

ITRAINONLINE MMTK

Guidelines to exercise: Budgeting and Planning

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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 :)