

31 August 2026

The Chief Executive Officer

National Information and Communications Technology Authority (NICTA)
P.O. Box 8444
Boroko, National Capital District
Papua New Guinea
By email: uas@nicta.gov.pg

**Re: Submission on UAS CP No. 01/2027 – Universal Access & Services
Project Consultation Paper 2027**

Dear Sir,

Lightspeed Limited (Lightspeed) welcomes the opportunity to respond to the National Information and Communications Technology Authority's (NICTA) 2027 Universal Access and Service (UAS) Project Consultation Paper (UAS CP No.01/2027). We commend NICTA on the transparency of the process and on framing the 2027 programme not only around mobile broadband infrastructure, but around the broader goal of meaningful connectivity — recognising that coverage alone does not guarantee digital participation, affordability, or sustained community benefit.

Lightspeed is an authorised Starlink reseller in Papua New Guinea and the operator of the Starlink Impact (Konektim) range of community connectivity bundles, which combine low-earth-orbit (LEO) satellite broadband, solar power, managed networking, and (where required) digital payment infrastructure into a single deployable package for schools, health facilities, government offices and rural communities. Our recommendations below draw directly on our team's experience supporting Universal Service Fund (USF) rural broadband and digital-inclusion rollouts for the Telecommunications Authority of Fiji (TAF), including the deployment of solar-powered satellite connectivity to outer-island and maritime communities and the integration of digital payment and agent-banking services at community connectivity points.

Our submission is structured to align with Section 11 of the Consultation Paper. We have also proposed, per NICTA's invitation in Section 11.6 and the Executive Summary, an additional complementary initiative — alternative LEO satellite and solar connectivity with integrated payment systems — that we believe should be considered alongside the proposed 322 mobile broadband sites.

1. Summary of Recommendations

- Support the prioritisation of mobile broadband as the core of the 2027 UAS Programme, but recommend a technology-neutral, cost-per-beneficiary re-screening of the lowest-population, highest-cost “Rural Star” sites in Annex A against LEO satellite + solar alternatives.

- Propose a complementary, non-mobile UAS funding stream — the “Konektim Community Connectivity” model — for schools, health posts, district offices and island/maritime communities where terrestrial mobile infrastructure is not commercially or logistically viable within the 2027 cycle.
- Recommend integrating digital financial inclusion (mobile money / agent banking payment terminals) into UAS-funded community sites from the outset, rather than as a later-stage add-on, drawing on the TAF USF experience in Fiji. Our platform has already integrated with Vodafone’s Mpaia and Digicel’s MyCash in Fiji. We also integrate now with Visa and Mastercard via Windcave.
- Support the proposed open-access and infrastructure-sharing framework, and recommend it explicitly accommodate satellite ground infrastructure and community Wi-Fi hotspots operated under voucher / interconnection arrangements with licensed mobile operators.
- Recommend a pre-qualified supplier panel or framework agreement procurement track for rapid-deployment satellite/solar solutions, run in parallel with (not instead of) competitive tendering for tower-based macro sites.
- Recommend that any UAS Levy determination reserve a defined proportion of funding for “meaningful connectivity” enablement (devices, digital skills, payments, content) rather than infrastructure alone.

2. Comments on the Proposed 322 Mobile Broadband Projects (Section 11.2)

Lightspeed supports NICTA's identification of the 322 priority sites through the 2025 ICT access gap assessment and agrees that mobile broadband should remain the anchor investment of the 2027 UAS Programme, given its breadth of benefit across voice, data, digital government and financial services.

However, our review of Annex A indicates a wide cost-per-beneficiary range across the proposed sites, driven by the mix of Macro (PGK 1,502,397.52) and Rural Star (PGK 502,816.17) solutions. A number of the lowest-population Rural Star sites — for example in the Bougainville Atolls, Manus outer islands (Aua/Wuvulu, Ninigo/Hermit groups), Samarai-Murua's Louisiade and Yalamba wards, and North Fly's Star Mountain LLG — serve populations in the low hundreds at costs approaching or exceeding PGK 500,000 per site. These are precisely the communities for which LEO satellite connectivity, which requires no major tower infrastructure, expensive backhaul link or ongoing fuel logistics, is likely to deliver a materially lower cost per person served and a faster time to service.

Recommendation: We recommend NICTA commission a supplementary technical and cost comparison of the identified Rural Star sites against solar-powered LEO satellite alternatives before final project approval, and that the comparison be repeated for any future Rural Star classification. This does not require removing sites from the 322-site list; rather, it allows NICTA to select the most cost-effective delivery technology on a site-by-site basis, consistent with the technology-neutral approach set out in Section 7.1 of the Consultation Paper.

3. Proposed Complementary Initiative: Konektim Community Connectivity, Solar Power and Payment Integration

In response to NICTA's invitation for additional initiatives that strengthen meaningful connectivity outcomes (Executive Summary and Section 11.6), Lightspeed proposes that the UAS Programme establish a dedicated, technology-neutral funding stream for community-based satellite and solar connectivity, delivered through Lightspeed's Konektim bundles or equivalent solutions from other qualified providers.

3.1 Description of the Konektim model

Konektim bundles combine a Starlink satellite terminal, managed indoor and/or outdoor Wi-Fi, structured cabling, professional installation, and (for Premium tier) a cloud-calling handset for voice services, packaged for a single site such as a school, health centre, aid post, or district government office. A standalone Community Solar Power option (1,488Wh power station with 240W solar panel) allows deployment at sites with no reliable grid power — directly addressing the “inadequate transport and energy infrastructure” barrier identified in Section 4.2 of the Consultation Paper. Starlink allocates between 2TB and 5TB per community site with average 250mbps/25mbps speed per site. Via a managed service we are able to bond multiple terminals per site and allocate decent speed levels to each user.

Because Konektim sites require no tower construction, civil works, or fuel resupply logistics, typical deployment timelines are measured in weeks rather than the months required for macro site construction, making the model well suited to the outer-island, mountainous, and maritime LLGs that are over-represented among the Rural Star sites in Annex A.

3.2 Integrated digital payments

Based on our team's experience supporting TAF's Universal Service Fund rural broadband programme in Fiji, we found that connectivity investment achieved materially greater and faster socio-economic impact when a digital payment or mobile-money agent capability was co-located with the connectivity site from day one, rather than retrofitted later. We recommend NICTA consider requiring or incentivising UAS-funded community sites (whether mobile, satellite, or hybrid) to include, where commercially available, an integrated point-of-sale or agent-banking terminal linked to the community Wi-Fi or mobile connection. This would directly support the digital financial inclusion objective referenced in the Consultation Paper's strategic outcomes (Section 3.3) and NICTA's stated interest in digital financial inclusion initiatives.

3.3 Suggested indicative pricing for reference

Package	Includes	Indicative Cost (Excl. GST)
Community Basic	Starlink dish, indoor Wi-Fi, install & basic onboarding	PGK 499 / month
Community Standard	Adds managed firewall, outdoor Wi-Fi, structured cabling, local support	PGK 699 / month
Community Premium	Adds cloud-calling handset and priority local support	PGK 899 / month
Community Solar Power	1,500W power station (1,488Wh) + 240W solar panel	From PGK 3,299 (one-off)

Hardware (Starlink Mini Kit PGK 1,300; Starlink Standard 4X Kit PGK 1,700) is additional and one-off; installation and any extended networking costs are quoted following a site survey. These figures are provided for NICTA's reference in benchmarking a potential Rural Star / satellite cost envelope and would be subject to a formal proposal and site-specific quotation.

4. Infrastructure Sharing and Open Access (Section 11.3)

Lightspeed supports the proposed open-access and infrastructure-sharing framework in Sections 5.2 and 7.2 of the Consultation Paper. We recommend the framework explicitly recognise satellite ground infrastructure and community Wi-Fi hotspots as a form of shareable UAS asset — for example, by allowing licensed mobile operators to interconnect at a Konektim site to extend a local Wi-Fi calling or data offload service, under a voucher or wholesale access arrangement. This would let a single satellite site complement, rather than duplicate, future mobile network extension into the same community once commercially viable.

5. Financial and Funding Framework (Section 11.4)

We consider the proposed PGK 344 million programme and blended funding approach (UAS Levy, government and development partner co-funding) to be reasonable in principle. To improve value for money, we recommend:

- Applying a standard cost-per-beneficiary threshold across technologies (mobile macro, rural star, satellite) so that funding is allocated to the lowest-cost solution meeting each site's service requirement, rather than a single technology being pre-assigned to a site category.
- Considering a co-investment or subsidy-per-site model for satellite/solar community sites, under which NICTA subsidises capital hardware and installation while the operator (Lightspeed or another qualified provider) carries ongoing connectivity, maintenance and support costs recovered through modest, regulated end-user or institutional subscription fees — reducing the ongoing burden on the UAS Fund relative to full-cost-recovery models.
- Ring-fencing a defined share of the 2027 UAS Levy (for example 5–10%) for non-infrastructure “meaningful connectivity” enablement — devices, digital skills training, and payment integration — consistent with NICTA's own recognition that connectivity alone is not sufficient.

6. Procurement and Implementation (Section 11.5)

Given the shorter deployment timeframes and different risk profile of satellite/solar solutions compared with tower construction, we recommend NICTA run a parallel, pre-qualified supplier panel or framework agreement procurement track for community satellite and solar connectivity, alongside open competitive tendering for macro infrastructure. This would allow NICTA to award and deploy satellite-based sites within the 2027 implementation window even where macro site procurement (land access, civil works, tower fabrication) takes longer, reducing overall programme delivery risk as identified in Section 10.4.

Drawing on our experience with TAF's rural connectivity rollout in Fiji, key implementation risks to plan for include import/customs clearance timelines for satellite hardware, community land and consent processes for solar installations, and ongoing device/handset affordability for end users — each of which benefits from early engagement with provincial administrations and District Development Authorities, as contemplated in Section 10.2 of the Consultation Paper.

7. ICT Access Gaps and General Comments (Sections 11.1 and 11.6)

We agree that the 2025 ICT access gap assessment captures the major mobile and broadcasting coverage gaps in Papua New Guinea. We would highlight that several of the lowest-population, highest-cost-per-capita sites identified in Annex A (particularly outer-island and maritime LLGs in Bougainville, Manus, Milne Bay and Western Province) may be better served, sooner and at lower cost, by satellite-based community connectivity than by inclusion in the mobile macro/rural-star tender process. We would welcome the opportunity to work with NICTA to identify which specific sites in Annex A would benefit from this hybrid approach.

Finally, we note NICTA's interest in local content, digital skills and digital government services as complementary initiatives. Lightspeed would welcome discussing how the Konektim network of community sites could serve as physical access points for digital government service delivery, digital literacy training, and locally relevant content distribution, in partnership with relevant government agencies and development partners.

8. Submission Details

Field	Details
Submitting Organisation	Lightspeed Limited
Nominated Representative	Richard Broadbridge, Managing Director
Contact Details	+675 70091076 rbroadbridge@lightspeedpng.com lightspeedpng.com
Sections Addressed	Sections 5, 6, 7, 8, 9, 10 and 11 of UAS CP No.01/2027
Confidentiality	No part of this submission is claimed as confidential; NICTA may reference or summarise it in consultation reports.

Lightspeed appreciates NICTA's consultative approach to the 2027 UAS Programme and would welcome the opportunity to present these recommendations in more detail, including a site-specific cost comparison for the Annex A Rural Star locations, at NICTA's convenience.

We would be happy to take you through Fiji case studies if needed.

Yours faithfully,



Richard Broadbridge
Managing Director
Lightspeed Ltd