# PLEASE READ CAREFULLY

# Reporting guidelines

FIRE PROGRAMME Reports should focus on reflecting on the lessons learned during the project implementation, while documenting what was achieved with the money and time invested during the life of the project.

FIRE PROGRAMME understands that reporting can be a demanding, time-consuming exercise that if conducted for the benefit of the funding agency alone, might overlook aspects of project implementation of great relevance for the project team and their future work.

FIRE PROGRAMME encourages recipients to experience the benefits of developing reports for their own use, by identifying the main area(s) where the project team wants to focus their evaluation efforts to gain a deeper understanding of the project implementation for the benefit of the project team and the organization as a whole.

FIRE PROGRAMME requires two types of reports -financial and technical- to be submitted to the FIRE PROGRAMME secretariat:

- **Progress report:** FIRE will use this document for internal monitoring purposes (not for public distribution) focusing on processes and operational issues, providing context for project implementation and revised timeframes. Progress reports should be short, concise (maximum 20 pages long excluding guidelines, project factsheet information and content table). Findings documented as part of the progress report, as part of the progress reports will be used by the FIRE secretariat to promote the supported project. Only selected content from the technical report will be use for promotion purposes. Recipients are encouraged to define the ways they want to use the reports for their own benefits.

Progress reports are reviewed and approved by the FIRE Steering Committee to be able to process disbursements as per the signed contract. No disbursements will be processed until progress reports are submitted, reviewed and approved.

- **Final report:** FIRE will use this document for public distribution. Recipients are encouraged to define the ways they want to use the reports for their own benefits. Is important that the project team defines uses and users in the progress report, so the final report can focus on that. FIRE secretariat will help to facilitate the use of the report findings, by identifying other opportunities aligned with your requirements. The final reporting is an opportunity to synthesize and assess the activities conducted as part of the grant, while reflecting on the project's management, limitations, and achievements during the project lifecycle. It should include a review of the findings included in the progress report. Short, concise (maximum 30 pages long excluding guidelines, project factsheet information and content table). Findings documented as part of the final report, as part of the progress reports will be used by the FIRE secretariat to promote the supported project. Final technical reports will be edited by AFRINIC Communications Unit to be made available for the general public for download on the FIRE PROGRAMME website.

Reports must be submitted by email to fireprogram@afrinic.net using the following **template**, as per the proposal originally approved for funding.

Please **do not modify the template** layout and use the structure provided to guide your reporting process. All the *Tips* coloured boxes at the beginning of every section in the template will be removed by AFRINIC from your reports before public distribution.

**Please use only *Heading 2 and below* for formatting your project report**, so when you update the Table of contents all requested information is easily located throughout the document. *Heading 1* has been used when designing this template, to define the sections requested by FIRE PROGRAMME.

FIRE PROGRAMME Grant Recipients are encouraged to share the progress of the project through fireprogram@afrinic.net mailing list, where current recipients are subscribed.

FIRE PROGRAMME encourages project teams to document project activities using other forms of information sharing, such as blogs, wikis, collaborative tools, social media feeds, etc. The reports should include a brief description of the communications strategy implemented by the project team. Please share the links for additional documentation efforts conducted as part                              of                              your                              technical                              reports.

**Technical report No. X** *This template was developed as a collaborative product of the Seed Alliance, based on the previous reporting templates implemented by FRIDA and ISIF Asia, with valuable mentoring from the Developing Evaluation & Communication Capacity in Information Society Research (DECI) project. See* http://evaluationandcommunicationinpractice.ca *(as accessed on 3/7/2013)*

## Tips for effective reporting

Reports are a tool to learn from the project implementation, to describe the change experienced by the project team, project beneficiaries and partnering organizations, share information, promote accountability and transparency.

They provide evidence of the project development and implementation helping others to understand the rationale behind the project, the challenges faced, the processes and procedures involved, the solutions provided, the lessons learned, among other uses.

Other donors, sponsors and investors used them as a tool to allocated new funding to organizations, award prizes, etc. so is in your best interest to produce good quality reports.

- Project leader should **inform all members of the project team** about the reporting requirements so everyone can effectively contribute.

- Discuss with your project team what the theory of change behind your project is. What behaviours, processes, procedures, and relationships do you expect to change through your project implementation? What do you want to achieve through the project activities? What do you want to learn through the project implementation? Who is going to use the findings?

- Discuss with your project team **who would be the future users and how they would use the findings throughout the project lifecycle**. The uses identified should relate to the theory of change that you have discussed with your project team. The discussion about theory of change, users and uses, will be a very important input to your communication strategy: depending on who the user is and of what use will be the findings, a communication strategy can be developed. For example, if the users of the findings are policy makers and the use is to influence a change in the regulatory framework, which communication approach will work the best?

- Remind the reader of the context where the project plans to intervene. This **baseline information** will help the project team to identify the changes that can be attributed to the project intervention.

- **Document the project cycle and its activities**. It is recommended to keep a project diary about the activities conducted and all the financial records related to those activities on file, to be able to write a narrative of the project implementation.

- **Compare project records with the approved proposal** will allow you to track progress, keeping the project and its budget on track and making any necessary adjustments.

- Reflect on the lessons learned by the project team and identify the **key messages** that the project team would like to convey through the project reports, especially in the Overall Assessment section of the report.

- **Reports should be self-explanatory**, which mean that you should not exclude information, which has been already included in either the proposal, grant agreement or any previous report, as the reader probably might not have access to any additional documents.

- **Share templates created for your project**. Sometimes the most innovative aspects of a project reside in the processes and procedures used to implement the project activities. The templates your organization has created to collect data, analyze it, store it might hold the key of your project success.

- **Be creative and use online resources to share** the lessons learned through the project, document the project lifecycle and that best serve the key messages you want to convey. For example:

- o Provide online access to materials produced as part of the project for easy access;
- o Create online photo gallery for your project activities.
- o Keep attendance records to document an event and organize mailing lists to facilitate communication and encourage exchange of information.
- o Design surveys that fit your project activities. Write clear and direct questions to avoid misunderstandings in the collection of responses. Identify the key people that should participate in the survey as the source of information.
- o Capture interviews in short videos, structuring their script in a way that you can minimize the need for editing, to facilitate access and use.
- o Create info-graphics to explain your research findings (qualitative and/or quantitative).
- o Generate diagrams to explain the project timeline and how milestones have been achieved during the life of the project.

# Project factsheet information

| | |
|---|---|
| **Project title** | VillageTelco - Westridge. |
| **Grant recipient** | Communinet |
| | 64 Bellingham Crescent |
| | +2721 392 5920 , 086 653 0109 |
| | www.communinet.co.za |
| **Dates covered by this report** | 01 – 05 – 2013 / 31 – 05 – 2014 |
| **Report submission date** | 12 – 06 – 2014 |
| **Country where project was implemented** | South Africa |
| **Project leader name** | Jayson Johannes | jaysonjohannes@gmail.com |
| **Team members (list)** | Robert Douman | rdouman@gmail.com |
| | Angelo Lawrence | angelolawrence10@gmail.com |
| **Partner organizations** | VillageTelco Ltd |
| **Total budget approved** | $ 9 996.00 |
| **Project summary** | Communinet is a Mitchell's Plain based non-profit tech organisation that wishes to empower communities with the supply of broadband internet. Our main objective is to make high speed reliable internet |

access a reality for all. Currently the start-up cost for a reliable broadband internet is too expensive for average residents living on the Cape flats and most areas outside the major metropolitan city centers. Our goal is to alter the mind-set of those in less fortunate circumstances, from one of dependence to empowerment. Access to information is crucial in today's society and can be considered part of our evolution. The internet has a host of benefits, and has the potential to improve disfavoured economic areas and stimulate growth. Internet access has become a vital part of everyday life and has been revolutionary in the way information is shared on a global scale. Communinet would like to use this fantastic tool to assist learners in the Mitchell's Plain area to broaden their learning experience and allow them to have a hand in their future.

# Table of Contents

# Project Summary

*Tips: It is recommended to **complete this section once you have finalized the text of the report**. It will be easier to go back through to build the summary based on the highlights of the report the project team just put together.*

*The Project Summary can be up to **one page long**.*

*It should include a brief justification; an outline of the project objectives to be achieved; the project real timeline and the main activities conducted.*

*The abstract of the project written when FIRE PROGRAMME initially approved the project and the objectives listed in the Grants Agreement signed by AFRINIC and your organization should be useful inputs when preparing this section of the report.*

Please write the project summary here…

Over the past 12 months we have distributed ~ 800GB of data which is a phenomenal statistic considering none of our users has even used 1GB of data over 30 days before. We've created 11 hotspots; each hotspot (household) is capable of supporting at least 5 devices (users).

We are in the process of launching our second server, the server is prepped, loaded with the required Ubuntu software, an additional dsl line has been made available & Nanostation, which will improve the QoS & allow more households to connect using our service.

We have acquired all the necessary hardware & software and spend funds received from FIRE as per our

project budget with minuscule changes.

We would have liked to have connected 40 households to the internet but only managed to reach 30 households within a 12month period, that's still triple, the numbers we had before the Fire grant. We've been approached by the Strandfontein Rate Payers Association to offer our services to the Strandfontein community (neighboring community), this is an exciting partnership which will increase our reach & double the initial impact we'd hope to achieve, unfortunately we were unable to come to an agreement as yet because of local government's promise to have free Wi-Fi installed in the area by December 2013 which has yet to materialise.

Our main focus remains the community of Westridge. Initially we'd hope to receive a resounding reception from our community for our services; but it seems as if technology, specifically access to the internet is not high on the list of priorities so we've decided to take a different approach to achieve our objectives. We quickly realised that we were a new organisation & unfamiliar to most of the community so our goal was to get our offering out to as many members in the area as possible. Reducing the risk and establishing trust with our potential users were key factors in increasing our numbers on the mesh and getting as close as possible to our target of 40 households. So we devised a different strategy......where the goal is to get them to use our service.

### New Strategy

- Our team devised a marketing/sales strategy geared at increasing sales and community buy-in.
- Cold canvassing, door to door selling
- Bi-monthly flyer distribution in key zones
- Launched a "Try first" campaign for a limited period where users can try service for a 2 month trial period and just pay for data cost.
- Offered easy payment options where needed
- Introduced Wi-Fi routers
- Free installations
- Offered incentives for existing members to get neighbours to join & try our service i.e. free or additional data offered per referral.

In our opinion the issue might be the age gap since most adults grew up without access to technology & most schools presently do not have adequate ICT facilities, we feel the next generation of young adults might fall into a similar situation where they'll be faced with limited opportunities due to the lack of exposure to ICT facilities & access to the internet.

As we conduct our research & interviewed individuals we found that the need for computers were equally important as access to the internet, they're intertwined. So we've decided to add ICT school development to our list of objectives, specifically at primary school level to encourage the next generation of young adults to place a greater emphasis on familiarizing themselves with technology both in the hardware & software arenas.

We have a better understanding of the problems that exist and the needs of the community which allowed us to get more people to try our services. And to let them know of other products & services we offer as well. All round it's been a great experience and we can see our vision taking shape and what seemed like an impossible task is beginning to look quite promising and we are set to exceed our own expectations.

After numerous email & telephonic communication with government we feel that we are making progress in communicating our vision & securing funding for our organisation.

# Background and Justification

*Tips: The reader should be reminded of the **context** your organization is working, and where the project has been developed in.*

*This section provides a window to **understand the challenges** faced by the community you are working with.*

*Include a detailed description about the situation **before the project start**, describing any relevant aspects that make the project relevant in such a particular scenario.*

*The reader should be provided with a clear description about the problem(s) to be addressed through this project and the motivation from your organization and team members to get involved and offer a solution.*

According to studies conducted by Google South Africa, only 17% of the South African population has internet access. With the rise of globalisation, internet access is crucial in today's world. Our ability to connect has never been this simple and is only impeded by a lack of resources which is rampant in areas such as Mitchell's Plain. A gross lack of information technology coupled with scarce educational resources and limited employment opportunities make the possibility of progress seem light years away. We asked ourselves: How can we change things for the better?

**"Education is the most powerful weapon which you can use to change the world" - Nelson Mandela**

**Problem**

A large percentage of the Westridge, Mitchell's Plain community has not used the internet before let alone a computer. Many socioeconomic problems exist in the area, such as gangsterism, high levels of substance abuse and rampant unemployment with no hope at the end of the tunnel. Mitchell's Plain is one of the largest townships in South Africa with the largest population of drug users in the country, the drug capital of South Africa, sad but true. Poor local telecoms infrastructure and a high barrier to entry for last mile internet connectivity is at the core of our problem and the gap we wish to fill.

Poor ICT infrastructure, expensive last mile internet services & access to inexpensive IT resources like computers, laptops & tablets are at the heart of the problem and we feel we can make a difference in the technology arena, which could have a real positive impact on the community for future years & generations.

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Communinet aims to improve education by providing learners with the resources they need specifically their technology needs, provide support for small businesses operating in the area and contribute to the local economy by creating permanent job opportunities.

Through the technology Communinet offers - made possible by the technological advances of *The Shuttleworth foundation/VillageTelco Ltd* - we hope to assist communities by providing access to a network of information, resources & access the internet; broadening their horizons and enabling them to explore what the world has to offer.

# Project objectives

*Tips:* Please include here the **original objectives** as listed on the Grant Agreement.

*If any objectives were modified, added or removed during the reported period this should be explained/justified.*

### Objectives

- Connect 40 households to our network in 12months
- Allow users to make free local calls on our network within 12 months.
- Give 40 households access to broadband Internet within 12 months.
- Share information across our network between 40 households within 12 months.
- Enable 40 households to access information from Communinet server from a common network space within 12 months.
- Supply one primary school with broadband internet access within a 12 month period. **New**
- Assist with ICT development at primary schools & offer support services. **New**

We have put the implementation of the highlighted objectives (Extra) on hold pending further investigation as the evaluation report recommended. These objectives were added in the interim technical report and after discussing with the team we have decided to no longer invest any energy into them until a business case is developed to ensure the successful execution of the objectives.

## Users and uses

*Tips: Discuss with your project team who would be the future users and how they would use the findings throughout the project lifecycle. The uses identified should relate to the theory of change that you have discussed with your project team. The discussion about theory of change, users and uses, will be a very important input to your communication strategy: depending on who the user is and of what use will be the findings, a communication strategy can be developed. For example, if the users of the findings are policy makers and the use is to influence a change in the regulatory framework, which communication approach will work the best?*

**Who will be the user of these findings?**

**What are the more relevant things the project team wants to learn about or evaluate through the lifecycle of this project?**

Please write about the users and uses here…

| Users: | Uses |
|---|---|
| Scholars<br><br>Unemployed individuals<br><br>Entrepreneurs<br><br>Small business owners<br><br>Government<br><br>Social enterprises & NGO's | Access to additional educational content.<br><br>Gather information for school assignments & projects.<br><br>Earning online revenue using programs such as AdSense, YouTube and Google's blogger.<br><br>Home security e.g. ip security cameras<br><br>Small business services e.g. business registrations, Business Plans etc.<br><br>Used to establish & assist similar projects |

## Indicators

*Tips: Indicators help to **measure project's progress**.*

*Indicators help the objectives that were set by the project team to be affordable, tangible, and measurable.*

*They help to verify the success and rewrite the course in case we are not achieving it.*

*An indicator could be quantitative (percentage, amount) or qualitative (perception, opinion).*

*The FIRE secretariat suggests the SMART approach to indicators:*

**S**      **Specific**
**M**      **Measurable**
**A**      **Achievable (acceptable, applicable, appropriate, attainable or agreed upon)**
**R**      **Relevant (reliable, realistic)**
**T**      **Time-bound**

Please use the table below to share your project indicators…

| Baseline | Indicators | Progress | Assessment | Course of action |
|---|---|---|---|---|
| **Refers to the initial situation when the projects haven't started yet, and the results and effects are not visible over the beneficiary population.** | **How do you measure project progress, linked to your objectives and the information reported on the Implementation and Dissemination sections of this report?** | **Refer to how the project has been advancing in achieving the indicator at the moment the report is presented.** | **Descriptions should be clear and ideally contain operational terms where needed. Please describe the quality dimensions.** | **What is the project team planning to do next is very important to document, especially if changes to the original plan have to be implemented for the success of the project.** |
| 10 Mesh devices, One server PC loaded with Ubuntu 10.11, batman 3 Mesh server software.<br><br>No Nanostations<br><br>No monitoring tools<br><br>Testing proof of concept between server & user i.e. range, QoS, speed etc.<br><br>No installation equipment e.g. ladder, drill etc.<br><br>No billing software<br><br>No additional installation staff<br><br>Strandfontein network being developed.<br><br>No educational material. | 1. Number of Mesh devices installed & in use.<br>2. Number of Nanostations in operation.<br>3. Number of households utilising Wi-Fi routers.<br>4. Average number of users who increased their data usage or topped up.<br>5. Percentage of users who maximise their allocated data every month.<br>6. Number of servers<br>7. Average number of | 1. 30 Mesh devices<br>2. 2 Nanostations<br>3. 11 Households<br>4. 80%<br>5. 95%<br>6. 2<br>7. 2<br>8. None as yet<br>9. 0 | Installation of gateway at Ridgeville Primary School.<br><br>Strandfontein server has already been built (but has not yet been configured)<br><br>Ridgeville Primary has a limited computer lab with no access to the web, does not have the capacity to support the entire school.<br><br>installation team established<br><br>We are currently liaising with the Mayoral office, requesting funding & support for our organisation. We've been directed to Councillor | Establish & develop a close relationship with local government.<br><br>Acquire additional funding.<br><br>Install remaining 21 Mesh devices.<br><br>Improve our network monitoring tools & internal systems.<br><br>Upgrade billing software<br><br>Investigate & plan implementation of a computer lab at one primary school in the community.<br><br>Build relationship with local schools in community & assess |

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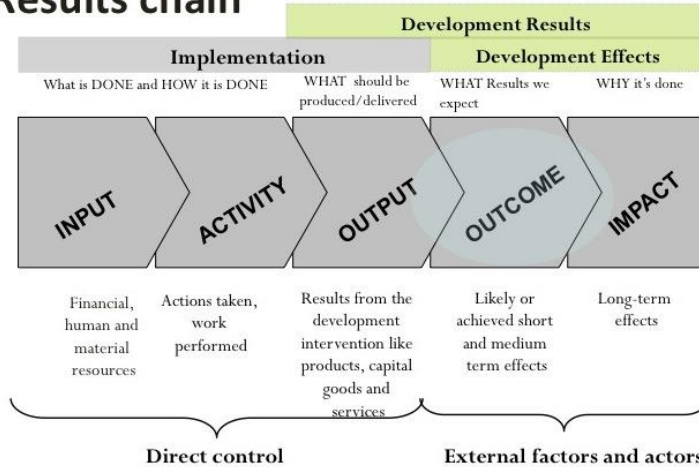| | | | | |
|---|---|---|---|---|
| | complaints per month. | | Suzette Little, concerning the application for grants or funding sponsorships. | where we could assist schools & improve ICT services at the schools. |
| | 8. Additional funding acquired. | | We have a scheduled meeting on 29th May 2014 with Olivia Dyers a portfolio manager from the Department of Economic Development & Tourism to discuss our project and find opportunities for synergy. | Conduct surveys at schools. |
| | 9. Number of active computer lab with broadband internet access supplied by Communinet. | | Received e-Marketing content from Quirk which will be made available from the Communinet website shortly. | |
| | | | Strandfontein rollout pending meeting with Strandfontein Rate Payers Association. | |

# Project implementation: understanding the chain that leads to results

*Tips: This is the most important section of the report. Here, the reader will **understand the processes and operational issues** of your project and how the contribute to the achievement of the objectives and the theory of change behind the project implementation.*

*Is possible that the project team's understanding of the development problems to be addressed with this project will have evolved or **changed** from those described when the project was originally submitted and approved. If that is the case, please share what motivated the change and what course of action has the project team identified.*

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## Results chain

Development Results

| Implementation | | Development Effects |
| --- | --- | --- |

What is DONE and HOW it is DONE | WHAT should be produced/delivered | WHAT Results we expect | WHY it's done

INPUT → ACTIVITY → OUTPUT → OUTCOME → IMPACT

| Financial, human and material resources | Actions taken, work performed | Results from the development intervention like products, capital goods and services | Likely or achieved short and medium term effects | Long-term effects |

Direct control | External factors and actors

*Results chain diagram provided by In Develop*

## Narrative - project implementation

Please write a narrative description about the project implementation, starting from the problem statement you develop on your approved proposal. Please use this section of the report to provide context to the work conducted. For example:

1. Describe any **partnerships** with other organizations, researchers and community leaders that have been developed during the project cycle and the usefulness of these in achieving the project's objectives.

- VillageTelco Ltd
    - o Supplier of ICT Mesh devices
    - o Support from Group: http://groups.google.com/group/village-telco-dev/topics

- Ellies (Pty) Ltd
    - o Supplier of hardware used for our installations
    - o http://www.ellies.co.za/

- Scoop Distribution

    - o One of our main trading partners (Supplier)
    - o Supplier of commercial wireless equipment
    - o http://www.scoopdistribution.co.za/

![FIRE logo]

- Strandfontein rate payers association

    o Allow us access to a new neighbouring community, demographic unchanged

- Cape Town TV

    o Cape Town TV - known as CTV - is a non-profit, community-based television station aimed at the greater Cape Town metropolitan area. This relationship shall assist Communinet with acquiring interesting content for dissemination & advertisement.

- Department of Economic Development & Tourism for the Western Cape

    o Key Role player for the long term success of Communinet & VillageTelco Westridge project.

    o Investors

- Quirk (Pty) Ltd
    o Supplies us with eMarketing content for educational purposes.
    o Assisting our young entrepreneurs to market their business online effectively.
    o http://www.quirk.biz/resources;jsessionid=7A5EB2E60BCC439896E68B29833379F4.sybaris_jboss


2. Describe the **involvement** of project beneficiaries, during all phases of project implementation.

3. Describe any **gender, ethnic and generation gap** issues that have impacted positively or negatively your project implementation.

**4.** Please take the time to reflect about activities that you struggle to implement during the period reported, along with processes and methods originally planned that might need **adjustment** to achieve your project objectives.

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# Please use the table below to report about project implementation…

| Input | Project activities | Outputs | Outcomes | Timeline | Status | Assessment |
|---|---|---|---|---|---|---|
| **Financial, human and material resources** | **Actions taken, work performed** | **Result and/or deliverable produced as a direct result of the project activity** | **Likely or achieved short and medium term effects.** | **Dates were the listed activity was developed** | **Indicate when the activity started, on-going or completed** | **Assessment indicating how the activity has been conducted** |
| Working capital of $8500 compliments of AFRINIC & the FIRE program | 1. Installed 30 Mesh devices. | **Outputs are under direct control of the project team** | **Focus on the changes facilitated by the project for its beneficiaries** | 1. 05/2013 - 05/2014 | 1. Completed | **Describe technologies implemented, methods and techniques used and any challenges that have been identified** |
| Mesh devices X41 | 2. Build 2nd server PC | | **Outcomes tend to be under the influence of the project team but not under direct control** | 2. 08/2013 - 02/2014 | 2. Completed | |
| Nanostation X2 | 3. Configured 2nd Communinet server PC | **Infrastructure** | | 3. 08/2013 – 02/2014 | 3. Completed | **Technologies:** |
| Installation equipment & cabling | 4. Configured 2X Nano Station with Batman Layer 3 (Mesh Software) | **1.** 30 Mesh devices installed and operational. | | 4. 08/2013 – 03/2014 | 4. Completed | • X30 Mesh device (MP01) used for client distribution has a range of 2km also acts as a mini server. Loaded with Batman Layer 3 |
| Accounting, Payroll & HR software purchased | 5. Applied for 2nd DSL fixed line | 2. 11 Wi-Fi hotspots able to support at least 55 devices. | **Short term:** | 5. 11/2013 – 03/2014 | 5. Completed | |
| LegalWrite (Business administration) software purchased. | 6. Configured Communinet network Firewall | 3. 15km of Wireless Mesh infrastructure (Line of Sight) in the Westridge area. | More efficient mesh installations | 6. 07/2013 – 05/2014 | 6. Completed | |
| Nagios3 network monitoring tool | 7. Manufactured our own RJ45 (ethernet cables) for clients & general sales. | 4. Duplicate network of Westridge in neighbouring Strandfontein. | Network more secured | 7. 06/2013 - present | 7. On-going | • X2 The Ubiquiti Nanostation (NSII) used by our server pc has a 15km range. They are much more powerful than the mesh potato, it also has a faster processor & more ram. A must for all Mesh networks with more than 10 connections. Loaded with |
| Webmin server management opensource software | 8. Installed Nagios3 on server | | Community has access to affordable internet from the comfort of their homes. | 8. 09/2013 | 8. Completed | |
| Linux Traffic shaping opensource software | 9. Installed Webmin on server | **Social** | Support for small business & entrepreneurs operating in the community. | 9. 05/2013 | 9. Completed | |
| Default Firewall (no rules set) | 10. Developed based billing software (java) for staff & | 1. Mentoring a tertiary student belonging to our network. | Access to business administration tools. | 10. 10/2013- present | 10. On-going | |
| Accountant | | 2. Improved safety & awareness by creating a neighbourhood watch Facebook page called | Create employment opportunities. | 11. 05/2013 - present | 11. On-going | |
| | | | | 12. 07/2013 – 04/2014 | 12. Completed | |
| | | | | 13. 01/2014 – present | 13. On-going | |
| | | | | 14. 07/2013- present | 14. On-going | |
| | | | | 15. 05/2013 - present | 15. On-going | |
| | | | | 16. 09/2013 – 12/2013 | 16. Completed | |
| | | | | 17. 05/2013 – present | 17. On-going | |
| | | | | | 18. Completed | |
| | | | | | 19. Completed | |
| | | | | | 20. Completed | |
| | | | | | 21. On-going | |
| | | | | | 22. Completed | |
| | | | | | 23. Completed | |
| | | | | | 24. Completed | |
| | | | | | 25. Completed | |

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| Java developer<br><br>Project manager<br><br>4 Casual installer staff<br><br>Purchased all necessary hardware equipment & tools for installations<br><br>Purchased all stationary & consumables<br><br>Part time Ghost Writer | clients.<br><br>11. Upload learning materials & software online<br><br>12. Sold & configured 11 Wi-Fi routers.<br><br>13. Training a tertiary student on Batman-adv. Layer 2 (Mesh Software)<br><br>14. Provided free IT support for all Communinet users.<br><br>15. Repaired clients PC's<br><br>16. Registered 2 businesses<br><br>17. Distributed promotional flyers.<br><br>18. Project manager attended accounting training.<br><br>19. Applied for educational eMarketing material from Quirk.<br><br>20. Applied for Tax Exemption.<br><br>21. Applied for funding from:<br><br>-the Social Development Department of RSA,<br><br>- Department of Economic development and Tourism for the Western Cape | Proudly Westridge.<br><br>3. Reduced poverty<br><br>**Products and services**<br><br>1. Wi-Fi routers R300 –R400<br><br>2. Internet service offering R150 for 7GB of broadband data.<br><br>3. PC repair service offered. (Free)<br><br>4. IT equipment for sale.<br><br>5. Small business services offered. (Free)<br><br>**Economical**<br><br>1. Tax Exempt<br><br>2. Employed several casual staff<br><br>3. Assisted 2 Companies in registering & formalising their businesses. http://www.gallomedia.co.za/ & http://alwaysbrightelectrical.co.za/<br><br>4. Sold Wi-Fi & IT products from scoop distribution at a small profit.<br><br>5. Repaired PC's(x4 Users) for a fee<br><br>**Knowledge creation**<br><br>1. eMarketing training content acquired & | Better data & client management<br><br>Reduced installation cost for community.<br><br>Reduce expensive cellular cost by making free calls on network i.e. hopefully this should reduce the amount of disposable income spend on expensive cellular services for local communication.<br><br><br>**Long term:**<br><br>Create employment opportunities.<br><br>Future short courses to be offered to Tertiary students in the community.<br><br>Connect local students to other learners around the globe.<br><br>Give students the necessary ICT tools to research and pursue any career, regardless of their background and demographic.<br><br>Ensure that every school in our area has an ICT center equipped with sufficient computers, access to the internet & | 18. 10/2013<br><br>19. 11/2013<br><br>20. 08/2013 – present<br><br>21. 05/2013 – present<br><br>22. 08/2013<br><br>23. 07/2013-present<br><br>24. 01/07/2013 - 04/07/2013<br><br>25. 18/06/2013 - 20/06/2013<br><br>26. 12/08/2013 – present<br><br>27. 29/08/2013 – present<br><br>28. 13/08/2013 – present<br><br>29. 15/09/2013 – present<br><br>30. 15/08/2013 – present | 26. On-going<br><br>27. Completed<br><br>28. On-going<br><br>29. On-going<br><br>30. Completed | Batman Layer 3<br><br>• X2 PC server specs: Core 2 Duo 2GHz, 2GB Ram, 320GB HDD, Loaded with Ubuntu 10.11, Webmin, Nagios3, Billing server, Firewall<br><br>• X2 4MB/s DSL fixed line<br><br>• Wi-Fi Routers sold: Tenda W3002R, 1XWAN port, 4X LAN ports<br><br>• 1X Office Pc specs: Core 2 Duo 2GHz, 4GHz Ram, 320GB HDD, Loaded with Windows 7 Ultimate, MS Office 2010, Pastel Xpress, Payroll & LegalWrite<br><br>**Main challenges we face are:**<br><br>• Line of sight limitations of wireless equipment.<br><br>• Time taken to have additional DSL fixed line installed from operator. |

**Technical report No. X** *This template was developed as a collaborative product of the Seed Alliance, based on the previous reporting templates implemented by FRIDA and ISIF Asia, with valuable mentoring from the Developing Evaluation & Communication Capacity in Information Society Research (DECI) project. See* http://evaluationandcommunicationinpractice.ca *(as accessed on 3/7/2013)*

| | | | | | |
|---|---|---|---|---|---|
| | Government.<br><br>- Department of Social and Early Childhood Development for the City of Cape Town.<br><br>22. Proposal submitted for funding to CTV(Cape Town TV)<br><br>23. Designed & developed website.<br><br>24. Overhauled Communinet website content.<br><br>25. Created LinkedIn, Twitter & 2X Facebook accounts<br><br>26. Approached three primary schools in Westridge – Ridgeville, Duneside & Westville primary schools to setup meeting to discuss a potential collaboration & assess current ICT situation.<br><br>27. Meeting with Ridgeville Primary(Only school who responded after initial contact)<br><br>28. Researched & investigated a variety new antenna options & wireless technologies | available to our users, compliments of Quirk. (Includes eTextbook as well)<br><br>2. Google Groups "Village Telco Development Community" group.<br><br>3. Custom Firewall configured for our unique mesh network.<br><br>4. Linux traffic shaping software used for quality management & fare usage.<br><br>5. Webmin software is used for managing server pc (Open source).<br><br>6. Development of billing server software<br><br>7. Nagios, a network monitoring program (Open source).<br><br>8. Informative weekly newsletter.<br><br>9. Website development<br><br>10. Website content overhaul<br><br>11. Communinet Wiki<br><br>12. Established a social media presence & used platform to communicate our brand, services & | additional learning materials.<br><br>Create permanent job opportunities.<br><br>Reduce poverty.<br><br>Create world class ICT infrastructure. | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | which will improve QoS & reach i.e. white TV spaces, Wi-band etc.<br><br>29. Create an informative newsletter for community<br><br>30. Applied for license exemption services & networks from WAPA | products.<br><br>13. Assist users with the installation of Skype & Google Talk<br><br>**Research**<br><br>1. Researched all topics in Technical report. To improve quality of report and for better understanding.<br><br>2. Acquired additional information with regards to certain topics contained in the technical report.<br><br>**Training**<br><br>1. Basic accounting training course taken by Project manager.<br><br>2. Our In house Java Developer has Training 1 tertiary 2nd year student (Mesh user from our community) attending the University of Cape Town. | | | | |

## Project outputs, communication and dissemination activities

*Tips: Take into account that the reader of your report has not being involved in project implementation, so readers do not have any further knowledge besides the information you are providing here.*

*This section of the report will allow you document the communication and dissemination efforts that the project team has conducted, which might be part of a specific communication strategy design as part of the project, or in place for the organization as a whole. When possible, please provide information about strategies in place and the rationale behind them.*

*Lessons can be learned from many aspects of project implementation, covering a wide variety of aspects such as technical, social, cultural and economical. Taking the rationale behind the project and its objectives can serve as a framework to draw your conclusions. Lessons can be identified by project partners, beneficiaries and general staff from the organization. A project diary and other activity records can serve as a tool to reflect during project team meetings and immediately after project activities are conducted.*

> ***Outputs are immediate, visible, concrete developmental change that is the tangible consequence of project activities, under direct control of the project team.***

*Example of possible outputs to report are:*
- *New products and Services (software, online platforms, applications);*
- *Information sharing and dissemination (publications, conferences, multimedia, social media);*
- *Knowledge creation (new knowledge embodied in forms other than publications or reports, such as new technologies, new methodologies, new curricula, new policies);*
- *Training (short-term training, internships or fellowships, training seminars and workshops) and*
- *Research Capacity (research skills; research management capacity and capacity to link research to utilization of research results).*

Please use the table below to report about project dissemination…

| Project outputs | Status | Assessment | Dissemination efforts |
|---|---|---|---|
| Output No. 1 (use the same names as per the listed outputs in the table above, see Project implementation)<br><br>**Infrastructure**<br><br>1. 30 Mesh devices installed and operational.<br>2. 11 Wi-Fi hotspots created able to support at least 55 devices.<br>3. 15km of Wireless Mesh | Please select the option that better describes the status into the development of this output:<br><br>**Infrastructure**<br><br>1. Completed<br><br>2. Completed<br><br>3. Completed | Descriptions should be clear and ideally contain operational terms where needed. Please describe the quality dimensions.<br><br>**Infrastructure**<br><br>- Although we fell short of our target of 40 households we've started upselling users with Wi-Fi routers, this enables multiple users to access the internet from | Please specify what dissemination efforts were made, with special attention to those intending to reach target groups by gender, age, ethnic and socio-economic profiles to impact marginalized and disadvantaged groups.<br><br>All software developed by Communinet is be available on GitHub https://github.com/rdouman/c |

infrastructure (Line of Sight) in the Westridge area.
4. 2X Server PCs
5. 2X DSL fixed line
6. 2XNanostations

**Social**

1. Mentoring a tertiary student belonging to our network.
2. Improved safety & awareness by creating a neighbourhood watch Facebook page called Proudly Westridge.
3. Reduced poverty

**Products and services**

1. 30 Mesh devices installed and operational.
2. 11 Wi-Fi routers sold
3. Internet service offering R150 for 7GB of broadband data.
4. PC repair service offered.
5. IT equipment for sale.
6. Small business services offered.

**Economical**

1. Tax Exempt
2. Employed several casual staff
3. Assisted 2 Companies in registering & formalising their businesses. http://www.gallomedia.co.za/ & http://alwaysbrightelectrical.co.za/
4. Sold Wi-Fi & IT products from scoop distribution at a small profit.
5. Repaired PC's(x4 Users) for a fee

4. Completed
5. Completed
6. Completed

**Social**

1. Work in progress
2. Work in progress
3. Work in progress

**Products and services**

1. Completed
2. Completed
3. Completed
4. Completed
5. Completed
6. Completed

**Economical**

1. Work in progress
2. Completed
3. Completed
4. Work in progress
5. Completed

**Knowledge creation**

1. Completed
2. Completed
3. Completed
4. In progress
5. Completed.
6. In progress
7. Completed
8. In Progress
9. Work in progress

one mesh device. To date we have connected 38 different devices over the course of the 12 month period. Essentially creating 11 private network hotspots which are capable of supporting at least 55 users collectively.

- We will have 51 Mesh devices deployed by December 2014.

**Knowledge Creation**

- Our billing server software once completed will be equipped with a UI Web server, which will allow clients to login & check their bandwidth usage and allow Communinet staff to manage connections remotely.

- A more professionally looking website will hopefully entice potential clients to join and make use of our wonderful services.

- We have improved our social media presence & use it to communicate services & promote our brand effectively to our community. We also use it as a tool to keep our neighborhood safe.

**We offer more products & servers now.**

Products

- Laptops & Pc's
- Routers, cabling
- Tablets, PC components

Services

- Internet
- PC repairs & upgrades
- Small business services

**Installation Team:**

NetBilling

**Webmin**

http://www.webmin.com/download.html

**Nagios**

http://www.nagios.org/download

**Communinet Wiki** contains how to guide & Mesh setup info

http://communinet.co.za/wiki/index.php?title=Main_Page

**Facebook pages**

**Proudly Westridge**

https://www.facebook.com/groups/proudlyWestridge/

**Communinet Page**

https://www.facebook.com/pages/CommuniNet/129051383884658

Creation of a Communinet newsletter containing latest news & information for door to door distribution (Require funding to launch).

**Mesh Potato Setup**

http://villagetelco.org/get-started/flash-your-mesh-potato/fonflash/

**Ubiquiti Nanostation** (supernode) configuration instructions

http://wiki.openwrt.org/toh/ubiquiti/nanostation

https://groups.google.com/forum/#!topic/village-telco-dev/kjmxhmrodZc

## Knowledge creation

1. eMarketing training content acquired & available to our users, compliments of Quirk. (Includes eTextbook as well)
2. Google Groups "Village Telco Development Community" group.
3. Custom Firewall configured for our unique mesh network.
4. Linux traffic shaping software used for quality management & fare usage.
5. Webmin software is used for managing server pc (Open source).
6. Development of billing server software
7. Nagios, a network monitoring program (Open source).
8. Informative weekly newsletter.
9. Website development
10. Website content overhaul
11. Communinet Wiki
12. Established a social media presence to promote brand, services & products.
13. Assist with Skype & Google talk installations

## Research

1. Researched all topics in Technical report. To improve quality of report and for better understanding.
2. Acquired additional information with regards to certain topics contained in the technical report.

## Training

10. Completed
11. Completed
12. Completed

### Research

1. Completed
2. Completed

### Training

1. Completed.
2. In Progress.

- Project Manager
- 1X Casual Installer

**Installation kit:**

- 1X Pre-programmed Mesh Device, 1X Wi-Fi router (optional)
- 1X Pole, 1X bracket, 1X ethernet cable (RJ45)
- Cordless drill, ladder, couch screws, wall plugs, cable ties

**Procedure for new installations:**

- Receive communication from client either via email or telephonically.
- Provide client with a quotation.
- Schedule to meet with client to give a brief description of Communinet and outline our services & products we offer to the community and to evaluate their ICT needs & wants.
- Agree on terms and set date for installation.
- Depending on the client's financial situation we would either accept full payment or part payment on the day of the installation, or then allow clients to pay the installation & hardware fee over an acceptable time period. The minimal amount we accept is the data fee which is R150 (~$14).

Research

- Collected more information on the wireless internet & various technologies. More knowledgeable on the topic.

**Ubuntu OS 10.11**

https://launchpad.net/ubuntu/+cdmirrors

**Skype**

http://www.skype.com/en/download-skype/skype-for-computer/

**Google Talk**

http://www.google.com/talk/whatsnew_more.html

**Educators eMarketing content**

http://www.quirk.biz/

| | | | |
|---|---|---|---|
| 1. Basic accounting training course taken by Project manager.<br><br>2. Our In house Java Developer is Training 1 tertiary 2nd year student (Mesh user from our community) attending the University of Cape Town. | | **Training**<br><br>2nd year Student<br><br>Fawaaz Dassie 20 yrs old of Westridge, Mitchell's Plain<br><br>Attends the University Of Cape Town,<br><br>And is a Communinet User as well | |

## Project outcomes

*Tips: This section should be completed **ONLY** for the final report.*

*FIRE PROGRAMME expects you to report about the **outcomes** of the project as defined in the table below, based on the project implementation section of this report. Project team is encouraged to discuss the questions provided below to guide the reflection:*

*Can you identify and describe the relationships between the activities implemented and the social, economical, cultural and/or political benefits of your project implementation?*

| ***Outcomes can be defined as:*** |
| --- |
| • *Medium-term effects* <br> • *Effect of a series of achieved outputs* <br> • *Should capture the changes for the beneficiaries* <br> • *Take place during the life of project/strategy* <br> • *Influence but not direct control* |

Please write about the project outcomes here…

### Medium-term effects

- Timely access to new resources
  Generate interest in ICT
- Free IT support service

### Community

- Community has access to affordable broadband internet from the comfort of their homes.
- Network better secured we had an instance of hackers.
- Communinet has access to business administrative tools which we'll use to support small businesses & entrepreneurs operating in our community.
- Reduced installation cost for community
- Support for small business & entrepreneurs operating in our community

### Organisation

- More efficient mesh installations
- Better data & client management

### Long term:

- Offer short courses to tertiary student.

- Create more employment opportunities in the ICT sector.

- Connect all schools to our infrastructure.

- Create an entrepreneur network.

## Project management and sustainability

*Tips: Please comment on the general project **administration, staffing, procurement**, etc. specially those aspects contributing to the fulfilment of the project objectives as well as those that have delay project implementation.*

*Indicate **how the project team has strengthened its capacity** and work towards sustainability with the support provided by FIRE? (new equipment, training, improved administrative skills, lessons learned from the project). Has the organization increased its research or administrative skills of the team involved? Has the project allowed for a particular contribution to capacity building of women or marginalized social groups? Special attention should be paid to the expected or unexpected impact on marginalized social groups.*

*Have you done **anything different** to provide administrative support for this project **besides your "business as usual"** processes and procedures? Has the project inspired change inside your organization?*

> *Sustainability is to be examined not only in terms of staff retention and financial stability of the organization supporting the project but about the communities' appropriation of benefits perceived from project implementation.*

*The FIRE Secretariat is very interest to learn if this project has generated opportunities for future development (new funding from partnerships, sponsorships, investment or other funding mechanisms), please provide details.*

*Please explain if the FIRE grant has helped to consolidate your organization and how. If any of the project activities will continue after the end of the FIRE grant, please describe how your organization is planning to support future developments.*

Please write about project management and sustainability here…

### Equipment

There has been a miner delay with regards to our Mesh Potato stock order. Our supplier no longer had stock locally, the stock had to come from China & the manufacturer appeared to have had an inexplicable delay.

That being said we have all the equipment needed to carry on with our project activities. We have procured a total of 40 mesh devices, 30 meshes have been deployed to date, 7 of which are on a trial basis & 20 meshes in reserve, In total we own 51 Mesh devices which is more than adequate to roll out to the schools operating in the area which we hope do in the next 12 months. We were fortunate enough to receive a discount from VBX Communications (Pty) Ltd www.vbx.co.za who was so kind to accommodate us and do a great deal for us. Special thanks go to Steve Song who connected us.

### Future development

Our project manager has created a few relationships with various government & city departments, working with key stakeholders within government on ways to collaborate to find synergy, as well as having applied for funding which we are confident will come to fruition. We will be sending fresh proposals for funding in June '14. We have definitely used the fact we have received funding from the FIRE programme – AFRINIC*, IDRC & SIDA* and nothing locally as leverage to acquire new funding from local government. We are still working on improving our proposal writing skills and continue to apply for funding from organisations willing to back a winning team☺.

Experimenting with new technology is definitely on our agenda specifically; White TV spaces, optic fiber & WiBand which we will form part of our arsenal. These are technologies we have identified as keys to our

development & would like raise the financial resources to experiment & research with them. Our goal is to remove the line of sight limitations we are currently experiencing. We'd like to model ourselves to the likes of TENET http://www.tenet.ac.za/ the only difference being we cater for a different audience but we would like to own & develop similar infrastructure.

Currently our network can sustain itself with the number of users we have. Communinet is able to cover all its recurring cost for bandwidth data & domain fees. Our internet service will continue to run even after the end of the FIRE grant, we should double our numbers in the next 12 months and give at least 2000 schools kids access to the internet provided the sufficient funds are raised. The remaining funds still to be received by the FIRE program will be used to invest in more network equipment specifically Nanostations to further improve range & signal strength.

### Improved administrative skills

We have acquired LegalWrite software which is a software package that has all the business administrative tools required to register businesses, draft contracts etc. basically like a virtual lawyer. Our project manager attended an accounting & payroll course which should help with managing our finances better.

### Lessons learned

Don't rest on your laurels, adaptability, persistence & staying focus when things aren't going exactly according to plan. You need to be able to adjust & be creative when things are not going as you'd expected also a certain kind of resilience is needed to accomplish your objectives & reach your goals. That being said, the better the plan the better chance you have of success. Team work is essential if you wish accomplish anything & make a real impact. In our situation where a service is being offered a marketing & sales strategy was of utmost importance and key in our numbers improving and getting the community's buy-in.

### Delays

- Waiting for additional the DSL line for expansion from fixed line operator (Telkom – has monopoly over our fixed lines in SA)

- Updating our billing software which will make managing of client's data usage much easier. We are unable to financially support our developer on a full time basis which has delayed our efforts in this area.

**Before the FIRE grant**, our organisation lacked basic resources like stationary, man power, adequate software, hardware equipment & tools necessary to carry out our project activities. We were also working off our personal accounts for the most part and were quite limited by our lack of resources & working capital, unable to move around to the various social development offices, delivering flyers to the community, we were able to purchase bulk stock which in turn allowed us to manufacture & sell products & services at a more affordable rate to our community & users.

Each user on our network is still responsible for paying for their bandwidth data (7GB per month) which ensures that our service will continue to run even after the FIRE grant.

## Impact

*Tips: This section of the report does not refer to the project activities, but about the **"bigger picture"**. It will be desirable if the project team can reflect on the **impact that the project has contributed to as part of other actions implemented by your organization and/or your partners**.*

> *Impact refers to the influence the project may had on the way people does things through the use or adoption of the project outputs; changes in the context the project was implemented; changes in the community the project has been working with; and/or changes inside the organizations that have participated in the implementation or the relationships established through the project's implementation.*

*Impact is often impossible to measure in the short term and is rarely attributable to a single activity. Impact can be linked to a vision or long-term development goal that your organization might be working towards.*

*It can be identified as a logical consequence of achieving a combination of outputs and outcomes.*

*Impact is usually measurable after the project life and is outside the direct control of the project team and the organization.*

The work done during the past 12 months will prove most useful in acquiring new funding & support from our local government. Our body of work will encourage government & hopefully other funders to see the value in our work which should secure more investment for our community.

We hope to serve as a support system for students & entrepreneurs. We've made valuable connections with government, our trading partners as well establish ourselves in our community.

Our hope is to change the mind-set of our community from one of dependence to empowerment especially among our youth. We want the next generation of youth to excel, to pursue their dreams & ambitions. We hope to encourage other individuals to start their own initiatives & projects, a kind of ripple effect to strengthen our local economy & improve our standard of living.

We believe there's a huge amount of potential & talent exist amongst our youth and we'd like to harness those skills & provided a solid foundation for our kids to develop & express themselves confidently, giving them the necessary tools to hone their craft.

We're not sure how long it's going to take to cultivate & mold young minds but we believe in our project, we have the ability & capacity to make a difference & to inspire our peers.

In order for societies to evolve and to progress, communities have to familiarise themselves with technology especially in developing countries in Africa & other similar countries in the rest of the world because it could radically improve living standards that many suffer from. It's hard to believe there are people in the 21st Century who have not used a computer let alone the internet before.

We will hopefully have done enough to prove our organisation has what it takes to deliver & hopefully work with government in rolling out internet to the masses. Our users have used more data over the past 12 months than we anticipated; we believe this is an indication of our quality of service and the evolution of the project. We are providing a great service for our community, a must needed one. It has shown us that the community is quite capable of adapting to new technology and this gives us motivation to connect more members of our community & beyond.

One of our users has started an Electrical company www.alwaysbrightelectrical.co.za which he runs from home and uses our internet services to interact with his suppliers & customers, fantastic!

We have something to produce to local government which will definitely bring more investment & funding to Communinet & our community of Westridge, Mitchell's Plain.

## Overall Assessment

*Tips: This section of the report is extremely valuable for the FIRE secretariat as it provides evidence about the role and relevance of FIRE contributions in the AFRICA region.*

*Tips: Briefly provide **your own views** on the value and importance of the project relative to the proposed innovation, investment of time, effort and funding involved. Include the strengths and weaknesses of the project and the steps taken to strengthen the credibility and reliability.*

*This is your opportunity to conduct a **team reflection about the value of the project for the organization**. The following questions might help you to prepare a substantive overall assessment.*

- *To what extend the project meet its objectives?*
- *What were the most important findings and outputs of the project? What will be done with them?*
- *What contribution to development did the project make?*
- *Were certain aspects of project design, management and implementation particularly important to the degree of success of the project?*
- *To what extend the project help build up the research capacity of your institution or of the individuals involved?*
- *What lessons can be derived that would be useful in improving future performance?*

Please write the project overall assessment here…

Our team was able to generate R29 216.49 over the past 12 months, that's 25.54% of the total FIRE grant. Our network coverage has a radius & range of 15km. However a potential user will need to be within a 2km range to their closest mesh device with good line of sight or situated in Fresnal zone (http://en.wikipedia.org/wiki/Fresnel_zone). Going forward we will be generating R3450 monthly from our users, which is sufficient to sustain our internet service. Our project is sustainable; we were able to make a little extra money which was reinvested into our organisation & used for operational purposes, we developed some of our own software, created new products & services which we hope will further stimulate economic growth in our community. Communinet has enormous potential and we feel we have just scratched the surface and we hope to extend our reach & carve out more market share.

## Connect 40 households to our network in 12months

We managed to connect 30 households to our network.

## Share information across our network between 40 households within 12 months.

Each user connected to our mesh is capable of connection to each other by using their allocated mesh ip address e.g. 10.10.20.1 using a standard web browser i.e. Google Chrome, Mozilla Firefox provided access is given by recipient, which include limited access to the Communinet server which contain learning materials & other media as well.

## Give 40 households access to broadband Internet within 12 months.

We've managed to reach 30 households and distributed ~ 800GB of broadband data.

There are ~ 50 different devices that are registered by our server to gain access to the internet.

## Allow users to make free local calls on our network within 12 months.

We've recommended two options for our users when making calls using our network

- Skype
- Google Talk

Government is in the process of improving local infrastructure surrounding our community e.g. fibre optics implementation should improve last mile connectivity speed & quality.

Communinet has applied for a license from WAPA which should enhance our credibility as a service provider and protect us from the bigger service providers. The funds from FIRE programme – AFRINIC*, IDRC & SIDA* has allowed us to accelerate the roll out of our services, amp up our marketing efforts & make our services much more affordable to the community we serve. We're able to attend formal training & develop our own software in-house capabilities. We are constantly trying to improve our systems, procedures & processes, comply with local tax law, which in turn makes us more credible & attractive to potential donors.

Persistence, focus & a strong resolve is required if our organisation wants to achieve its objective, its lessons we've constantly been reminded of. We've also realised that it's the mentality that's one of our biggest enemy and always thinking of ways to relate & educate our community.

| Strengths | Weakness |
|---|---|
| Contacts<br><br>- FIRE programme – AFRINIC, IDRC & SIDA<br>- Western Cape Government<br>- Suppliers & trading partners | We still lack a few major resources<br><br>- utilities vehicle for installations<br>- Capital<br>- Additional admin & technical staff |

| All the required installation resources | Limitation of mesh devices(Line of sight) |
|---|---|
| Business admin tools | |
| Research capacity | |

The technical report has given us the opportunity to break down our project & really think about all aspects of our project. It will be used as a blue print & baseline for future developments. We are hopeful that this template will assist us in securing additional funding. We will continue to document & publish our activities, which will assist other organisations in rolling out this type of project.

We still have quite a long way to go but with partners such as the FIRE programme – AFRINIC, IDRC & SIDA we feel confident that we will make a success of our organisation & encourage other individuals from our community to do same & assist with the development of Mitchell's Plain.

Our team has distributed more data than the big service providers operating in our area. Thanks to FIRE programme – AFRINIC, IDRC & SIDA, we have secured all our equipment, the technology needed to carry out day to day operations & to expand our operation for the next 12 months. Thank you FIRE programme – AFRINIC, IDRC & SIDA for making this all possible and for assisting us in making a difference in our community.

## Recommendations

Please write the project recommendations here…

### Technical

We recommend the use of Batman layer 2 instead of 3, most network administrators of mesh networks around the world are using this version which makes things easy when you need advice or any software & firmware updates. Communinet uses both versions of batman.

We also recommend at least 2 Nanostations for large scale mesh network operations and where distances between mesh devices are more than 2km apart, a Nanostation would be needed to be introduced instead of a mesh potato. The Nanostation is capable of running the same firmware as the mesh potato. Nanostations need to be positioned at least 200m apart. Even though they have a range of up to 15km there has to be LoS (Line of Sight) in order for either mesh or Nanostation to connect, please avoid having too many Nanostations in close quarters, they transmit a much more powerful signal than the mesh potato and may disrupt the signal of the mesh devices. Please refer to project implementation table for more details.

### Marketing & sales

Communicate the benefits that your organisation offers to the community in your marketing material, make it short and clear. Marketing your organisation online should always be a major part of planned advertising and promotions.

### Relationships

Building repour with the community & local community leaders you wish to empower is vital to the success of your project.

## Bibliography

*Tips: Include complete bibliographic references to all sources (printed, on-line, quotes, etc) used to prepare the different sections of this report. The APA style guide offers examples about how to reference a variety of sources.* http://www.apastyle.org/learn/quick-guide-on-references.aspx*(as accessed on 3/7/2013).*

Please write the project bibliography here…

**Communinet Website URL**

http://www.communinet.co.za/

**Facebook Address:**

https://www.facebook.com/pages/CommuniNet/129051383884658

**Twitter Page:**

https://twitter.com/CommuniNet78

**LinkedIn:**

http://www.linkedin.com/home?trk=nav_responsive_tab_home

**TED: Ideas worth sharing**

http://www.ted.com/

**RSA Animate:**

http://www.thersa.org/

**GitHub: Code dissemination**

GitHub is the best place to share code with friends, co-workers, classmates, and complete strangers.

https://github.com/

**VillageTelco Ltd:**

http://villagetelco.org/

http://groups.google.com/group/village-telco-dev/topics

**VBX Communications (Pty) Ltd:**

**www.vbx.co.za**

**Scoop:**

http://www.scoopdistribution.co.za/index.php?cPath=99&osCsid=otkpf6utaife0jttc10rg414q6

**Wireless Access Providers' Association**

**FIRE**
Fund for Internet Research & Education

**Technical report No. <mark>X</mark>** *This template was developed as a collaborative product of the Seed Alliance, based on the previous reporting templates implemented by FRIDA and ISIF Asia, with valuable mentoring from the Developing Evaluation & Communication Capacity in Information Society Research (DECI) project. See* http://evaluationandcommunicationinpractice.ca *(as accessed on 3/7/2013)*

http://www.wapa.org.za/


**Quirk:**

http://www.quirk.biz/

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