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Date: 13th July 2020

African Network Information Centre Ltd
11th Floor, Standard Chartered Building,
Ebene Cybercity,
Mauritius

BY EMAIL: reg-admin@afnic.net

(Attention: Eddy Kahiura (Chief Executive Officer))

Dear Sir/Madam

RE: IPv4 Number Resource Allocated to Cloud Innovation Ltd – ORG-CIL-AFRINIC

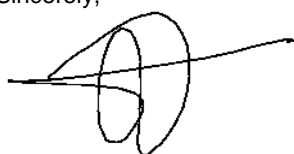
1. We refer to the following documents:
 - (a) Your letter dated 23rd June 2020 ("**Your Letter**")
 - (b) Registration Service Agreement, as signed on 23rd July 2013 ("**Agreement**")
 - (c) AFRINIC's Bylaws ("**By-laws**")
 - (d) Consolidated Policy Manual ("**Policy Manual**")
 - (e) Spreadsheet (Cloud-Innovation.xlsx) ("**AFRINIC Excel File**")
 - (f) Spreadsheet (3 Problems.xlsx) ("**Cloud Excel File**")

***NOTE: Cloud Excel File contains 2-tab page.*
2. **In regards to point 1 of Your Letter**, we find your lack of understanding on the basics of global routing alarming and humbly suggest for AFRINIC to equip its internal staff members with better knowledge on the basic functions of the internet. We wish to clarify that there is no reliable or meaningful correlation between the location where an Autonomous System Number ("ASN") is registered and the location where IP prefix announcements are originated from that ASN. As such, your reliance on the country registration of the ASN as the sole determining factor to indicate the alleged inconsistencies, as shown in the AFRINIC Excel File, is erroneous. Kindly refer to **Cloud Excel File**, specifically under the tab page of "sheet" entitled "Problem 1: ASN Registered Location vs True BGP Announcement Location" and "Traceroute Examples for Problem 1 (Host name indicates actual location of the IP)".
3. The list of prefixes provided in the AFRINIC Excel File appears to be a list of routes identified in some particular view of some routing table. Further, it appears that you have made the assumption that every advertised prefix must be recorded in WHOIS and/or you assume that the next least specific WHOIS registration applies. In reality, it is not uncommon to advertise a covering aggregate while registering only the component more specific prefixes in WHOIS. We take great pains to accurately register each assignment accurately in WHOIS with each applicable RIR. Examples of these errors are provided in **Cloud Excel File**, specifically under the tab page of "sheet" entitled "Problem 2: Allocation Data vs Assignment Data" and the other tab page of "example".
4. Further to that, in accordance to the AFRINIC Excel File, we also wish to state that the priority of reference should have been made to the more specific prefixes instead of the covering aggregates, because the more specific prefixes are the only ones that reflect the actual usage of the IPs, as illustrated in **Cloud Excel File**, specifically under the tab page of "sheet" entitled "Problem 3: Specific Prefixes vs Covering Aggregates" and the other tab page of "example".
5. **In reply to point 2 of Your Letter**, we are pleased to inform you that we have very strict policies in place to ensure that the utilization of the IPs we assign to our customers are based on a strict need-basis only, and we do keep records of our customers' IP Number Resources needs in check to ensure that the IP Number Resources are assigned in full compliance with applicable policies.
6. We wish to clarify that there is so far no codified regulations/procedures in existence made by AFRINIC that formally stipulates **(i)** the procedures in updating the usages of IPs to AFRINIC and **(ii)** the procedures on the manner of usage of the IP Number Resources. Therefore, it is not right for AFRINIC to dictate its resource members, including us, as to how the IP Number Resources should be utilized when AFRINIC's role is to merely determine whether the IP Number Resources are being utilized. Consequently, we consider that conducting updates through the WHOIS database is a sufficient and

reasonable notice to AFRINIC. As such, we have dutifully notified promptly, accurately and fully to AFRINIC by an authoritative and valid contact. However, we humbly wish to point out that it is impractical to obtain the written approval of AFRINIC for every time updates through the WHOIS database are conducted.

7. With respect, we wish to point out that AFRINIC should be actively monitoring its own database at all times in order to be notified by us. Had AFRINIC done this, we sincerely believe that you would not have made this allegation against us in the first place. Therefore, inference can be made from your allegations in point 2 of Your Letter which highly suggests that AFRINIC has not done its part by monitoring its own database, to which we find it surprising for a reputable entity to have overlooked our abiding compliance of notice to AFRINIC. As such, we humbly suggest that AFRINIC may consider conducting better monitoring on its own database to avoid any further events of misunderstanding such as this.
8. **As for point 3 of Your Letter**, we wish to clarify that section 6 of the By-laws merely defines who is eligible for AFRINIC membership and what are the different types of “Members” (*i.e.* “Registered Members”, “Resource Members” and “Associate Members”), it does not specify anything in regards to the manner or location of usage for the IP number resources. As such, we find that section 6 of the By-laws has no relevance in supporting your allegation that the use of IP Number Resources outside of the AFRINIC region is any sort of violation.
9. Moreover, we wish to point out that the Agreement merely governs the business relationship between AFRINIC and its resource members, while the By-laws govern the actions and administration of AFRINIC as a business. The actual administration of the registry and of the IP address space represented in that registry is controlled by the policies developed through a bottom-up open public policy process (*namely the RPD Working Group and the Policy Development Process in the case of AFRINIC*), which is community-approved since IP number resources are resources of the public community. As such, IP number resources can only be governed by the current policies, which are available in the Policy Manual (*currently Version 1.5 as of the date of this letter*), and not by the Agreement and By-laws. Your Letter makes no allegations of violation of any policies contained there, most likely because we are not in violation of those policies. That said, we humbly suggest that AFRINIC may consider training its staff members to raise better compliance and awareness of its own bottom-up Policy Development Process, so as to avoid any further misunderstanding such as this.
10. In view of all that precedes, we strongly deny having acted in any way in breach of the Agreement, Policy Manual and/or the By-laws.
11. We are in fact very concerned about AFRINIC’s apparent understanding of, and approach to, this matter, so we are hereby reserving all of our rights to take such action as we may be advised to protect our position and interests. However, we sincerely hope that the above will have now cleared any misunderstanding.
12. We remain available to discuss this further, should you consider it necessary.

Sincerely,



Victor Chan
Legal & Compliance Officer