



**Ministry of Information
and Communications
Government of Nepal**



**International
Telecommunication
Union**



**Ministry of
Communications
Government of Israel**



**Ministry of Foreign Affairs
MASHAV-Center for
International Cooperation
Government of Israel**

Land Mobile and Fixed Services



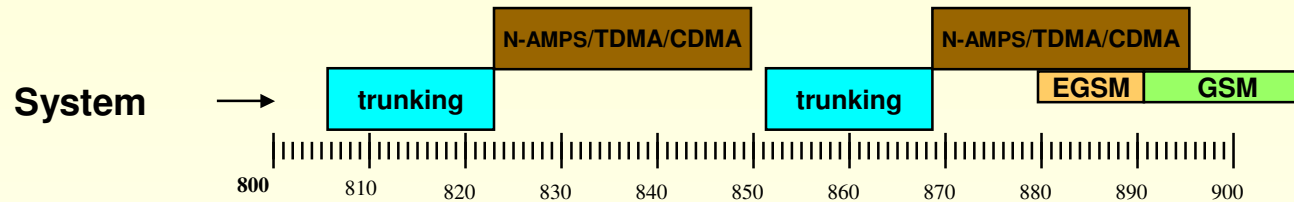
800/900 MHz Cellular, Trunking & TV allocations



15 October 2008

Israel allocation

US standard

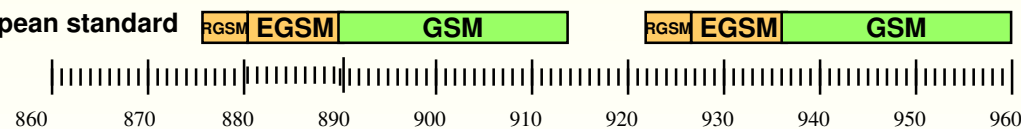


EUROPEEN

TV standard

CH63	CH64	CH65	CH66	CH67	CH68	CH69
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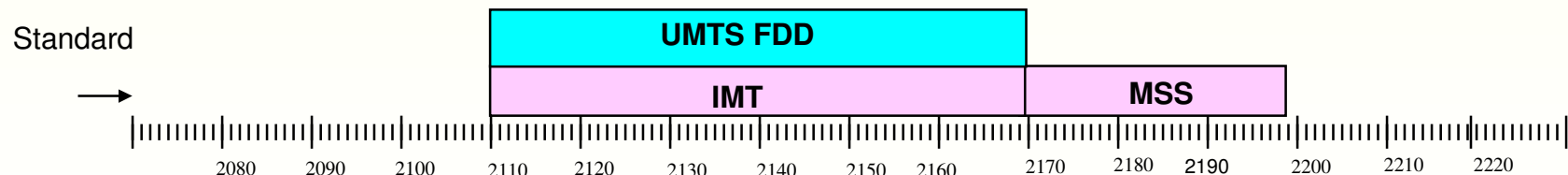
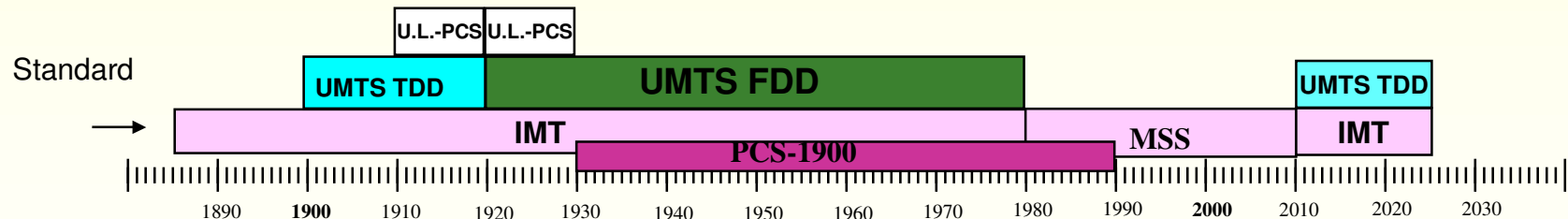
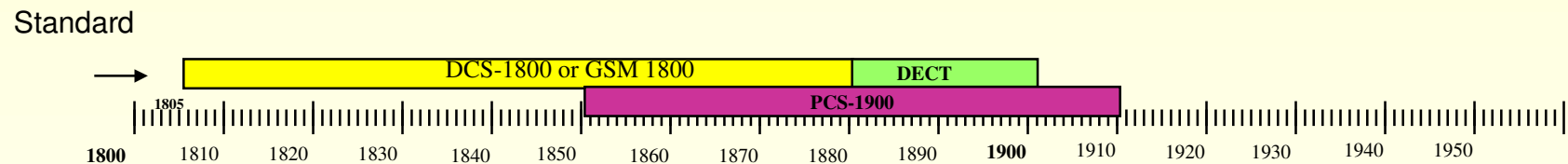
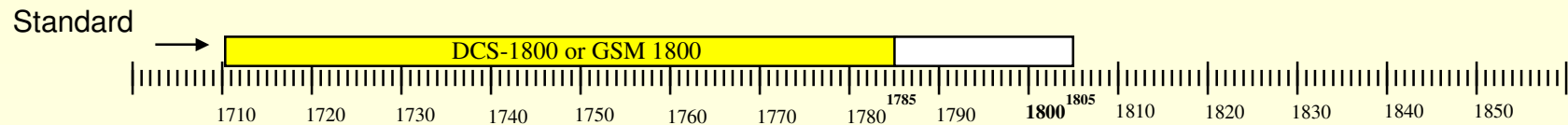
System European standard





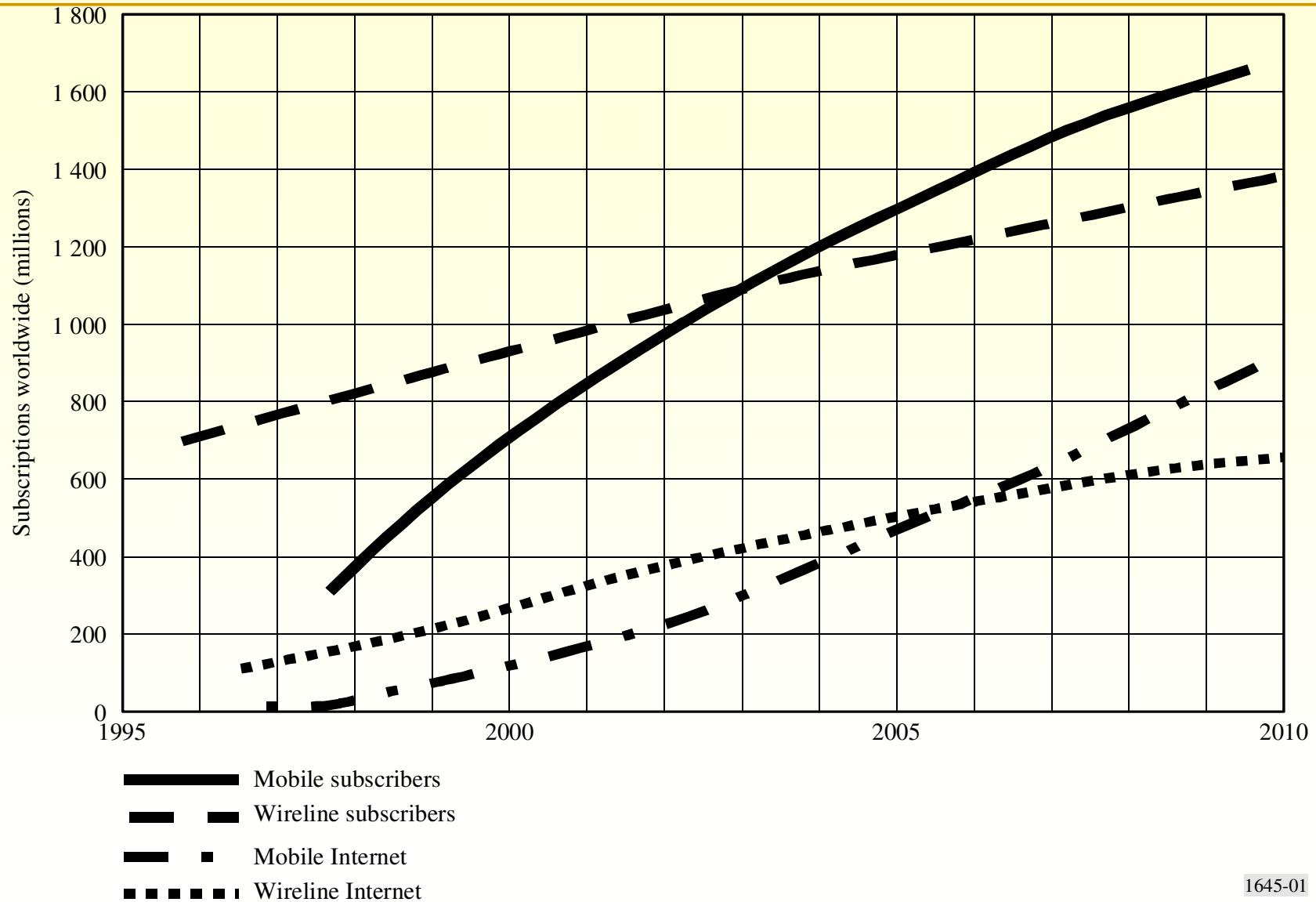
15 Oct. 2008

LAND Mobile Standards 1700-2200 MHz





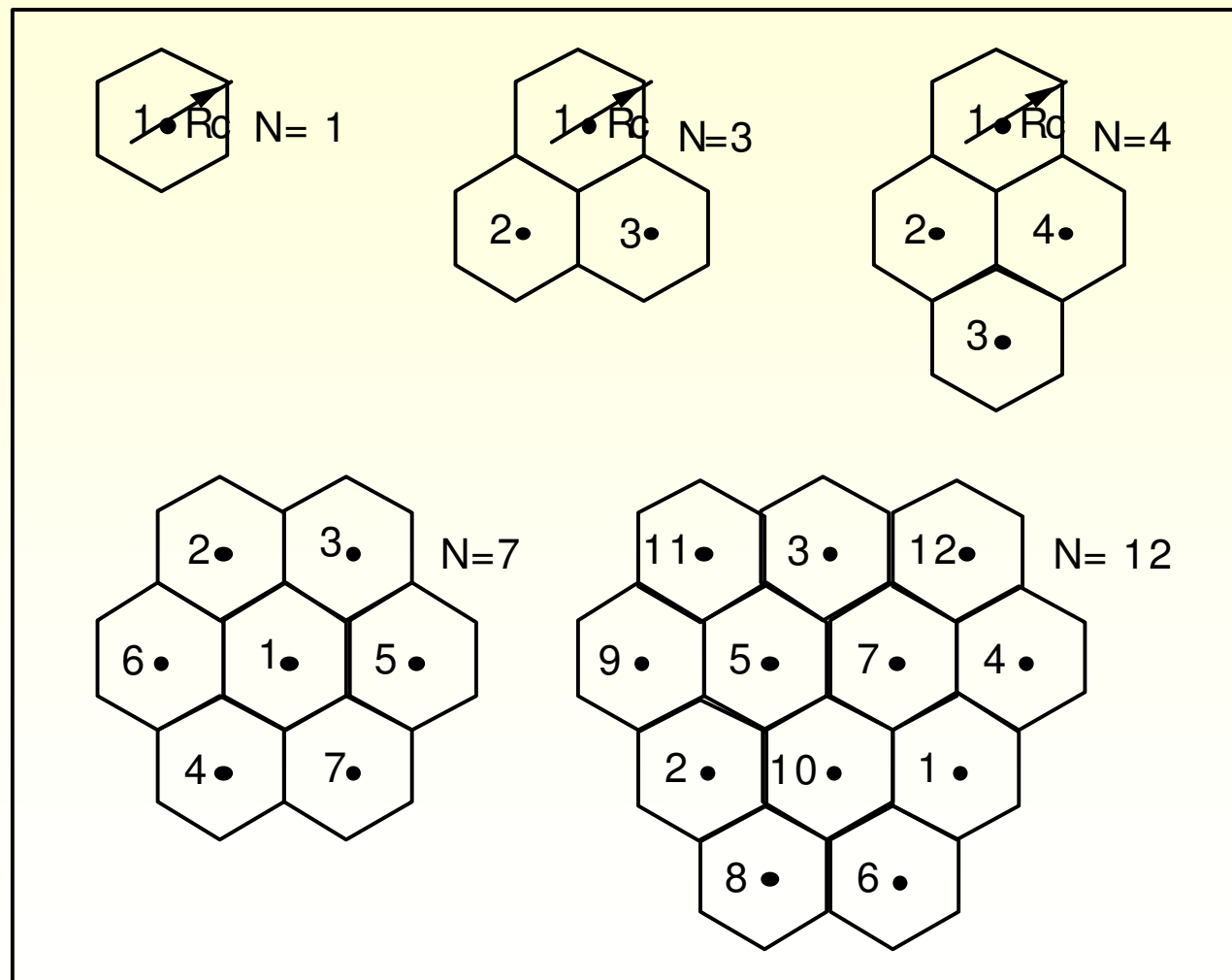
Land Mobile- ITU-R Rec 1645, Global Growth



1645-01

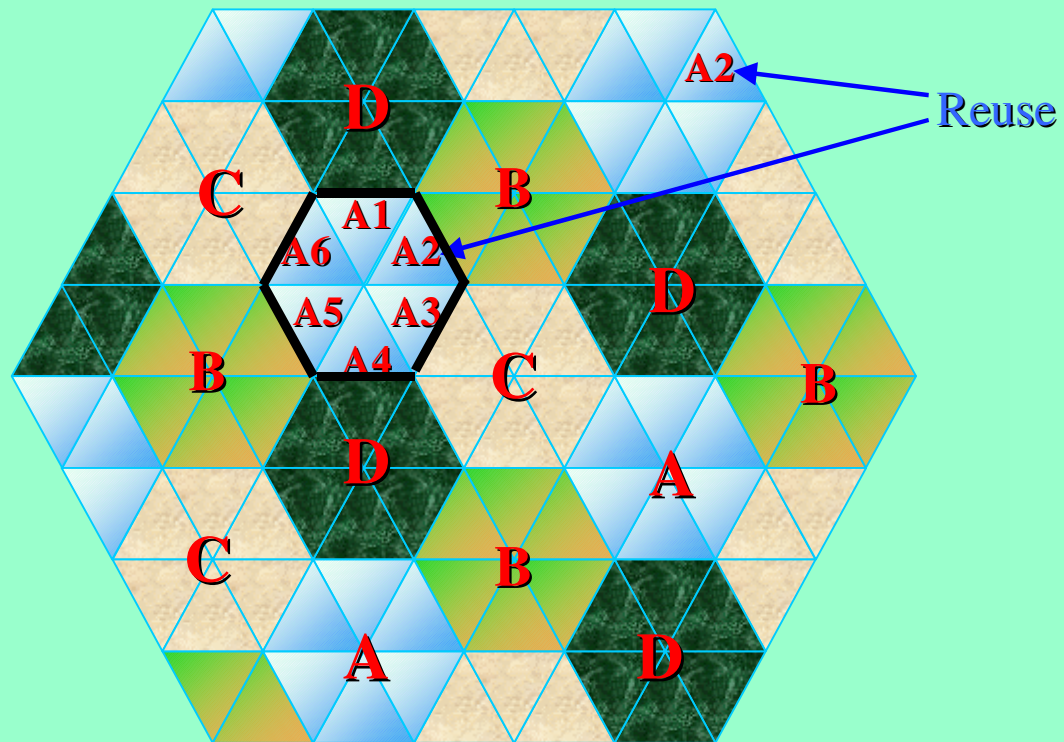


Land Mobile- Typical cell clusters



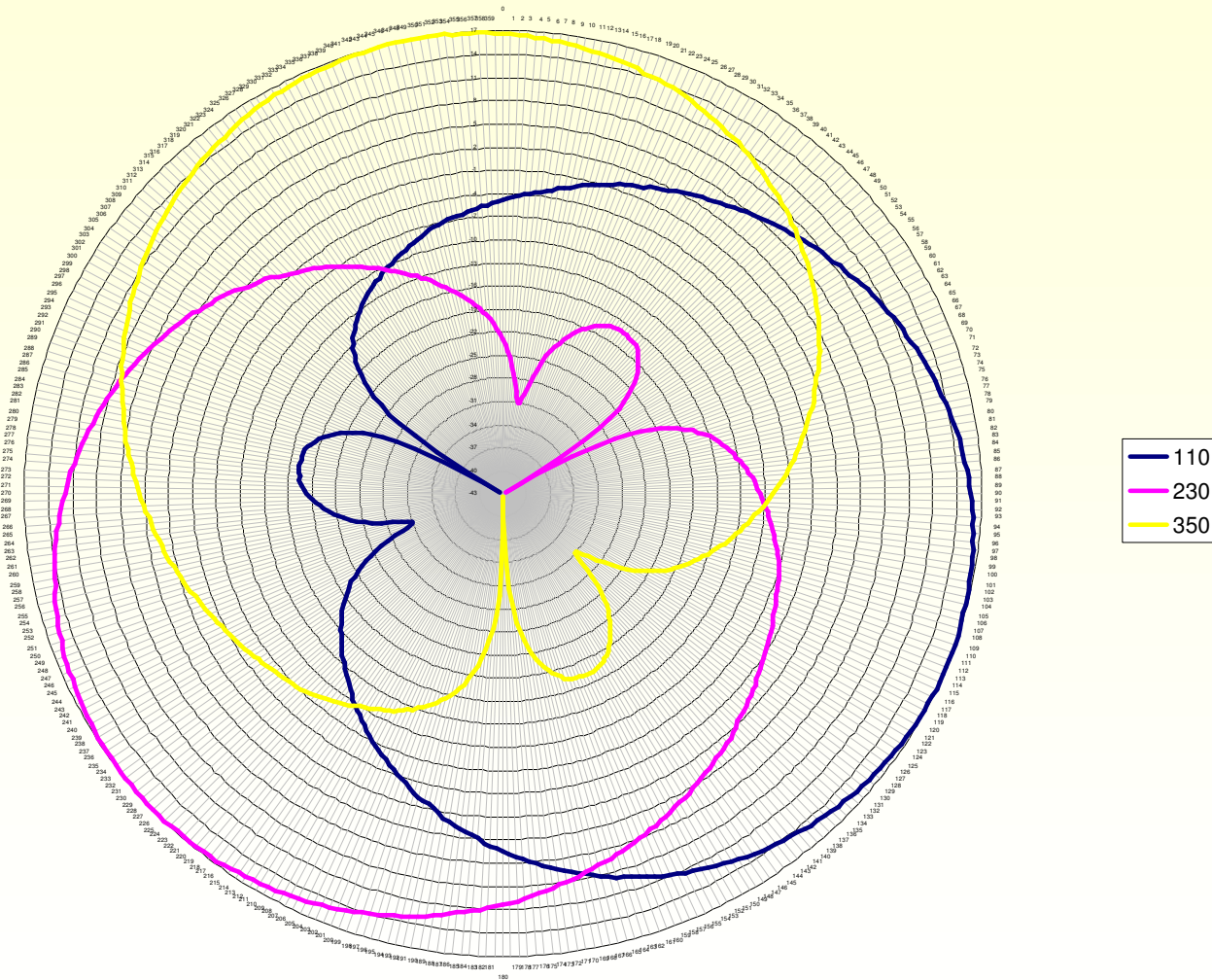


Land Mobile- Reuse



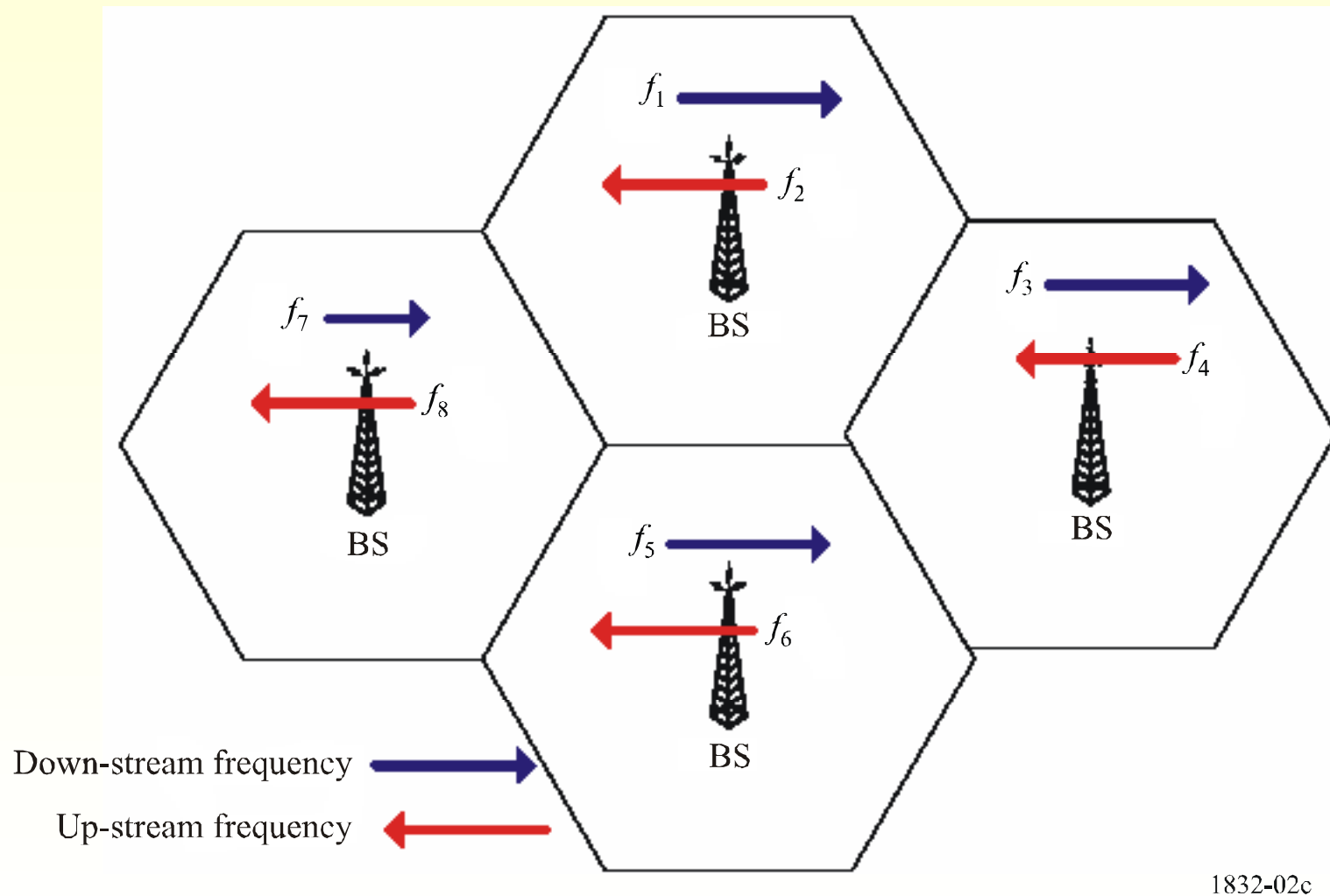


Land Mobile- Cellular typical BS pattern



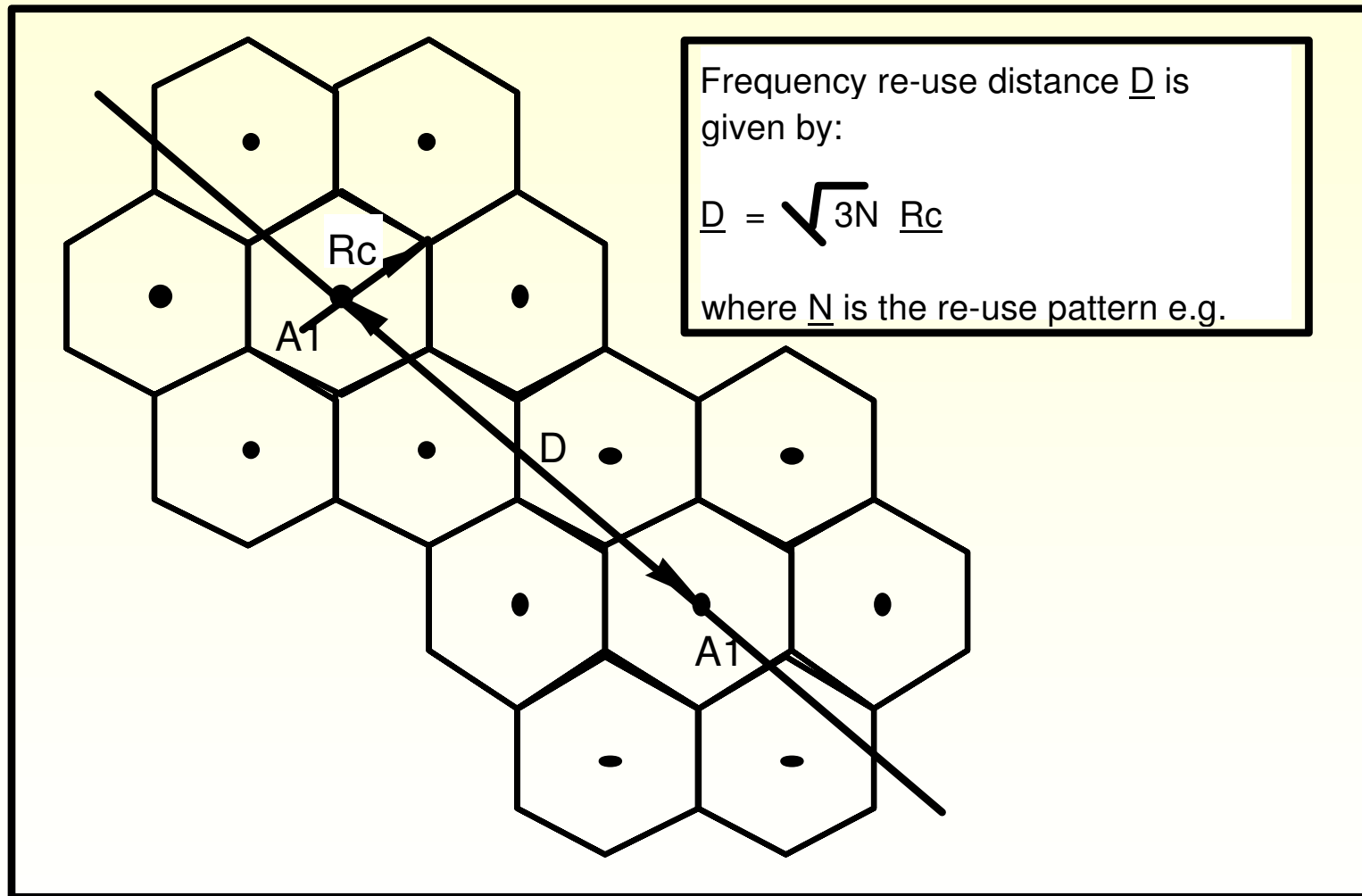


Land Mobile- Up and Down Links





Land Mobile: 7 cell re-use example

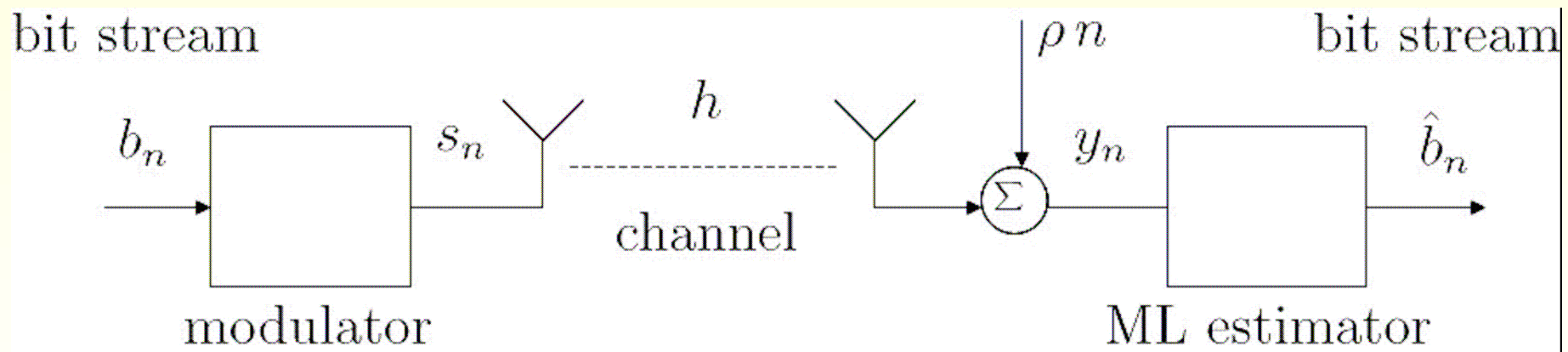




Land Mobile- Maximum Likelihood Comms



SISO communications system. Single Input Single Output System (SISO) Dr. Doron Ezri

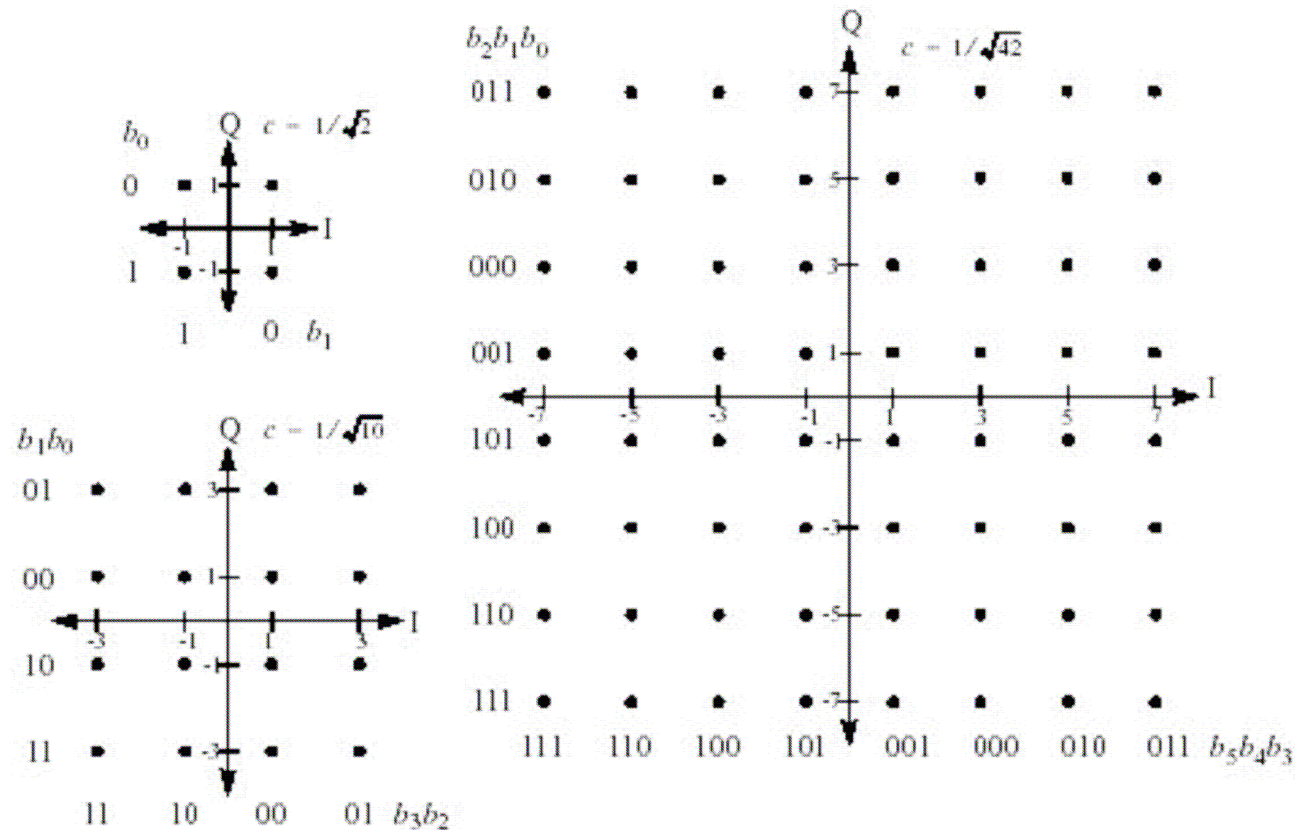




Land Mobile- Modulation

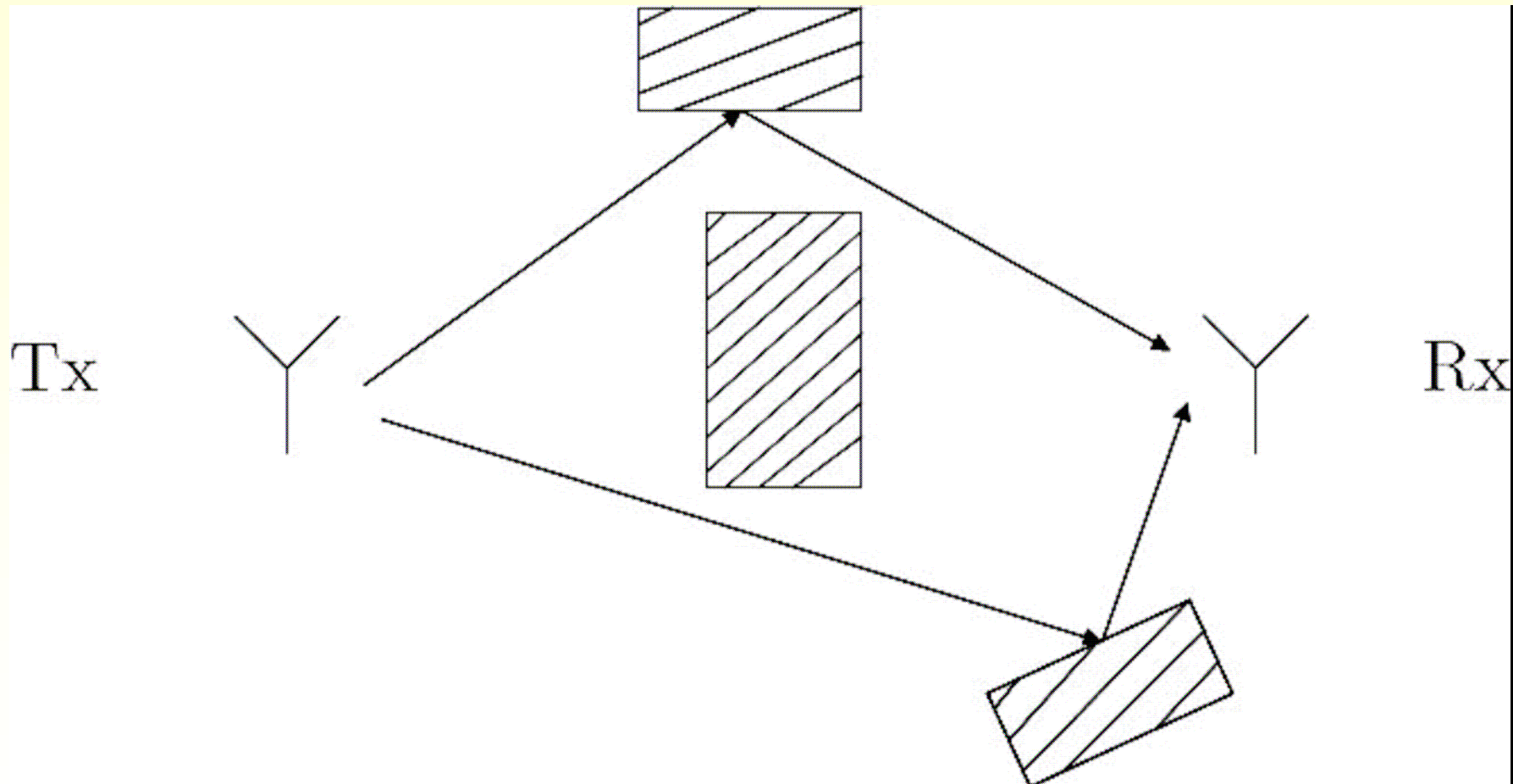


QPSK, 16QAM and 64QAM modulations Dr. Doron Ezri



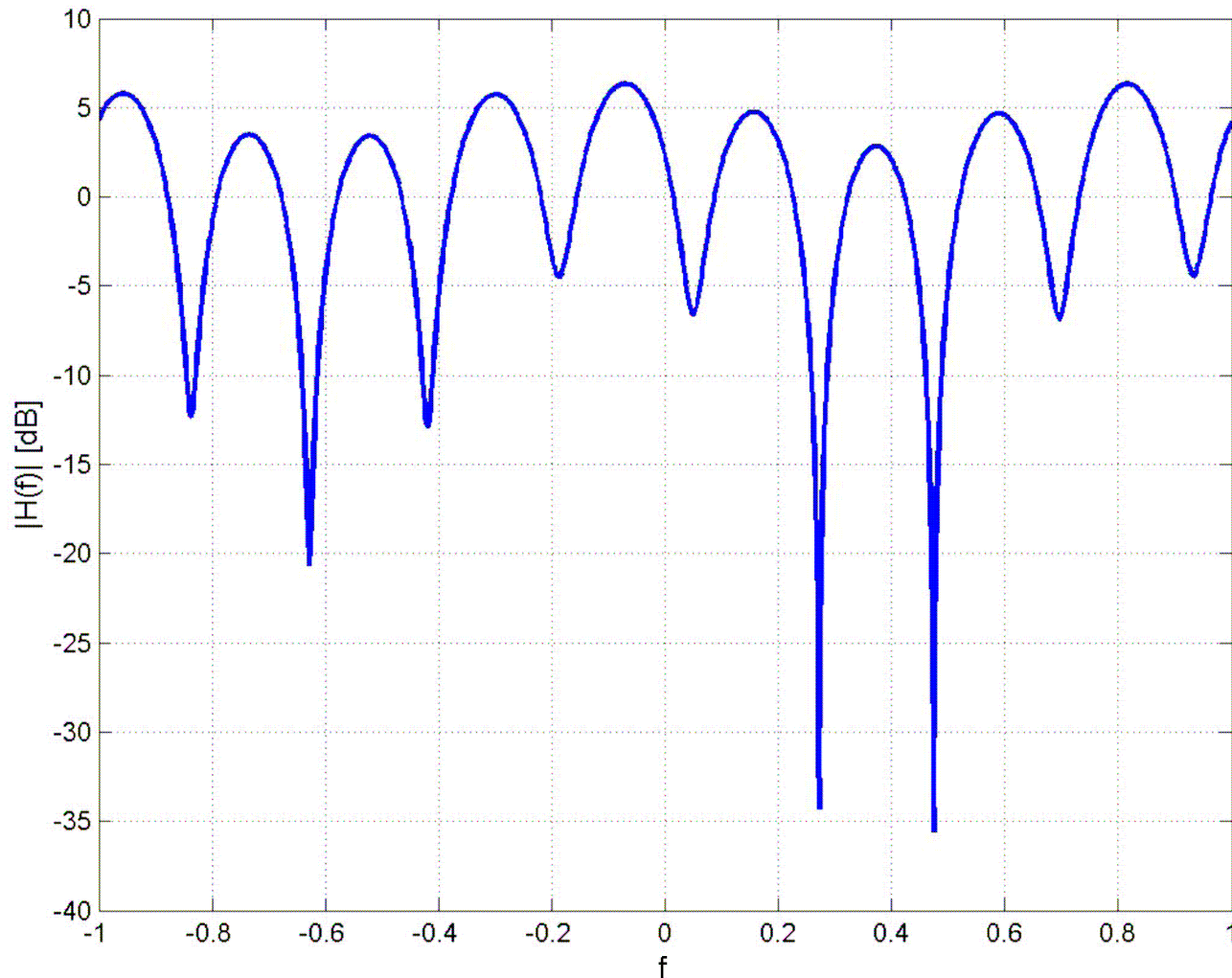


Land Mobile - A multipath scenario



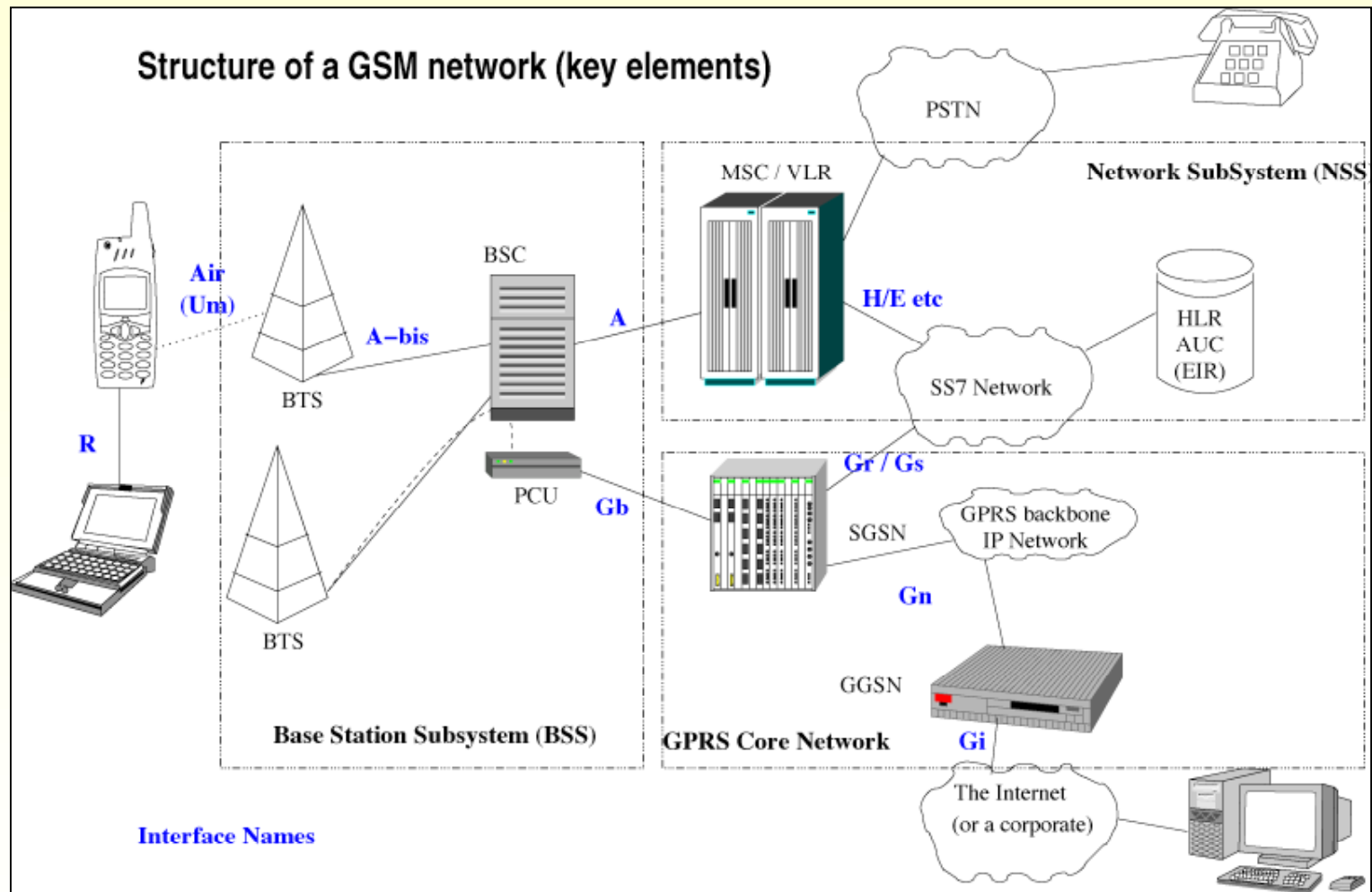


Land Mobile- a selective **fading** channel.





Structure of a GSM Network (key elements), LMHB



BTS; Base transmitter station; BSC Base station controller
PCU Packet control unit; MSC Mobile switching centre
HLR Home location register; VLR Visitor location register
SGSN Serving GPRS support node; Um, A-bis, A, Gb, Gr, Gs, Gn, Gi various interface protocols



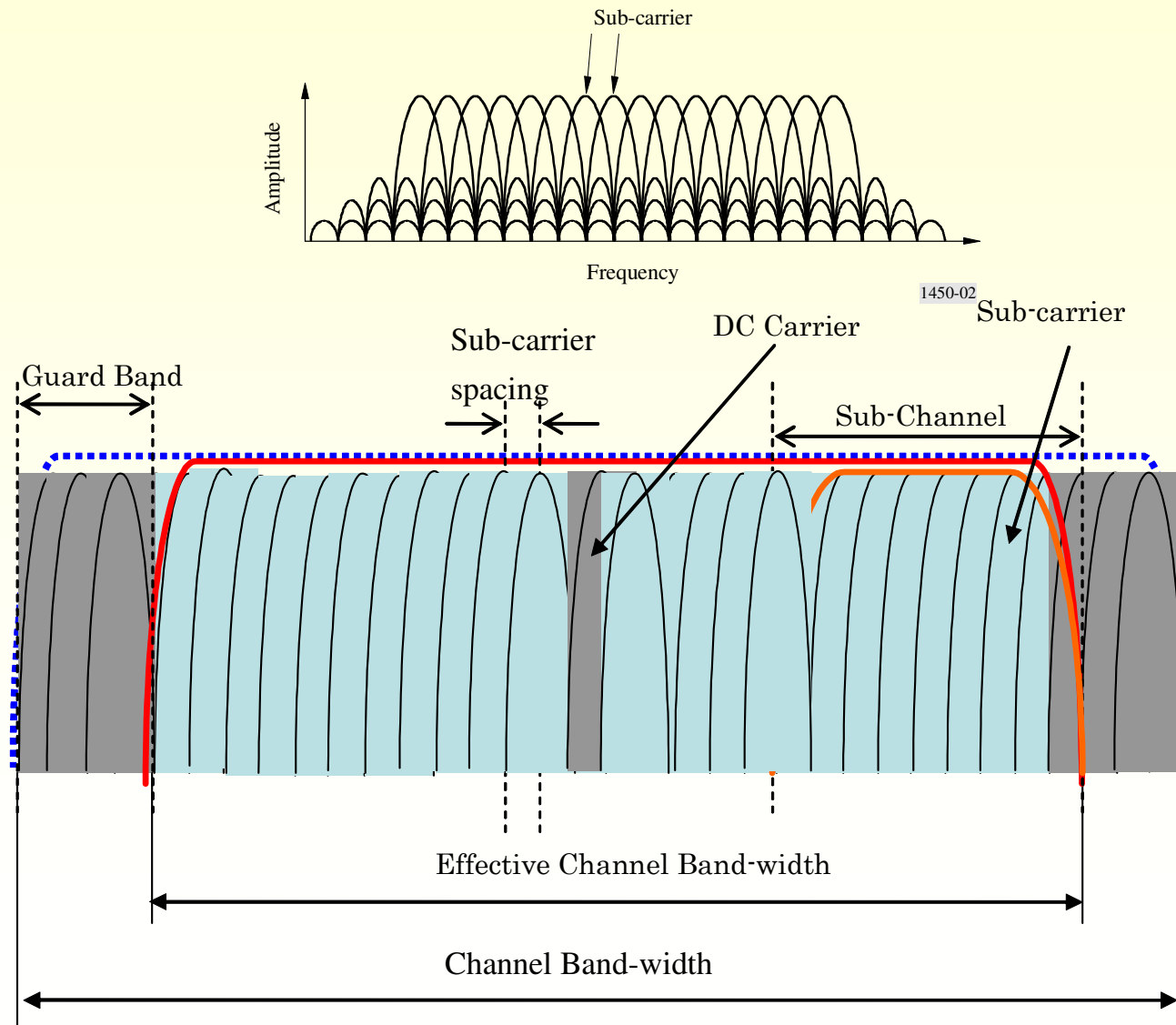
Progressive enhancements to 3GPP specifications, LMHB



Version	Name	Max uplink speed	Max downlink speed	Latency
Release 99	WCDMA	384 kbit/s	384 kbit/s	120 ms
Release 4	WCDMA	384 kbit/s	384 kbit/s	120 ms
Release 5	HSDPA	384 kbit/s	14 Mbit/s	80 ms
Release 6	HSPA	5.8 Mbit/s	14 Mbit/s	60 ms
Release 7	HSPA+	11.5 Mbit/s	42 Mbit/s	40 ms
Release 8	LTE	80 Mbit/s	300 Mbit/s	10 ms

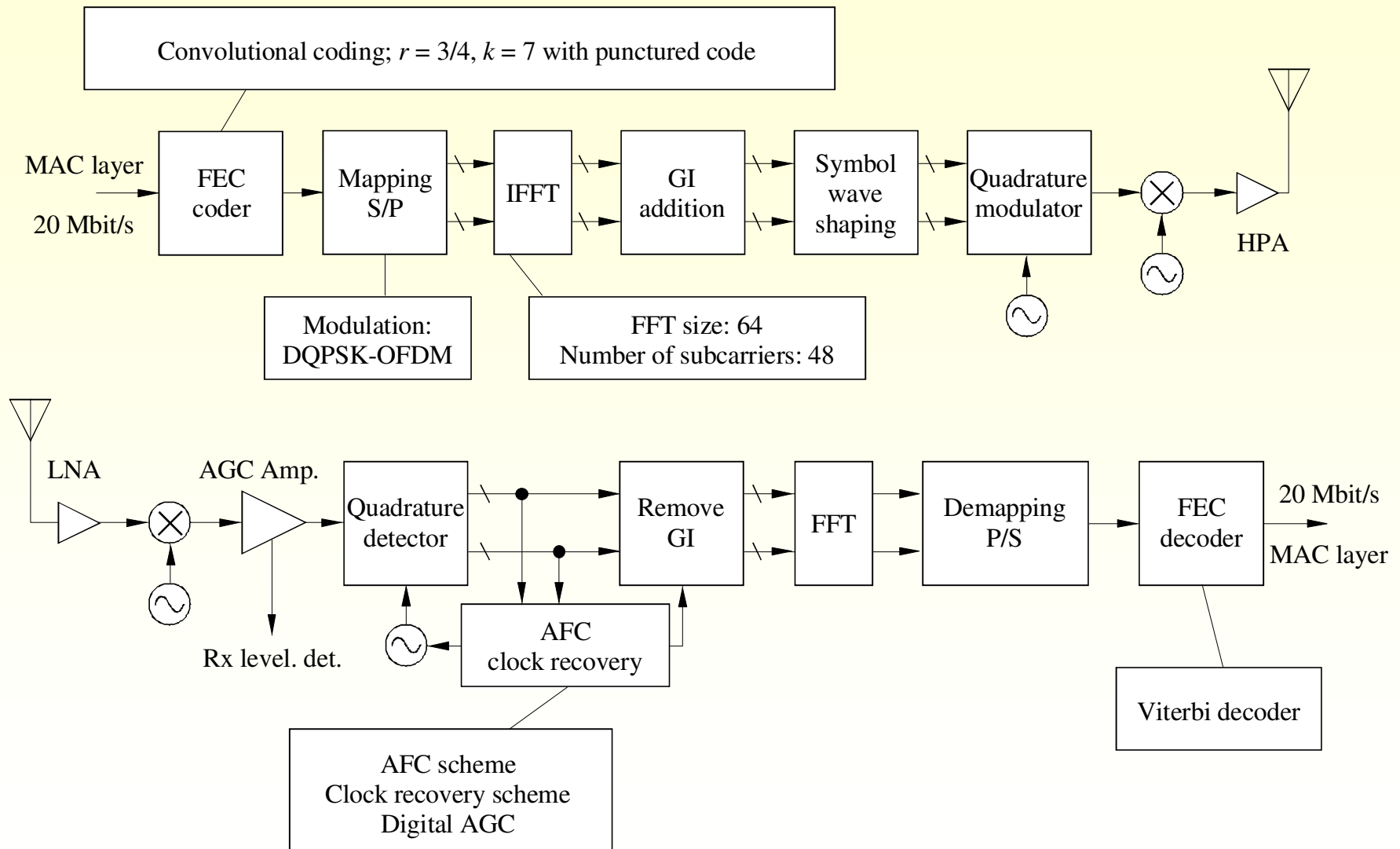


Spectrum AND Structure of OFDM, LMHB_M1450





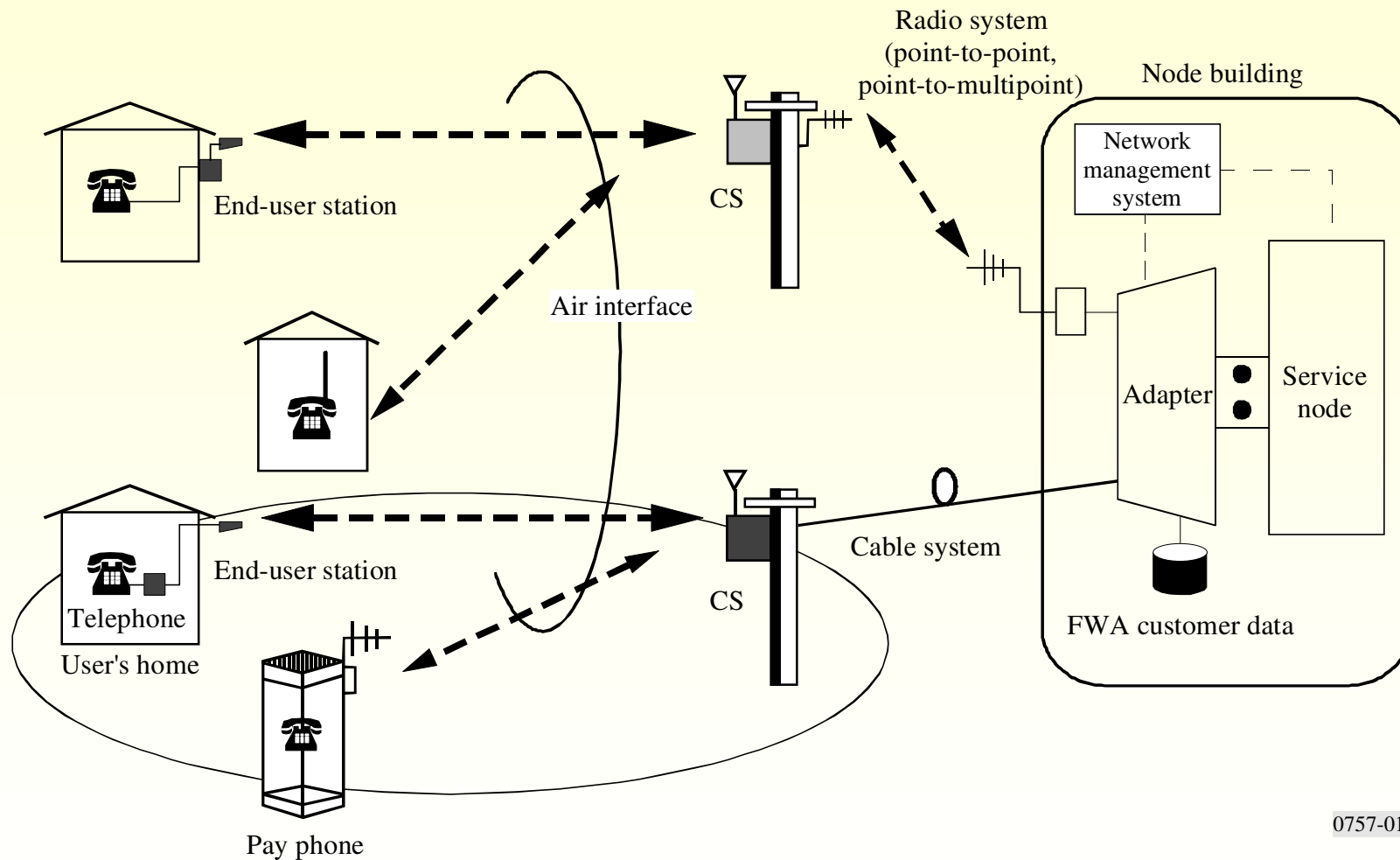
Configuration of DQPSK-OFDM, with conventional Coding, M1450



1450-03



FWA using mobile technologies; ITU-R F. 757



0757-01



Mesh Network; Mobile & RLAN, ITU-R LMHB

