













Network Status	Mobile Network	Mobile Network
Upgrade the existing network	Expand coverage	Packet switched / higher data rate Circuit switched to GPRS, GPRS > EDGE > UMTS
Requirements	network extension demand planning establish backhaul + interconnection links RAN and concentrator planning extend required infrastructure + field service	 check HW + SW release for upgrade capability change network infrastructure from CS > PS provide for IP traffic transmission and gateway staff training on new technology develop / provide applications and content
Cost	+ extended infrastructure + facilities ++ new backbone links (fiber or MW)	++ cost for new packet switched infrastructure ++ upgrade IP traffic transmission / peering ++ train new staff on technology
Benefits	extensions are faster deployed quick voice and SMS services for subscribers staff is familiar with technology ++ network usable for data capabilities	++ demand of mobile data is high/churn is likely +++ mobile broadband services are possible ++ long term / future prove



Network Status	No ICT coverage area	No ICT coverage area	No ICT coverage area
Develop ICT access	Satellite access	Radio access networks	TV and radio broadcast
Require- ments	 earth station / earth terminal (VSAT) space segment transponder bandwidth ground distribution network 	 available frequency spectrum limited amount of power trunking+switching for UHF trunked trained staff and operators 	 broadcast TV transmitters Powered transmitter sites Radio / TV content to be transmittee User terminals (TV or radio) + power
Cost	++ satellite terminal / infrastructure +++ space segment / transponder bandwidth + ground access network	+++ relatively inexpensive equipment ++ power consumption relatively low + trunked version needs backbone ++ very portable+light infrastructure	+++ low cost for user reception + analogue transmitters used availab ++ transmitter maintenance
Benefits	+++ can be implemented anywhere + available bandwidth is limited ++ implementation and maintenance is substantial	+++ inexpensive solution for wide un- connected low service demand area + roll-out is fast and inexpensive + very portable+light infrastructure no or very limited data capabilities	+++ vast areas can be reached communication is only one-way ++ low cost solution for remote learnin ++ good point to multipoint disaster warning solution



5. What is technically needed to implement new and emerging ICT technologies

ICT network expansions require generally a high amount of planning

- Interconnection and long distance links (trunked and radio links)
- Local access network planning last copper mile or radio access network
- Switching, data centers and international gateways have to grow accordingly

and a strength

- Consider stable power requirements, plan resort to Solar/wind/diesel/hybrid
- National spectrum management

预览已结束, 完整报告链接和二维码如下:

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