

POLICYBRIEF

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No Fast Lane for Satellites: Emergency Connectivity Governance in Sub-Saharan Africa - A Cameroon Case Study

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Four Days of Warning, No Pathway to Act

Currently, Cameroon has no emergency licensing fast-track for satellite-based connectivity, and remains outside the [Tampere Convention](#), [the international treaty](#) that is particularly crafted to remove regulatory obstacles to disaster telecommunications. This is not a story about missing technology or an unforeseeable disaster (though there is limited advanced technology in context).

Just four days before the [July 2023 Limbe floods](#), Cameroon's own multi-hazard early-warning system correctly forecast the danger. The disaster arrived exactly on schedule, and the terrestrial networks failed as expected. Space-based infrastructure is often the solution in precisely these circumstances. Yet in this case, satellite alternatives were not authorised, requested, or apparently even considered once terrestrial networks failed (IFRC, 2023). Emergency services and victims alike were left to operate without connectivity at the moment it mattered most.

Cameroon's own Emergency Telecommunications Service, established under [Decree No. 2005/124](#), has no simplified import procedure attached to it, even for emergencies, by the Red Cross's own legal review (IFRC, 2021). Even if the operator makes the space segment available to extend coverage over the disaster-stricken area, the ground equipment needed to use it requires an import licence. What is more, less than a

Highlights

Cameroon has no emergency satellite licensing fast-track and has not acceded to the Tampere Convention, the treaty designed to remove these barriers.

The 2023 Buea and Limbe disasters in Cameroon were preceded by an accurate four-day early warning, yet no backup satellite communication solution was triggered.

Brazil and the United States and Venezuela show licensing and decision making speed, is a determinant to outcomes: each activated satellite connectivity within days during similar natural disasters.

Despite its demonstrated effectiveness elsewhere, Starlink remains banned in Cameroon, and no comparable system exists to close the resulting gap in emergency connectivity.

year after the catastrophe, in April 2024, Cameroon's customs authority banned the importation of [Starlink kits](#) outright, and as of the 2026 budget cycle, ordinary commercial licensing for satellite service [remains incomplete](#), years after the floods that exposed the need for it ([Space in Africa, 2025](#)). The 2023 floods and landslides in Buea and Limbe are evidence of that need, not the subject. The claim is precise: Cameroon's regulatory framework cannot move at the speed a natural disaster or emergency requires, even with days of warning. The framework must be in place before disaster strikes, ready to admit the best technology available, whether space-based or otherwise.

Starlink serves throughout this brief as the reference example because it is currently the most advanced space-based broadband communication system in commercial operation, and the capacity and speed of broadband is what most civil, governmental, and humanitarian services now require. Competitors are emerging, including other low Earth orbit constellations at earlier stages of deployment. The arguments made here, therefore, attach to the technology, not to the company: an emergency licensing pathway should be operator-neutral, applying to whichever qualified provider can restore connectivity fastest.

Geographic Vulnerability and Terrestrial Fragility

Cameroon's geography raises the cost of this regulatory gap. Limbe sits on a low-lying coastal plain at the southern foot of Mount Cameroon, where the Limbe and Jenguele

rivers regularly overflow their banks during the rainy season ([OCHA, 2023a](#)). Buea sits atop the volcano's slopes, where loose ferrallitic and volcanic soils erode under heavy rainfall, producing flash floods and landslides ([OCHA, 2023b](#)). These are structurally distinct vulnerabilities that all converge on the same weak point: terrestrial telecommunications networks that fail when they are needed most.

Measured against this framework, Cameroon's baseline connectivity is closer to basic than to meaningful, even under normal conditions. An estimated 41.9% of the population used the internet as of late 2025, with fixed broadband speeds averaging under 15 Mbit/s, ranking the country 148th internationally ([DataReportal, 2025](#); [World Data, 2026](#)). Terrestrial fragility is not hypothetical: in March 2024, [a subsea cable failure across West and Central Africa](#) forced Cameroon to reroute internet traffic through the South Atlantic Inter Link, and in September 2024 Cameroon's own regulator [reported deteriorating mobile service quality](#) from all three national operators, citing power shortages and fibre cable breaks (Internet Society, 2024; Eyenga, 2025; ART, 2024).

Satellite connectivity is disproportionately valuable for this region precisely because Cameroon's population is dispersed and its terrestrial network is thin and easily disrupted. There are remote villages in Buea and Limbe with little to no internet connectivity, and the distances and low population density mean that investment in terrestrial infrastructure is neither financially viable nor commercially justifiable. A

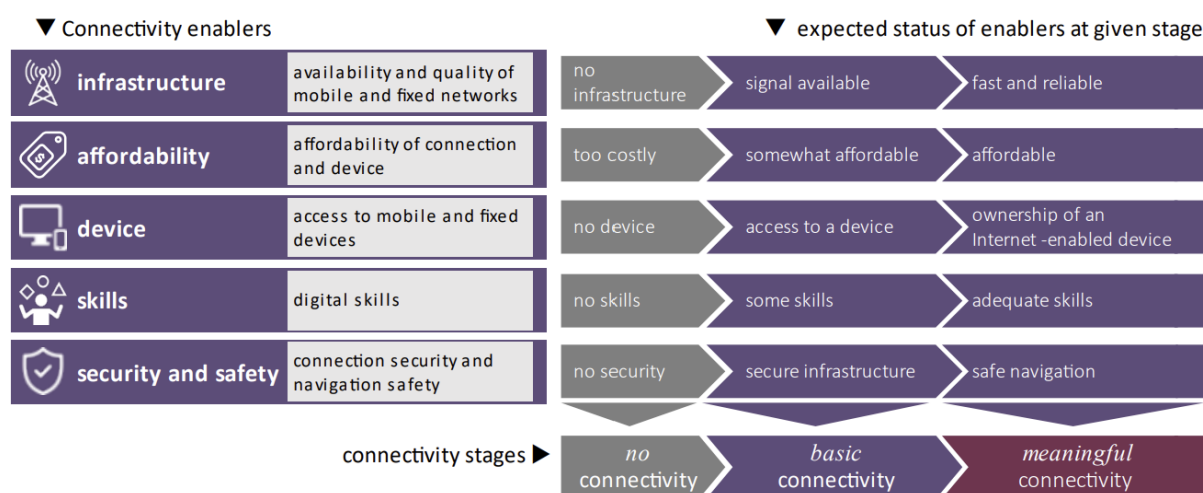


Figure 1: Expected status of connectivity enablers by stage, from no connectivity to meaningful connectivity.

Source: Adapted from ITU and UN Office of the Secretary-General's Envoy on Technology (2022), Figure 3. Expected status of enablers by stage of connectivity.

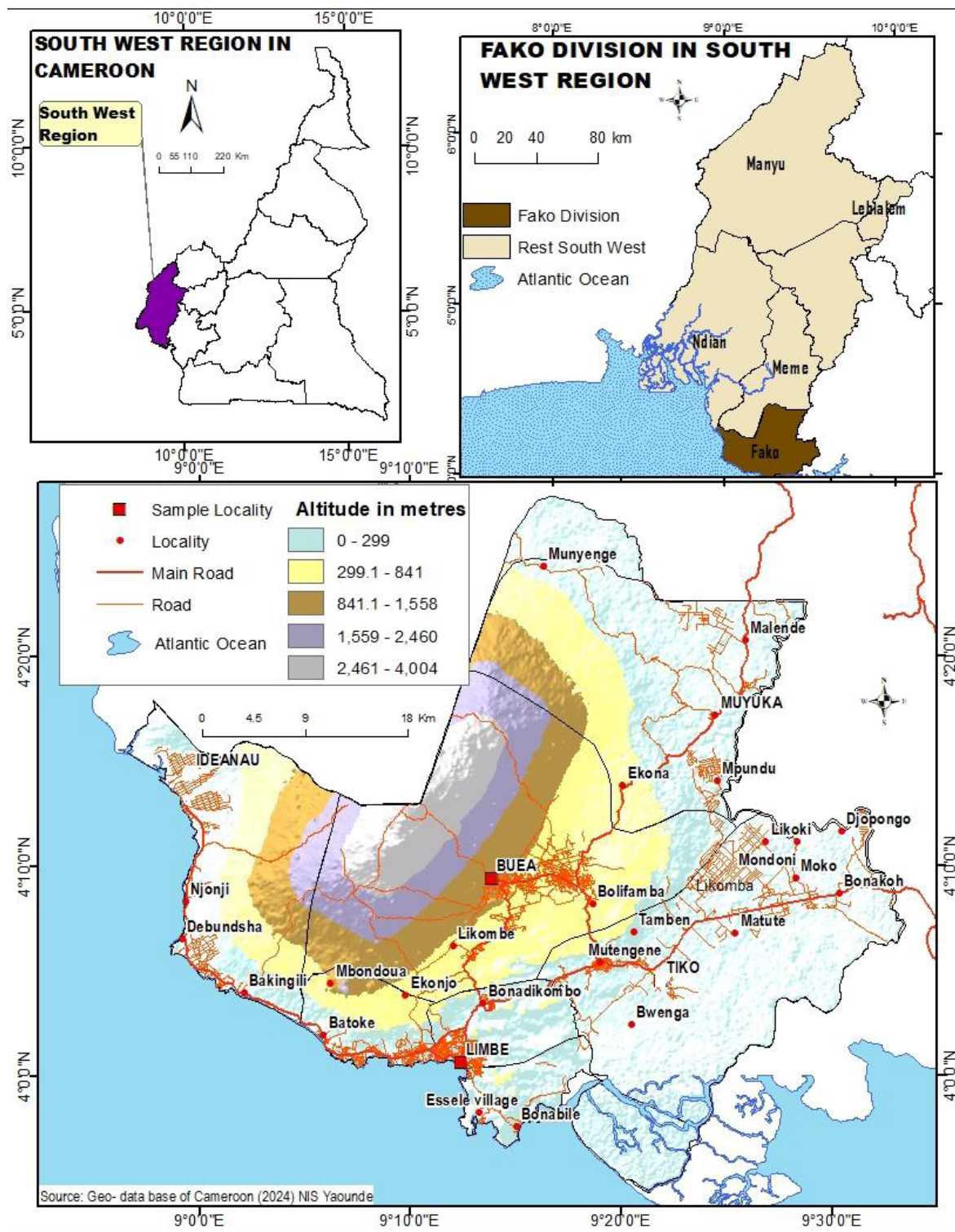


Figure 2: Location and terrain of Buea and Limbe within Fakodivision, South-West Region, showing the altitude contrast underlying the two-location case study.

Source: Adapted from Sunjo, Fuanye, Ngala and Fikake (2024).

licensing pathway that can move at emergency speed would not solve Cameroon's underlying connectivity gap, but it would prevent that gap from becoming a total blackout at the exact moment communication is most critical, for affected residents, particularly the most vulnerable and for local and international responders alike. Such authorisations can be limited to the duration of emergency relief efforts.

The Glaring Evidence: Buea and Limbe, 2023

Buea, March 2023 (mountainous). On 18 March 2023, torrential rain triggered flash floods and mudslides from Mount Cameroon into Bova, Bokwai, and Buea-town. Two people died, four were injured, and one was reported missing. Roughly 900 people were directly affected, and water infrastructure serving about 3,000 people was destroyed, alongside 120 businesses at the Buea-town market (OCHA, 2023b; UNICEF, 2023). This was not Buea's first such event: a flood in March 2020 had already killed one person and injured ten (Oduoye et al., 2023). One Buea resident, affected by this disaster, said, "It all happened in the daytime, I came back from the farm early, but my kids were still on their way home, when I heard of the floods, I tried calling my children but couldn't hear what they were saying."

Limbe, July 2023 (coastal). From 18 to 21 July 2023, heavy rain caused landslides in the Upper-Mawoh and Cassava Farm neighbourhoods and flooding in Down Beach and Church Street, killing five people and affecting roughly 2,000 residents across nine neighbourhoods (OCHA, 2023a). Thirteen patients had to be evacuated from Limbe's sub-divisional hospital. Limbe has faced this pattern before: a comparable event in June 2001 killed more than seventy people (OCHA, 2023a).

The warning that arrived on time

What makes this case study decisive is the timing. Cameroon's Africa Multi-Hazard Early Warning and Early Action System had already placed the country at Level 2 alert, and a meteorological bulletin issued on 14 July 2023, four days ahead, specifically forecast heavy rain and flooding risk for Limbe, Buea, and Tiko between 14 and 17 July (IFRC, 2023). The disaster arrived as predicted. Despite this lead time, IFRC's own after-action assessment noted that affected populations were "not fully aware of the areas at risk and of early warnings" (IFRC, 2023), a gap that falls squarely within the warning-dissemination pillar of the UN's [Early Warnings for All initiative](#), led by the ITU. One expert interview attributed this partly to limited trust in local early warning systems, noting that communities relied more on word of mouth and social media than official channels (expert interview, 2026).

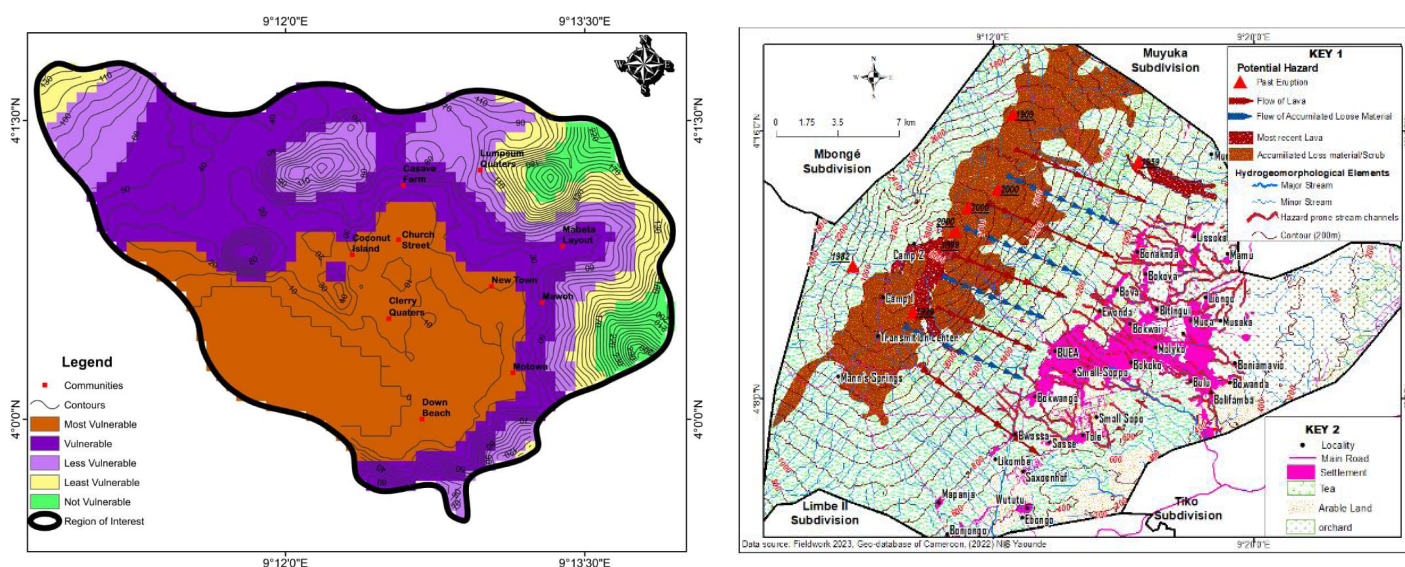


Figure 3: Flood vulnerability map of Limbe (left) and flow directions of potential landslide material in Buea (right), showing the coastal and mountainous risk patterns underlying the two-location case study.

Source: Adapted from Sunjo, Fuanye, Ngala and Fikake (2024).

A regulatory gap, not a technological one

In neither case does the available data indicate that satellite-based connectivity was considered, requested, authorised, or declined. This silence is itself the finding. The author, present in the South-West Region during this period, observed the Buea flooding directly; the empirical account offered here is grounded in that observation as well as in the documentary record. Cameroon's Telecommunications Regulatory Agency (ART) requires prior approval for the import of telecommunications equipment, and this requirement was enforced, not waived, during the relevant period: in April 2024, Cameroon's Directorate General of Customs issued a formal ban on the importation of Starlink kits, citing national security grounds ([Business in Cameroon, 2025](#)). Even the ordinary commercial pathway remains unfinished: as of the 2026 budget presentation, Cameroon's Minister of Posts and Telecommunications confirmed that Starlink Cameroun Sarl's concession documents had only just been [forwarded for the next stage](#) in the possible granting of a concession agreement. At the moment, no emergency-specific pathway exists at all.

One Technology, Three Regulatory Choices

Two comparators, chosen for contrast in licensing speed rather than disaster type, show that regulatory decision-making, not wealth or technological readiness, enables outcomes. A fourth example, Türkiye, shows the same rule operating in reverse.

Venezuela, June 2026. Twin 'strong' earthquakes killed more than 2,000 people and damaged Venezuela's networks and a submarine cable. The response was rapid; nonetheless, the European Union (EU) activated its Copernicus satellite mapping services within days, using mechanisms agreed upon before the disaster struck ([Internet Society, 2026](#)).

Brazil, Rio Grande do Sul, April to May 2024. As [catastrophic flooding](#) disrupted mobile service in 228 of 497 municipalities, Brazil's telecom regulator Anatel publicly reported the disruption within days. By 12 May, the state government had secured 1,000 Starlink antennas, and the state telecom company Telebras had deployed over 50 emergency antennas of its own, coordinated with a federal restoration plan ([Freedom House, 2024](#)).

United States, Los Angeles wildfires, January 2025. T-Mobile and SpaceX activated direct-to-device satellite service within days of the fires, but only because the US

Federal Communications Commission had approved the underlying framework in November 2024, months in advance, and had already used it during Hurricanes Helene and Milton ([Benton Institute, 2025](#)). The speed reflects a pathway built before the emergency, not an improvisation during the emergency.

Turkey, February 2023. By contrast, Turkey initially declined Elon Musk's offer to activate Starlink after the devastating February 2023 earthquakes, with an official citing sufficient existing satellite capacity while Musk noted Starlink was "not approved by the Turkish government yet" ([Duffy, 2023](#)).

The lesson for Cameroon is precise: licensing speed during a disaster is a function of licensing decisions made before the disaster, regardless of income level.

The Legal Framework and Where It Falls Short

Cameroon's [Constitution](#) allows the President to declare a state of emergency by decree (Article 9), and its monist legal system means ratified treaties automatically become binding domestic law once published (Article 45). Civil protection is governed by Law No. 86/016, which reorganised the sector and created a National Council for Civil Protection, and by Law No. 90/47 on states of emergency ([IFRC, 2021](#)).

The telecommunications-specific instrument is [Decree No. 2005/124](#) (15 April 2005), which organises the Ministry of Posts and Telecommunications and establishes, under Article 58, an Emergency Telecommunications Service responsible for acquiring equipment and defining operators' roles during emergencies. Yet IFRC's own legal review of this decree concludes that "no provisions are provided on simplified procedures for the import of telecommunications equipment as part of international disaster assistance" ([IFRC, 2021](#)). The framework exists on paper; the fast-track does not, confirming this brief's central claim from Cameroon's own domestic legal text.

Cameroon has [not acceded to the Tampere Convention](#) on the Provision of Telecommunication Resources for Disaster Mitigation and Relief Operations, the primary international instrument designed to waive the licensing, import, and movement barriers that this case study documents. Given Cameroon's monist system, accession would have direct domestic legal effect without further implementing legislation, a comparatively low-cost reform with an immediate structural benefit. The Convention's influence extends beyond its

fifty parties through ITU emergency telecommunications frameworks, and its contents may be applied by reference in bilateral or ad hoc arrangements or national disaster laws, but its waivers bind only parties, a status Cameroon does not hold.

The ITU separately maintains its own emergency telecommunications architecture. [Resolution 34 \(Rev. Baku, 2025\)](#) mandates National Emergency Telecommunication Plans and ties disaster telecommunications to the ITU-led warning-dissemination pillar of the [Early Warnings for All initiative](#). Resolution 647 (Rev. WRC-19) instructs the ITU to maintain a database of emergency spectrum availability and to coordinate with the UN Emergency Telecommunications Cluster, the same mechanism activated for [Mozambique's 2024 floods](#). The [Sendai Framework's](#) Priority 1 and Priority 4, and its Target G, commit signatories to people-centred early warning systems as a matter of disaster preparedness. At the regional level, the [African Telecommunications Union](#) established a Task Group in 2021 that has since developed a non-binding Model Satellite Licensing Framework. Its 2024 report explicitly recommends that member states use ATU coordination channels to streamline national licensing processes. Cameroon has not yet aligned its domestic procedure with this framework.

Three Steps to Emergency Readiness

Recommendation 1: Establish an emergency satellite-licensing fast-track within ART, tied to a National Emergency Telecommunication Plan. ART should adopt a defined, time-bound authorisation process, activated automatically upon a declared emergency and expiring with the conclusion of relief efforts, consistent with the National Emergency Telecommunication Plan model the ITU already recommends under Resolution 34.

Recommendation 2: Accede to the Tampere Convention. Given Cameroon's monist legal system, accession would take direct domestic effect, immediately waive the licensing and import barriers this case study demonstrates, at minimal legislative cost.

Recommendation 3: Align domestic licensing with the African Telecommunications Union's Model Satellite Licensing Framework. Cameroon should adopt a pre-cleared registry of approved satellite operators, consistent with the ATU's existing 2021 Task Group framework, thereby converting the licensing question from case-by-case review to the

activation of a pre-approved list the moment an emergency is declared.

These measures are narrow by design. They do not require Cameroon to resolve broader questions of market structure or long-term digital development strategy. They require only that Cameroon formalise, in its own domestic procedure, the emergency responsiveness that the Tampere Convention, the ITU, and the ATU have already established and to which Cameroon is not yet a party.

Conclusion: Innovation Awaits Authorisation

The technology to keep disaster-affected communities connected already exists, and Cameroon's own case demonstrates the need for it with unusual clarity: in Limbe, the danger was forecast four days in advance, and still no satellite-based alternative was authorised, requested, or considered when the warning proved correct. The missing piece is neither innovation nor unpredictability. It is regulatory speed and regulatory choice. Brazil's regulator-led response and the United States' pre-cleared pathway show that the same technology yields different outcomes depending entirely on whether a licensing mechanism was in place before the emergency arrived. Cameroon already has the constitutional tools, regional institutions, and warning systems in place. What remains is to connect them, a fixable gap, not an intractable one.

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