



3G Industry Workshop

presented by
Hutchison Telephone Co Ltd

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Hutchison's Views

Hutchison views that the proposal :

- discourages long term infrastructure investment
- in favour of NSP
- many unresolved business, operational and technical issues
- poor accuracy
- high regulation costs



Discourage Infrastructure Investment

- better coverage and higher capacity lead to more open network obligation and higher risks for MNO
- reducing surplus capacity can reduce obligation
- higher & longer term investment not encouraged
- return on investment hard to predict
- investment plan beyond control of network investors
- much less costly, risky and committal to become NSP than MNO



In Favour of NSP

- NSP classification rather loose & obligation undefined
- can NSP resell the regulated wholesale capacity ?
- the current OFTA proposal may encourage NSP in very short term speculation on capacity
- chance of creating a super NSP without investment
- NSP should be subject to same regulatory requirements as MNO, such as MNP, porting charge, CLI, other charges



Business Issues

- wholesale price based on “Retail Minus” or “LRAIC” is not fair to MNO, as it will not be commensurate with high 3G investment and risks
- wholesale pricing should not be less than fully allocated cost including spectrum auction fee and CAPEX plus 25% ROI, as opposed to LRAIC and retail minus
- OFTA proposal has not defined any minimum capacity commitment from NSP
- MNO will encounter unpredictable capital funding and cashflow requirements
- minimum of 30% open network is far too high



Operational Issues

- inconsistent busy hour between MNO and NSPs
- unpredictable lead time to build additional capacity
- impossible to define a commonly agreeable measurement area / time for all NSP, among OFTA's suggestion, 'busiest 1% of cells' is more pursuable
- network traffic forecast almost impossible



Technical Issues

- inclusion of cell id information in CDR is questionable
- high network processor loads may lead to system stability problems
- RAT statistics may not be available from UMTS network
- manual measurement of ATCBH RAT almost impossible



Poor Accuracy

- non linear relationship between data volume and load factor
- using uplink traffic to project higher loading downlink capacity is invalid and incorrect
- CDR cannot accurately show
 - ⇒ occupancies of radio channels in multiple cells during soft handover
 - ⇒ subsequent handover traffic volume will be erroneously presented in the call initiating cell
- there is no commonly accepted industry measurement method for RAT



High Regulation Costs

- a dedicated CDR processing Centre is necessary to carry out post-processing of huge amount of data
 - ⇒ CDR, grouping of NSP data, RAT statistics, ATCBH calculation, conversion of voice traffic into data volume
 - ⇒ data volume to be processed is estimated at least 100 times more than current voice business
- huge CDR data volume will induce much higher processor load in RAN,SGSN, GGSN, CG etc
- as tremendous data analysis is involved,OFTA will incur also high costs in regulation



Current situation

- despite several rounds of discussions and consultation, there are lots of issues unresolved
- hasty decision - should we continue to adopt this proposal of mandatory open network
- may need further rounds of consultation if open network is still to be mandatory



Hutchison's Proposal

- Hutchison strongly views NSP connection should be achieved through commercial negotiation and should not be mandatory
- **Recommendations**
 - ⇒ immediately proceed with licensing without mandatory open network obligation
 - ⇒ should OFTA view that competition at the content and service level is not satisfactory or healthy, OFTA may introduce open network obligation 3 years after commercial service
 - ⇒ this 3 years period will provide
 - stable investment period
 - time for complete network build out in HK
 - 3G technology to become mature
 - sufficient time for the industry to come up with better process for regulation



Recommended mandatory conditions (if any, after 3 years)

- ① wholesale pricing should not be less than fully allocated cost including spectrum auction fee and CAPEX plus 25% ROI, as opposed to LRAIC and retail minus
- ② open network obligation be limited to maximum 15%
- ③ NSP commits 5 years' capacity backed by bonds and produce monthly traffic forecast
- ④ capacity reporting only required in the case of failure to reach commercial agreement and upon dispute by NSP
- ⑤ NSP needs to fulfill certain MNO regulatory obligations, e.g: MNP, porting charge, CLI and other charges
- ⑥ NSP cannot sub-lease capacity to other "NSP"
- ⑦ MNO is not obliged to lease capacity to other MNOs



thank you