



Comments on 3G "Open Network" Regulatory Framework

OFTA Industry Workshop
5 January 2001

On "Open Network" Requirement

Nokia welcomes the notion of "open network" as it encourages service development that can benefit end-users.



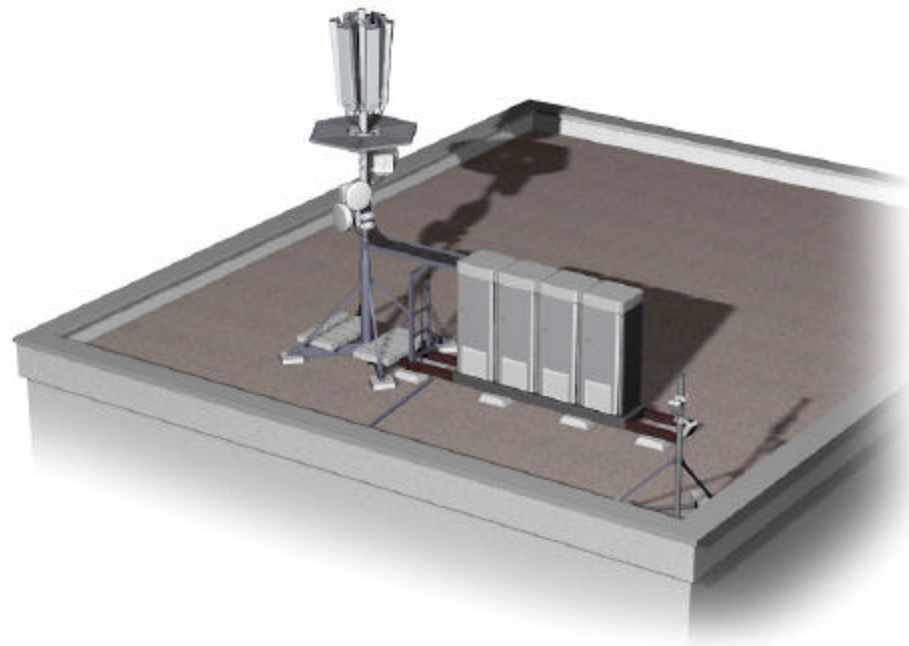
Need for Standard Solutions

- The current "open network" measurement method calls for network functionalities which are not mandatory in 3GPP.
- For instance, recording of cell identity information in CDR (which is necessary for determination of "Actual NSP Traffic Occupancy") is not mandatory in the 3GPP standard.
- Measurement solutions that do not conform to the 3GPP standard should be avoided.



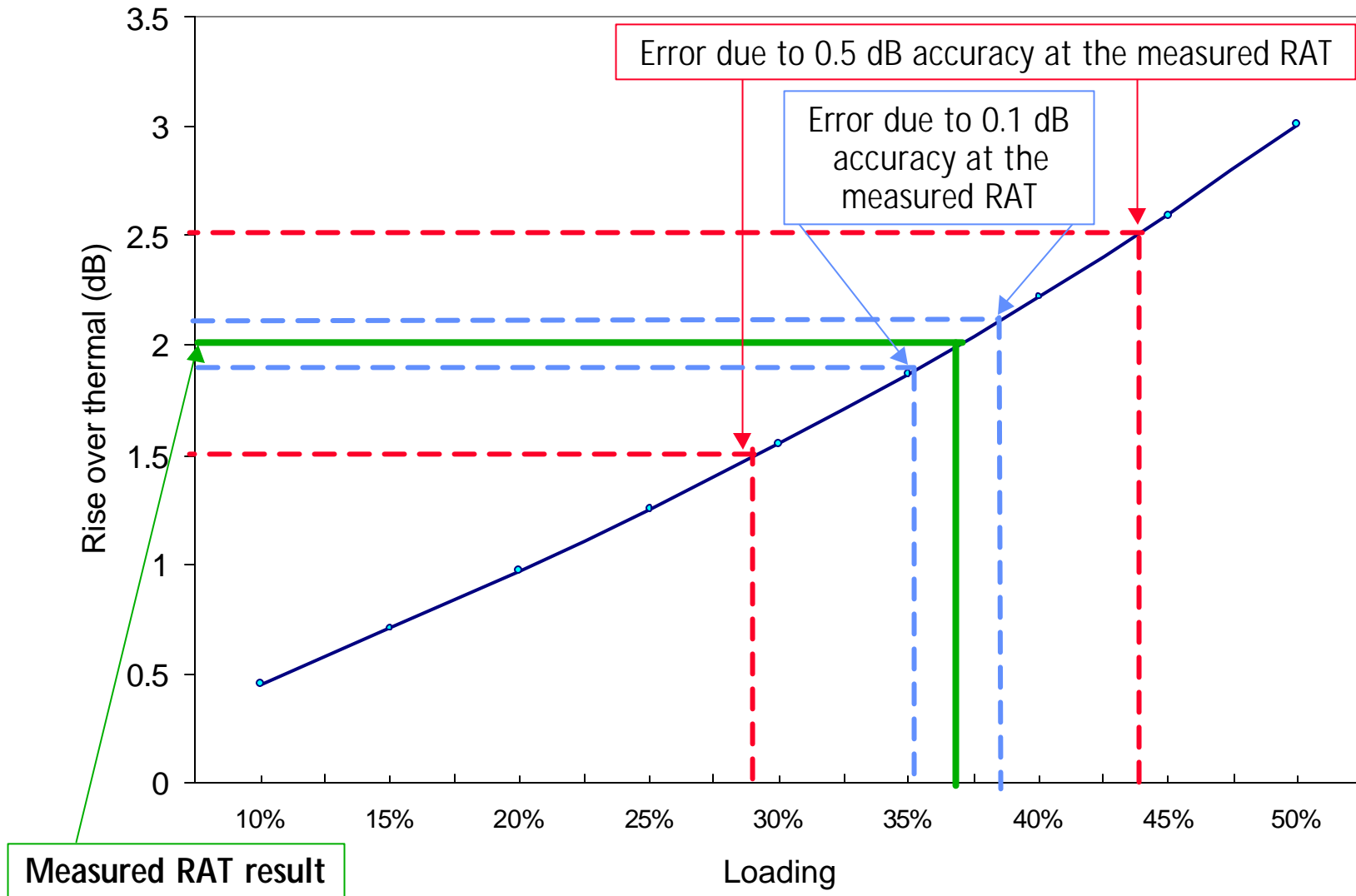
Accuracy of RAT measurements

- RAT value typically stretches over a 5 to 6dB range. A 0.5-dB error can be too much.
- Vendor equipment should be able to support measurements of good enough accuracy.
- Note that measurement methods to achieve high accuracy (e.g. Averaging process) will add to the system processing load.



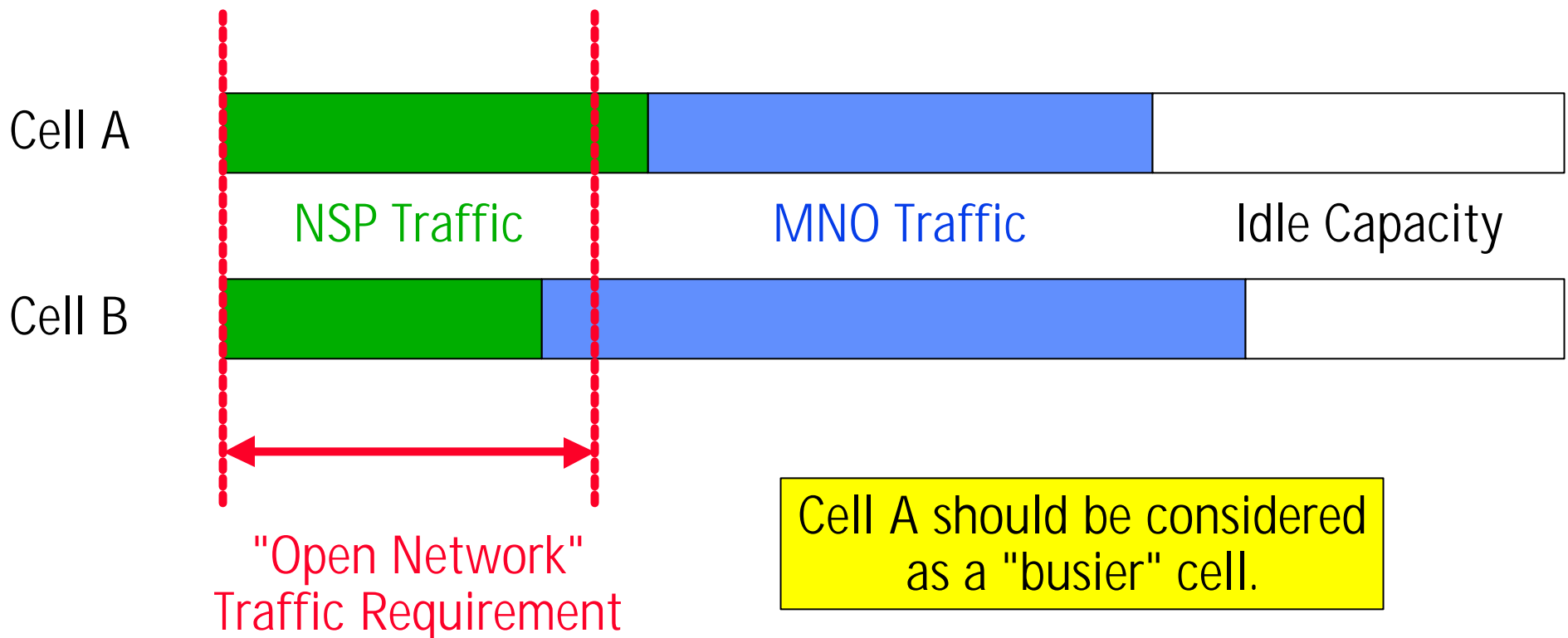
Accuracy of RAT measurements

Generic Load Curve



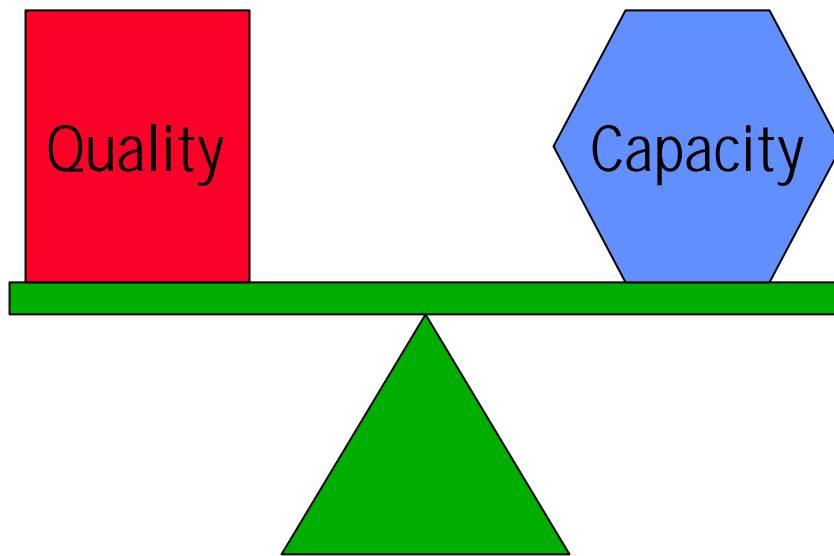
Selection of "Busiest Cells"

- Cells with the busiest NSP traffic (instead of total NSP+MNO traffic) should be selected for measurements.
- The principle is: MNO's own traffic distribution should not be considered in the determination of NSP traffic occupancy.



Factors affecting "Network Capacity"

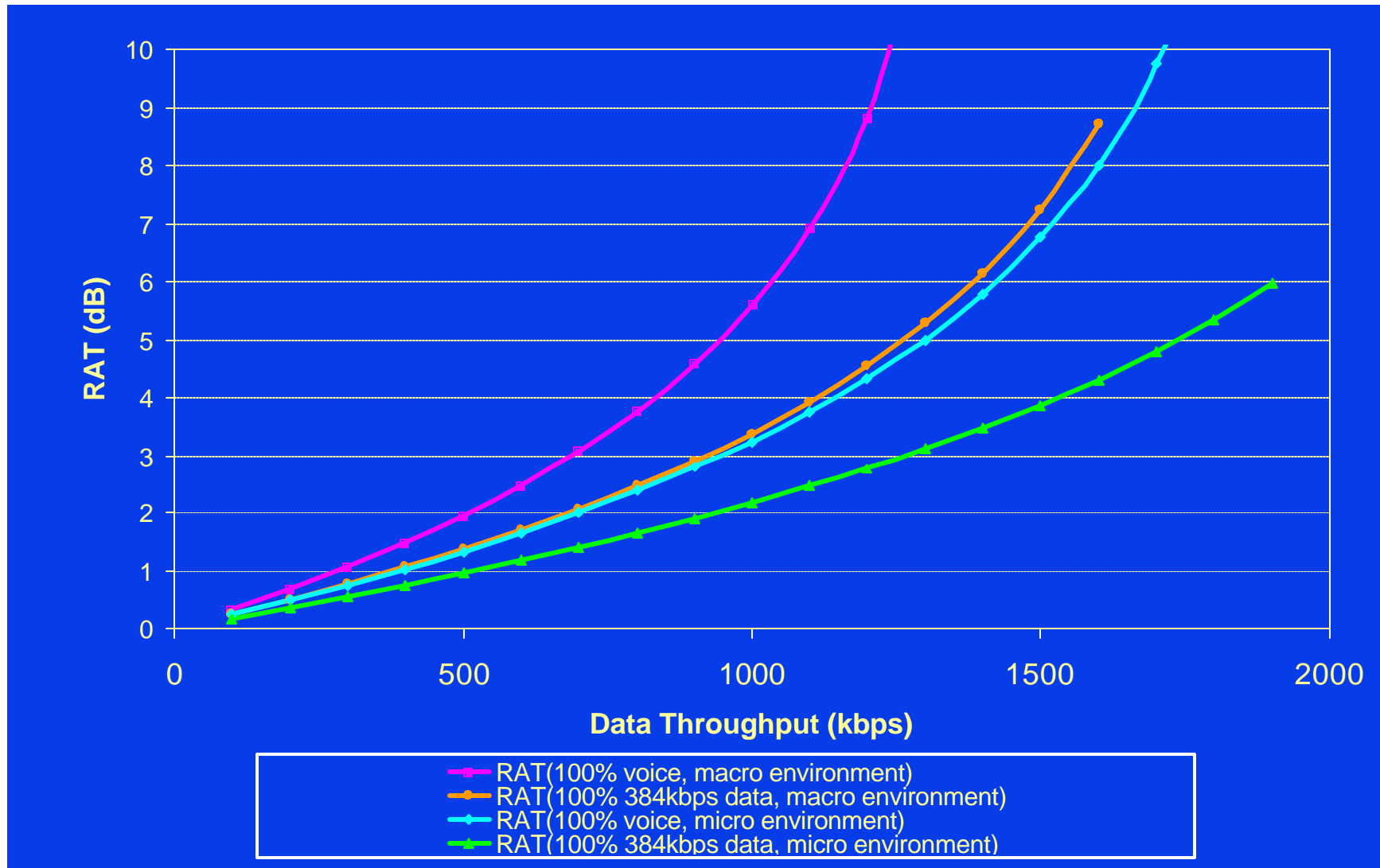
Effect of Service Quality



- Quality and capacity are tightly coupled in WCDMA.
- Different quality approaches (e.g. link performance requirements) can lead to different "network capacities" as derived by the loading value.
- Quality of service associated with "network capacity" measurement should be considered more carefully. This task may be challenging as different vendors may have different forms of implementation.

Factors affecting "Network Capacity"

Effect of Service Mix and Radio Environment



Bringing "open-network" benefits to end-users

- We welcome efforts to promote service innovation.
- A good basic 3G network is needed for introduction of MVNO and development of innovative services.
- We need simple and straightforward rules in early phases in order to speed up network roll-out, coverage improvement and enhancement of network quality.
- Countries with few regulations for MVNO actually make MVNO boom, e.g. UK is the country with most MVNOs (8 in the market).
- A successful MVNO does not necessarily occupy a large share in MNO, e.g. Virgin Mobile (MVNO) shares 5.1% of subscribers in One2One (MNO) as of July 2000.