Guidelines for “Budgeting and planning of a PtP Wireless link”

1. Who are the key stakeholders in the project? Who are the key people to contact and get support from?
   - Any person that can have an impact on a decision that concerns the implementation

2. What practical and technical information is required as a starting point of the project?
   - Maps of the area including altitude
   - Weather conditions on site (temperature, amount of rain, thunder, humidity)
   - Type of terrain (sand, soil, stones)
   - Population (sparsely or dense populated)
   - Access to road for transportation
   - Radio/Tower Legislation
   - Conditions to import equipment

3. What technical information about existing infrastructure is required
   - Existing wireless infrastructure.
   - Existing antennas and cabling
   - IP Network layout (if going to share IP infrastructure).
   - Description of other equipment on site
   - Frequencies/Channels
   - Radio power

4. What physical infrastructure must be in place to establish the connection?

Examples of scenarios:

A. PtP link from the highest point of Curricutta island to the office building
B. PtP link via repeater at the prison island.

   - Permissions/licences
   - Type of tower to procure (height, material)
   - Supplier of radio tower (including transport to site)
   - Assembling and raising of the tower
   - Electrical grounding and lightning protection
5. Budget for bringing an Internet connection from the primary school to the place of the implementation.
   - Wireless or wired

   If wired:
   - TP or optical fiber
   - Aerial or under ground
   - Additional protection (PVC pipes or similar)

6. Budget for bringing power/energy to both ends of the implementation
   - Access to power grid
   - Solar panel
   - UPS

7. Budget for implementing the actual link between the two points
   - Hardware (technical and non-technical)
   - Human resources

8. Budget for required licenses and permissions to operate your implementation (take your own country as example)
   - Application fee
   - Initial fee
   - Annual fee

9. Budget for maintenance and quality assurance of the implementation for 1 year.
   - What can you expect to break within one year?

10. What can go wrong? What are the bigger risks in the project? Risk analysis.
    - Regulations, application process
    - Purchase of equipment, customs, import tax
    - Overheating, power failure, overpowering the link
    - Weather conditions
    - Badly performed planning :(