CABLE AND WIRELESS

Response to the Eastern Caribbean Telecommunications Authority

Recommendation to Amend the Licence Classification Notice to Include Non-Terrestrial Networks and Services Licence and the Telecommunications (Fees) Regulations of the ECTEL Member States for Point-to-Multipoint Wireless Services

1. INTRODUCTION

- 1.1.Cable & Wireless St Kitts and Nevis Limited, Cable & Wireless Dominica Limited, Cable & Wireless St Lucia Limited, Cable & Wireless St Vincent and the Grenadines Limited, Cable & Wireless Grenada Limited (collectively as "Cable & Wireless" or "C&W"), each doing business as Flow, are pleased to respond to the Consultation Paper on the Recommendation to Amend the Licence Classification Notice to Include Non-Terrestrial Networks and Services Licence and the Telecommunications (Fees) Regulations of the ECTEL Member States for Point-to-Multipoint Wireless Services ("the Consultation") published by Eastern Caribbean Telecommunications Authority (ECTEL) on September 8, 2025.
- 1.2. Given that this Consultation does not include a specific list of questions, Flow's response is provided within context of ECTEL's proposed licence classification and the proposed amendments to the Telecommunications (Fees) Regulation. Flow expressly states that failure to address any issue raised in the Consultation does not necessarily signify its agreement in whole or in part with any position taken on the matter by ECTEL or respondents, and in that regard, reserves the right to comment on any issue raised in the Consultation at a later date.

2. LICENCE CLASSIFICATION IN THE CONTEXT OF MARKET DEFINITION

- 2.1.Recent advancements in satellite technology have dramatically changed the way Non-Terrestrial Networks (NTNs) are viewed in terms of their capability to offer competitive services to consumers and businesses alike. Around five (5) years ago, NTNs were considered niche services that provided connectivity to remote areas and useful technology in response to disaster recovery efforts in the aftermath of events such as hurricanes. Today, NTNs can provide speed that is sufficient for everyday use from the perspective of a significant segment of consumers and businesses.
- 2.2. At paragraph 2.3 in the Consultation Document, ECTEL acknowledged that in addition to promoting disaster resilience, there is the "need to ensure that citizens of ECTEL States continue to enjoy maximum choice in terms of the availability and accessibility of services...". It appears that ECTEL's position no longer considers NTNs as providers of niche or complementary services, but viable substitutes to terrestrial carriers given that the new technology affords consumers the ability to choose an NTN service provider over a terrestrial operator. From this perspective, Flow agrees with ECTEL that NTNs' services are substitutable for terrestrial fixed line and mobile services from the demand-side, as consumers and businesses increasingly view NTNs as viable alternatives. Moreover, given that Starlink was awarded a licence in two ECTEL States, and, as ECTEL also acknowledged at paragraph 2.3, that there is no need for ground-based services for NTNs to provide services, there is also a supply-side substitution element that must not be ignored. Today, NTNs can easily supply substitutable services without the need for capital outlay in local infrastructure. Thus, when one acknowledges that NTNs are considered an option from the demand side and that there is no requirement for investment of groundbased facilities for market entry (supply-side substitution), the conclusion has to be from a market definition perspective that NTNs and terrestrial service providers operate within the same product market for broadband internet.
- 2.3.Flow is of the view that a properly defined market from the perspective of a regulator is not a trivial matter. It has implications for the foundation of a regulatory framework that

facilitates fairness, investment, and fosters economic and social development. It is crucial that ECTEL reformulates market definitions for telecommunications services to accurately inform the classification of licences and the fairness of all relevant regulations.

- 2.4. Prudence dictates that substitutability of services should determine the market definition, which in turn would inform the classification of licences, however, while Flow believes that licences should be technology neutral, it is important that that licensing regime consider costs according to the type of operator to ensure fair competition.
- 2.5.Moreover, it is critical that the regulatory framework is designed to match the reality of our region and not reflect what has been determined by other jurisdictions that do not share the same market structure, dynamics, demographics, and geography in general. This point considers that some jurisdictions make a clear market demarcation between terrestrial and non-terrestrial networks. In fact, some jurisdictions go further by separating terrestrial networks that are fixed wired from fixed wireless, as is the case with Office of Communication in the UK in their 2025 Telecoms Access Review¹, where fixed wired networks were separated from both satellite and fixed wireless access.
- 2.6. Flow affirms that the situation in ECTEL States is different, whereby the network capacity constraints associated with NTNs and attributed to large populations and large population densities do not affect the ability of NTNs to compete in our region. For example, St. Lucia has the largest population among ECTEL States, with approximately 180,000 persons and a population density between 1,020 mi² to 1,510 mi² in the Castries district². Comparatively, London's population density is 14,503 mi², which is the highest in any region in England. Given the demographics of London, it may be reasonable to understand

¹ Office of Communications. (2025, October 15). Promoting Competition and Investment in Fibre Networks: Telecoms Access Review 2026-31. Retrieved from OFCOM Website:

 $[\]underline{https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/consultation-telecoms-access-review-2026-31/main-documents/volume-2-market-definition-and-smp-assessment.pdf?v=392945$

² The Central Statistics Office of Saint Lucia. (2024, October 16). Saint Lucia Population and Housing Census - 2022. Retrieved from The Central Statistics Office of Saint Lucia Website: https://stats.gov.lc/census/census-results/

OFCOM's determination to separate the operators due to technological constraints. However, said challenges are not present within the Eastern Caribbean.

- 2.7. The rollout and maintenance cost of terrestrial networks, especially in rural areas, require significant capital expenditure. The incremental cost of supplying additional subscribers to a satellite network approximates to zero. Starlink's satellite constellations have a capacity of approximately 450 Tbps with 5 Tbps of capacity being added per week,³ and as of July 2025, it has a median peak-hour downlink speed of 200 Mbps to its more than 2 million active subscribers in the US.⁴
- 2.8.Flow is concerned that ECTEL is not only considering the NTNs to operate in the fixed broadband market, but also in the Public Mobile Telecommunications space without consideration to Flow's commitment to a 15-year concession and the way in which cellular mobile services operate. On application and receipt of the Cellular Mobile Licence, it was expected that Flow's investments in the local economies of the ECTEL States would receive a reasonable return. However, it appears that ECTEL is considering a new licence regime that not only disregards the agreement to provide public cellular mobile but also ignores the structure and cost of operating a cellular mobile business. Flow categorically states that it is not against ECTEL's intention to review the classification of licences, but is concerned that it appears that entities which operate under a completely different and advantageous business model will receive special benefits under a two-tier regulatory regime.

³ Starlink. (2025, October 16). Network Update. Retrieved from Starlink Website: https://starlink.com/updates/network-update?srsltid=AfmBOorECDtwyKXAoioTtAbNetKkao-Y3j13VClDjFXgWq4T0auoQmR0

⁴ Ibid.

3. REGIONAL REGIMES FOR LICENSING AND SPECTRUM FEES

- 3.1.Flow is pleased that ECTEL has considered the approaches used across the Caribbean to inform this Consultation on determining the best licensing and spectrum fees regime for ECTEL States. Nonetheless, Flow remains concerned that while ECTEL is considering a licence to allow NTNs to provide Direct-to Device (D2D) services, ECTEL has not taken into account the significant cost to operate a cellular mobile service. Flow believes that ECTEL is not considering the costs associated with procuring equipment, duties, installation, equipment licensing, operation and maintenance of a cellular network. The perceived approach also excludes the cost of maintaining the fixed telecommunications network, which also provides transport for the mobile network, as well as the submarine cable that provides connectivity to the internet.
- 3.2.ECTEL correctly notes that in Jamaica Starlink was issued a carrier licence and a service provider licence within an existing licence category. It is equally noteworthy that NTNs were not given permission to operate in the mobile space. The Government of Jamaica has made it clear that the Jamaican market can only accommodate three licensed mobile operators. Therefore, any operator without a licence would have to operate through or in partnership with one of the existing licensed operators.
- 3.3.At paragraph 5.2 in the Consultation, ECTEL stated that "the value and quanta of RF spectrum that these newer NTN systems require to access, is not competitively priced similar to the RF spectrum used by the terrestrial networks to provide similar telecommunications services", yet ECTEL's subsequent recommendation on spectrum fees does not price NTN spectrum competitively, which is unfair to terrestrial operators.
- 3.4.Whereas Flow has to pay XCD 300,000 for the first 15 MHz and XCD 20,000 for each frequency pair thereafter, ECTEL proposes that NTNs pay XCD 12,000 for bandwidth above 10 MHz⁵, XCD 25,000 from 10 MHz to 100 MHz and XCD 60,000 for above 100

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⁵ FLOW wishes to know if Table 6 contains an error because the first block of spectrum fees appears to overlap with the second and third blocks.

MHz. Flow highlights this disparity in spectrum prices to demonstrate our concerns with respect to fair competition, but it is in no way of the view that similar fees across the board would address the other competitive advantages given to NTNs.

3.5. Given that ground-based facilities are not required for NTNs to operate in mobile, as acknowledged by ECTEL, Flow would be placed at a significant disadvantage. Operations without ground-based facilities will allow NTNs to avoid costs associated with maintaining terrestrial infrastructure. Coupled with the ability to provide services at significantly high bandwidth at negligible spectrum fees capped at XCD 60,000, there is a high likelihood that the regulatory environment would inadvertently favour NTNs, providing them with comparative advantages that could strengthen their market position over time.

4. WIDER ECONOMIC IMPACT

- 4.1.NTNs are dominant, well-capitalized, global platforms, some of which, like Starlink (SpaceX) and Kuiper (Amazon), are affiliates of large conglomerates with great financial strength. These types of business structures are conducive to predatory pricing⁶ to the detriment of consumers, and by extension the economy. Predatory pricing occurs when a firm sets prices at a level that implies the sacrifice of profits in the short run to eliminate competition and get higher profits in the long run.⁷ Flow maintains that ECTEL should consider that major NTNs also operate in the other communications technology markets and have benefitted from terrestrial operators' infrastructure without having to compensate for the use of their networks over the years.
- 4.2.If the licensing regime is not carefully designed, NTN's may have an incentive to undermine the performance of rivals and lead to their exit from the market. As a committed service provider in ECTEL States for over a century, Flow has been in the business of providing connectivity to the people of the region and to the rest of the world. NTNs, however, are multisided and normally have significant market power in businesses outside of telecommunications. Flow believes that while predation is normally discussed within the context of a dominant firm in a market, it is not unusual that "cross-subsidisation may be a profit-maximising strategy when it is used to sustain presence in the most competitive market, which would otherwise be abandoned.⁸"
- 4.3.In this regard, the satellite business model must be fully examined in order to assess the likely impact on existing suppliers and customers. Specifically, the business model of Low Earth Orbit (LEO) satellite providers offer services directly to consumers, businesses and governments across the globe. LEOs follow the business model of companies like Amazon, Facebook and Uber, where instead of expecting an immediate positive cash flow,

⁶ Bolton, P., & Scharfstein, D. (1990). A Theory of Predation Based on Agency Problems in Financial Contracting. American Economic Review, 93-106.

⁷ Motta, M. (2004). Competition Policy: Theory and Practice. New York, NY: Cambridge University Press

⁸ Vives, X., & Staffiero, G. (2009). Horizontal, Vertical and Conglomerate Effects. In B. Lyons, Cases in European Competition Policy: The Economic Analysis (pp. 434-492). New York: Cambridge University Press.

the focus is on facilitating the acquisition of customers and the control of markets, through low initial prices to attract business and subsidies, even if that eliminates the possibility of profits in the short run. Their goal is to become early leaders and to create a foundation for long-term success, following the model of other high-tech players over the past twenty (20) years. These businesses first concentrated on creating scale and acquiring a critical mass of users and then shifted their focus to generating revenues from the network.⁹

- 4.4. LEO providers such as SpaceX (Starlink) and Amazon (Kuiper) can forgo profitability for relatively extended periods of time because of massive private capital investment, including from venture capital, private equity, and investment from tech giants. SpaceX has raised billions from investors such as Google and Fidelity, enabling rapid scaling of Starlink without immediate need for capital injection from subscribers. Their investors are willing to wait longer for profits from these large LEO constellations, with the expectation that these satellite companies will capture the market for telecommunications services and in the future return significant profits.
- 4.5.LEO satellites, in particular, are a part of connected business ecosystems meant to deliver adjacent strategic benefits. For example, by providing high-speed internet connectivity, SpaceX's Starlink could enable SpaceX Tesla connected cars and advance the development of use cases such as autonomous vehicles. Similarly, Amazon's Kuiper could enable several services provided by Amazon, including further growth in the global e-commerce market and Amazon Web Services (AWS).

Even in more advanced economies, LEOs satellites now support low-latency applications and high-throughput connections, challenging terrestrial operators in those markets. Satellite networks are global networks in that once fully launched, their services can be accessed from anywhere in the world. These satellites aim to provide global broadband and mobile connectivity directly to customers.

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⁹ Mckinsey & Company. (2025, October 20). Large LEO satellite constellations: Will it be different this time? Retrieved from Mckinsey & Company Website: https://www.mckinsey.com/industries/aerospace-and-defense/our-insights/large-leo-satellite-constellations-will-it-be-different-this-time

5. CONCLUSION

- 5.1.Flow lauds ECTEL's efforts and its assertive approach to revisiting the framework of regulating the operations of NTNs seeking to operate in the jurisdictions of the Eastern Caribbean. While it remains a noble and strategic approach at this stage, the Caribbean should consider advancing towards a unified position on the regulation of NTNs, given their potential to be the most disruptive force shaping the future of telecommunications
- 5.2.Flow reminds ECTEL that its commitment towards continuous improvement in disaster resilience and broader connectivity are two of the significant features of Flow's growth and expansion within the region. Nevertheless, Flow maintains that regulations surrounding the delivery and provisioning of services should be fair by considering the cost of operations and the commitment made when each licence agreement was signed. Flow affirms that ECTEL's current proposal disregards Flow's investments and the cost of operating a terrestrial network.
- 5.3. While Flow acknowledges the regional scope of ECTEL's analysis, the Jamaican approach, whereby the Government made it clear that the Jamaican market can only accommodate three licensed mobile operators, is notable. In that country, any operator without a licence will have to operate through or in partnership with one of the existing licensed operators.
- 5.4.Flow notes that in the most recent developments within the United States, AST SpaceMobile has closed a deal to bring D2D connection via space to cell phone users "when needed" on Verizon plans. This marks an expansion of the partnership between the two companies announced last year. Prior to this, there was an announcement of the partnership between Starlink and T-Mobile for the delivery of satellite-originated services to customers of T-Mobile.
- 5.5.Flow is concerned that ECTEL's recommendation to grant the new NNS licence—intended for NTN operators providing broadband Internet and direct-to-device (D2D) services in

ECTEL Member States—creates a discriminatory framework. In particular, the licence and spectrum fees proposed for NTN service providers in ECTEL States are below the levels required for terrestrial operators, such as Flow, to deliver equivalent services. This differential treatment effectively results in discrimination against existing terrestrial providers.

5.6.ECTEL member states, like other jurisdictions where NTN service providers currently offer internet connectivity, have rightly highlighted the benefit of NTNs extending access to remote areas as a primary advantage to their citizenry. However, this focus overlooks the significant economic value of maintaining a robust, locally employed workforce, which NTNs are unlikely to support in the Eastern Caribbean. These entities, whose business model is described as "entrepreneurship development", primarily engage in direct-to-consumer kit sales and make minimal investment in local economies and human capital across the region.

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