nationalistic, aggressive; exploited and traumatised; marginalised & isolated...)

## Nature Activities

- \* Just BEING in the WILD nature
- \* Mountain climbing, trekking, hiking...
  \* Gathering Herbs & Wild Fruit
- \* Unspoilt Nature Walks \* Mountain Biking
- \* Bird-watching
- \* Insect-watching
- \* Camping
- \* Drinking spring water from the streams
- \* Caving
  \* "Free Climbing"
- \* Dog-walking

### **Growing & Tending Activities**

- \* Organic Gardening
   Collecting Rain Water
  \* Caring for Edible Forests: hazelnuts, walnuts, apples, plums...
  \* Raising Livestock (sheep, goats, donkeys, cows, horses...)
  \* Traditional Agriculture: growing barley, oats, corn, potatoes, cabbage...
- \* Honey-bees tending

## Historical Resources

- \* Nikola Tesla's uncle's church ;-)
- \* Old mill
- \* Archaic langage
- \* Mass graves from WWII (in the caves)

## Nearby Tourist Attractions

- \* Caves (Cerovacke Pecine)
- \* Museum: Nikola Tesla Memorial House
- \* Adriatic Coast (Zadar, Biograd, Karin, Novigrad...)
- \* Waterfalls (Plitvice, Krka, Una Spring)

# ADD

- "Digital Rights" aspects
- Climate Justice aspects