

EXPLANATORY MEMORANDUM

1. This Explanatory Memorandum explains IDA's decision ("**Decision on Reconsideration**") in respect of OpenNet's request to IDA dated 18 January 2013 ("**Reconsideration Request**") to reconsider certain aspects of IDA's direction dated 4 January 2013 ("**Direction on Directed Modifications**") and the grounds of the Decision on Reconsideration.
2. Unless the context requires otherwise, all capitalised terms used in this Explanatory Memorandum shall have the same meanings as in the ICO.

PART I: INTRODUCTION & BACKGROUND

3. Under OpenNet's existing ICO, among others, OpenNet provides Co-Location Space of up to 120 square metres per Central Office. As the current Co-Location Space at several of OpenNet's Central Offices is fully utilised or near full utilisation, new Co-Location Space is needed. OpenNet has submitted a proposed set of terms and conditions, to offer additional Co-Location Space at the Central Offices (i.e. Schedule 12C (Co-Location Space & Service in New Co-Location Room) ("**Schedule 12C**")), for IDA's review and approval. OpenNet has also provided the associated changes to Schedule 18 (Dictionary) for IDA's review and approval. On 30 October 2012, IDA commenced a public consultation to gather feedback from the industry, which closed on 20 November 2012.
4. After having carefully considered OpenNet's submissions as well as the feedback received, on 4 January 2013, IDA directed OpenNet via the Direction on Directed Modifications to propose modifications to Schedule 12C (Co-Location Space & Service in New Co-Location Room) and Schedule 18 (Dictionary) in relation to OpenNet's proposed Co-Location Space & Service in New Co-Location Room under its ICO ("**Required Modifications**"). On 18 January 2013, OpenNet submitted its proposed modifications to Schedule 12 (Co-Location Service), Schedule 12C (Co-Location Space & Service in New Co-Location Room), Schedule 15 (Charges) and Schedule 18 (Dictionary) to its ICO (collectively referred to herein as the "**Proposed ICO Modifications**") for IDA's approval.
5. On 18 January 2013, OpenNet also submitted its Reconsideration Request to IDA, requesting IDA to reconsider certain aspects of the Direction on Directed Modifications.

PART II: OPENNET'S RECONSIDERATION REQUEST AND IDA'S DECISION ON RECONSIDERATION

6. On 18 January 2013, OpenNet submitted its Reconsideration Request to IDA in respect of the following items:
 - (a) Reinstatement of sub-clause 1.5.3(i) of Annex 12D-1 to Schedule 12C; and
 - (b) Reinstatement of and amendment to sub-clause 1.5.3(ii) of Annex 12D-1 to Schedule 12C.

Sub-clause 1.5.3(i) of Annex 12D-1 to Schedule 12C

7. In the Direction on Directed Modifications, IDA had required OpenNet to remove sub-clause 1.5.3(i) as this is currently not imposed on the Co-Location Service offered under Schedule 12 to OpenNet's ICO. It also restricts the Requesting Licensees ("RLs") in designing their own power distribution. Furthermore, if an RL chooses to deploy its own DC power rectifier in the Co-Location Space, it is likely to use the DC rectifier to power multiple racks.
8. In OpenNet's Reconsideration Request, OpenNet informed that the amount of heat generated (and emitted) by a set of equipment is directly correlated to the amount of power supplied to that equipment. Hence, by restricting an RL from pulling or using the power designed for a rack into another rack, OpenNet will be able to control the heat emission generated by that rack. This will also prevent hot spots/high ambient temperature around the rack. Thus, OpenNet has requested IDA to reinstate sub-clause 1.5.3(i) of Annex 12D-1 to Schedule 12C.
9. Having carefully considered the above, IDA is of the view that OpenNet's reasons for preventing an RL from redirecting power from a particular rack into another rack may not be reasonable, given the factors in paragraph 7 above and the fact that OpenNet already requires an RL to comply with the maximum heat load of 3kW for each rack. Notwithstanding this, IDA also recognises that a heat spot might be created in the event an RL does not observe the said requirement. Such a situation may then create a hazard for other RLs located in the same Co-Location Room. To avoid such a situation, and considering the above in totality, IDA is of the view that it would be adequate and more reasonable for an RL to seek OpenNet's approval before the RL re-directs power from one rack into another rack and such approval shall not be unreasonably withheld.

10. Accordingly, IDA directs OpenNet to reinstate and to amend sub-clause 1.5.3(i) of Annex 12D-1 to Schedule 12C as follows:

“Power requested by the Requesting Licensee and provided by OpenNet to that particular rack must only be used for Co-Location Equipment in that particular rack. Where the Requesting Licensee wishes to pull and use the power designated for a rack for another rack, the Requesting Licensee shall seek OpenNet’s approval and such approval shall not be unreasonably withheld.”

Sub-clause 1.5.3(ii) of Annex 12D-1 to Schedule 12C

11. In the Direction on Directed Modifications, IDA had required OpenNet to remove sub-clause 1.5.3(ii) as there is no technical impediment for the proposed restriction and it prevents an RL from designing its own power distribution.
12. In OpenNet’s Reconsideration Request, OpenNet has clarified that the intent of sub-clause 1.5.3(ii) is to ensure that RLs which acquire redundant dual power supply from OpenNet do not overuse their allocated share of power as this could lead to serious consequences on their operations. Hence, OpenNet has requested IDA to reconsider its decision in respect of sub-clause 1.5.3(ii) and to approve the following revised drafting of the said sub-clause:

“The Requesting Licensee shall ensure that the total power consumed by each rack shall not exceed the circuit breaker size ordered for that rack (i.e. does not include the circuit breaker size provided as a redundant circuit)”.

13. With regard to OpenNet’s concern that the RLs may overuse their allocated share of power leading to serious consequences on their operations, IDA understands that the redundant circuit should generally be used as a back up in the case where the primary power supply is disrupted and IDA expects the RLs to take this into consideration when consuming power supplied by OpenNet. As there has been no occurrence of RLs overusing the power supply in the existing co-location space leading to service disruption, IDA is of the view that OpenNet’s concern is unfounded. Hence, it is not necessary for OpenNet to impose such a condition on the RLs. Nevertheless, IDA will monitor the situation and may review this requirement subsequently if necessary.
14. Accordingly, IDA is not agreeable to OpenNet’s revised drafting of sub-clause 1.5.3(ii) of Annex 12D-1 to Schedule 12C and directs OpenNet to remove this sub-clause.