

Connecting the jungle and other remote parts of the world

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TUCAN3G Project

- ▶ An EU-funded project aimed to provide mobile technology and data services to the most remote and isolated areas in the world
- ▶ Based on the femtocell technology

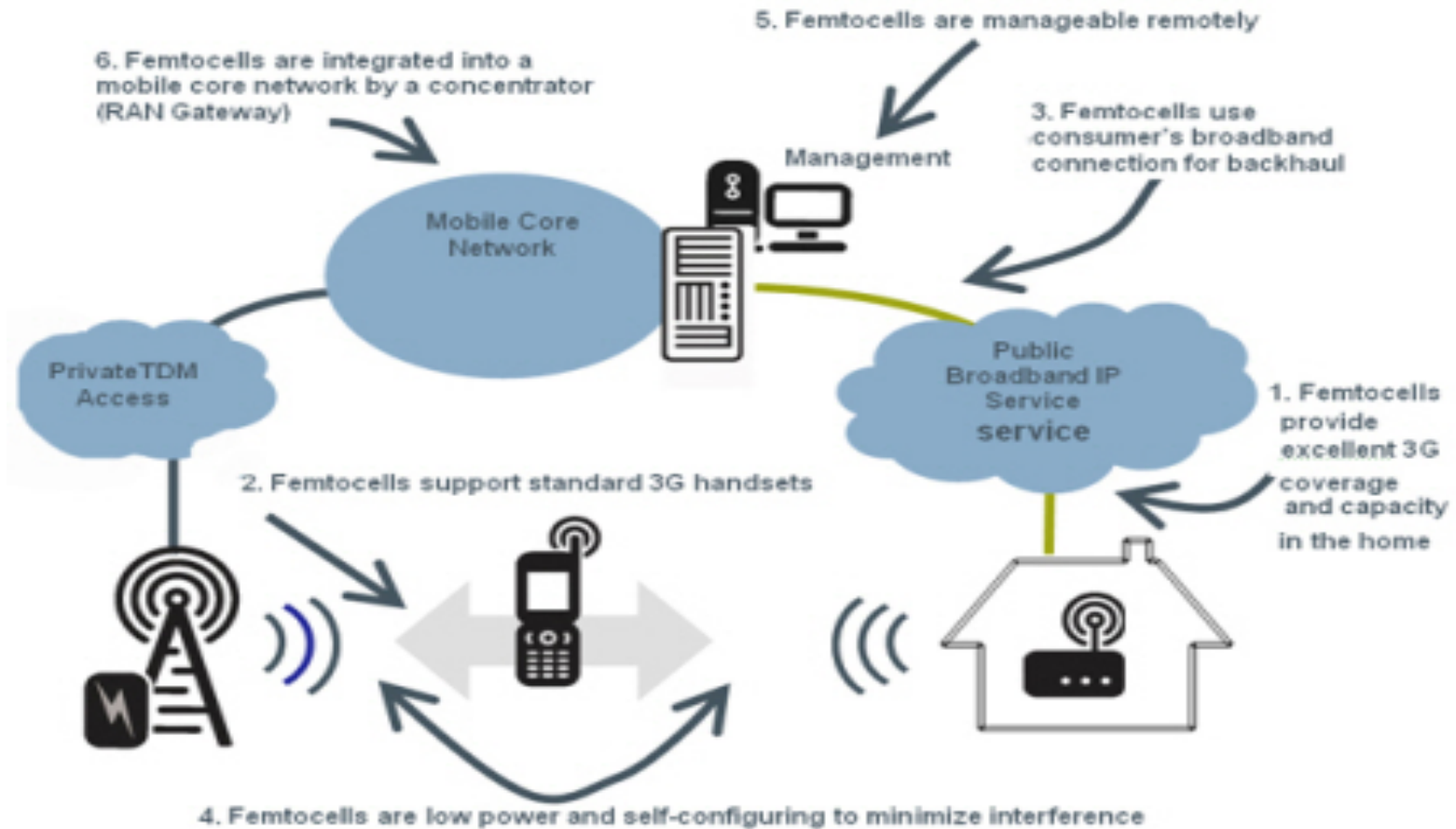
Why do we need this project ?

- ▶ Costs to build classical access and backhaul infrastructures discourage the cellular companies
- ▶ Low-income populations cannot afford the traditional cellular costs

Simple, cheap yet powerful

- ▶ Utilize new wireless technology to create access networks based on 3G femtocells
- ▶ Femtocells:
 - small, low-power cellular base stations that act as repeaters capable of boosting signals
 - work via solar energy
 - lower cost compared to a classical station

How Femtocells Work



Demonstration platform

- ▶ In a very remote part of Amazon rainforest
- ▶ Install femtocells in six villages
- ▶ Locals can communicate with relatives now



Toward universal connectivity

- ▶ Development of small, mobile rural operators connected to the Telefonica backbone
- ▶ A South American development bank has committed over EUR 700 000 towards expanding the program to another 15 villages
- ▶ The potential is huge

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