

Nokia Siemens Networks Village Connection

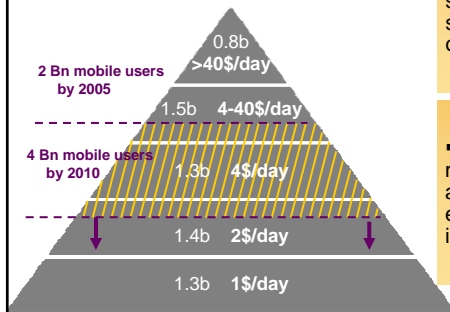
Affordable connectivity for rural villages

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Market trends and operator challenges



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Market Trend

- Globally 5 billion people will be connected by 2015
- Many potential subscribers can spend 3 USD/month on communications
- New coverage is mainly built in rural areas with little existing infrastructure

Operator challenges

- How to bring connectivity to rural areas of new growth markets profitably?
- Expanding to rural villages with traditional solutions and business models may be too costly
- How to ensure cost effective backhaul?
- How to secure power availability and maintenance in rural areas?



Rural subscribers present an unlocked potential

- Close to 3 billion people live in rural areas
- In Africa about 70% and in Asia 60% of the population live in villages*
- Often there is no communications service available
- Characteristics of a potential village subscriber
 - Income less than USD 3 per day
 - Irregular income, money is not saved
 - Brand-conscious



Innovative solutions are required for tapping into the rural business profitably

* Source: "Urban and Rural Areas 2003", Population Division, UN.
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Innovation: Nokia Siemens Networks Village Connection



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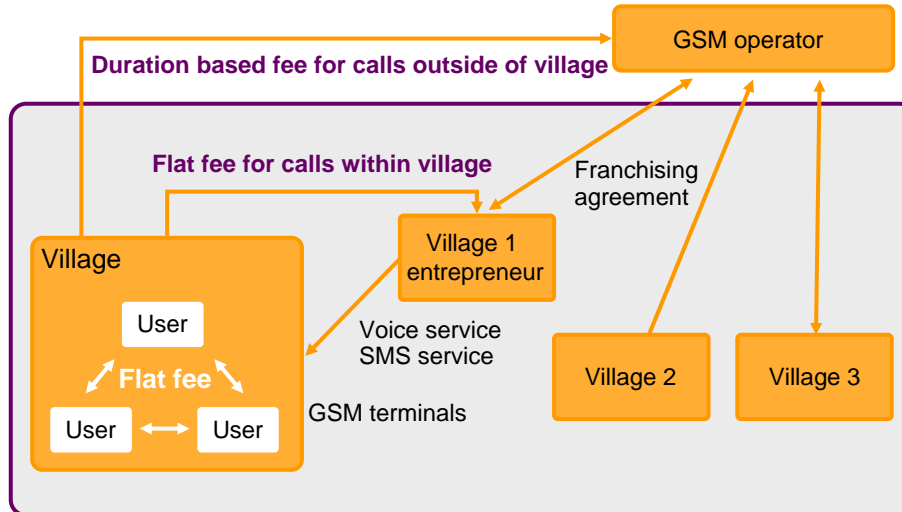
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Franchise business model makes operating village networks easier for the operator



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Franchising benefits all

Operator

- Capturing the rural market potential
- Savings enable a profitable business case in rural villages
- Larger subscriber base generates additional traffic



Entrepreneur

- Possibility to become a business owner
- Contributor to the village community



Villager

- Connectivity to the outside world
- Privacy to place calls from their home
- Improved efficiency and well-being

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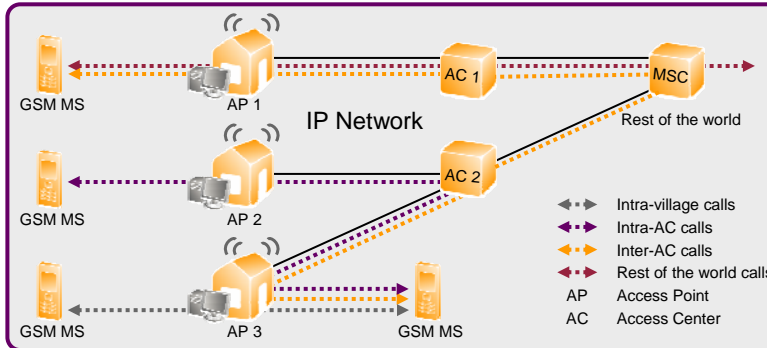
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Our Village Connection

- Uses GSM technology and handsets
- Economic local coverage with autonomous Access Points
- Local operation of village network possible
- Optimized switching and transmission capacity for calls within and between villages
- Cost-effective IP transport
- Alternative energy options



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Summary

Nokia Siemens Networks Village Connection leads the way toward affordable rural connectivity

The system enables a new franchise-based business model - regulation should look how to enable this to its full potential

Our Village Connection ensures CAPEX and OPEX efficiency

The solution is proven in successful pilots

Nokia Siemens Networks Village Connection turns rural village coverage into an attractive opportunity

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