

27 June 2003

Response to iDA's Consultation Paper on "Designation of Singapore Telecommunications Limited's Local Leased Circuits as Mandatory Wholesale Service" by A*STAR

1. Agency for Science Technology and Research supports the efforts towards competitive pricing of the Local Leased Circuits (LLC) as a critical step in promoting Research and Development (R&D), especially scientific innovation in telecommunication research. The R&D sector (together with the education sector) is also a major consumer of LLC bandwidth.
2. In general, though telecommunication costs have fallen substantially, the cost of LLC is still substantial and has become comparable to the cost of international leased circuits from Singapore. Any and every effort that helps reduce price should be explored. We applaud iDA for being proactive and look forward to more affirmative action for lower LLC prices.
3. In a recent competitive tender by NUS for SingAREN, we see that SingTel charges higher prices, compared to StarHub (through Asia Netcom as sub-contractor). NUS did not receive other LLC proposals. We understand that the primary reason is that other operators find it not worthwhile to purchase LLC wholesale in order to provide this service.
4. Though various independent studies (an example is from CMPnet.asia's *Watching The Local Leased Tails – An Industry Update*, dated 1 April 2003) have concluded that Singapore's LLC price is higher than other comparable countries. From an R&D angle we would like the pricing for LLCs to be comparative to similar R&D countries such as Korea.
5. We recommend that this regulatory control be reviewed after 3 years. Two other possible models to consider are Government Owned Company Operate (GOCO), somewhat similar to the MRT model and the separation of SingTel's LLC services from infrastructure, similar to Alberta SUPERNet, Chicago CivicNet and New York City Council Network Project.
6. The definition of LLCs should go beyond 2Mbps, to beyond 1Gbps. The R&D and Education sectors already require very high bandwidth and are currently constrained from using higher bandwidth by the high cost of LLC. Life-sciences research and Grid computing are two examples of areas that will greatly benefit from the cheaper availability of high bandwidth at 1Gbps range, resulting in higher R&D investments and research activity in Singapore. Wholesale prices should also not be limited to operators only but should be offered to large consumer organisations, such as Institutes of Higher Learning (IHLs) and R&D organisations.
7. We would like to reiterate the positive impact of cheaper bandwidth price towards expanding R&D activities in Singapore. To date they have been constrained by high LLC prices, even though international leased circuit prices

have fallen sharply. Lower LLC prices should bring bandwidth prices to a level that would further stimulate the R&D environment in Singapore.

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