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The logo for Connectivity for Refugees features a stylized Wi-Fi symbol above the text. The word "CONNECTIVITY" is in a large, bold, blue font, with the "O" containing a white Wi-Fi symbol. Below it, "FOR" is in a smaller, blue font, and "REFUGEES" is in a large, bold, black font.

**CONNECTIVITY
FOR
REFUGEES**

Connectivity for Refugees: South Sudan Country Profile

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GSMA

The GSMA is a global organisation unifying the mobile ecosystem to discover, develop and deliver innovation foundational to positive business environments and societal change. Our vision is to unlock the full power of connectivity so that people, industry, and society thrive. Representing mobile operators and organisations across the mobile ecosystem and adjacent industries, the GSMA delivers for its members across three broad pillars: Connectivity for Good, Industry Services and Solutions, and Outreach. This activity includes advancing policy, tackling today's biggest societal challenges, underpinning the technology and interoperability that make mobile work, and providing the world's largest platform to convene the mobile ecosystem at the MWC and M360 series of events.

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Acknowledgments

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This profile is part of a series prepared to showcase opportunities for engagement in the initiative. Based on existing data rather than primary research, the profiles sketch a picture of the connectivity situation for refugees in Ethiopia, Rwanda and South Sudan, and suggest possible engagement opportunities. As such, they should not be considered comprehensive, triangulated or necessarily up-to-date.



Partnership | Progress | Prosperity

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The views expressed do not necessarily reflect the UK government's official policies.

About the Connectivity for Refugees initiative

To enduringly address the connectivity challenge, and in line with the UN Sustainable Development Goals principle of leaving no one behind, UNHCR, the Luxembourg Government, International Telecommunication Union (ITU) and the GSMA have come together to initiate a blueprint for action, bringing together a wide range of private sector, government, international organisations and forcibly displaced communities, to enhance connectivity in refugee-hosting areas and open pathways for greater access to information, education, livelihoods and enhanced humanitarian protection. More information is available at www.refugeeconnectivity.org

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Introduction

South Sudan became independent on 9 July 2011 after decades of conflict. Since then, the population has continued to suffer from intercommunal tensions and conflict, most notably in December 2013 and July 2016. The signing of the Revitalised Agreement on the Resolution of the Conflict in the Republic of South Sudan (R-ARCSS) in 2018 and the formation of a new government in 2020, the Revitalised Transitional Government of National Unity (R-TGoNU), enabled about 500,000 refugees to return home.

However, there are still more than 2 million internally displaced people (IDPs) in South Sudan as a result of on-going intercommunal conflicts, insecurity and flooding.¹ South Sudan continues to face multiple

and compounding shocks – insecurity, sub-national violence, regional and national macroeconomic challenges – that have been intensified by the global economic downturn, the impacts of climate change and the on-going Sudan conflict. All this has had an adverse effect on the food security of South Sudanese families and recently displaced Sudanese refugees or returnees from Sudan.²

Connectivity is very limited in South Sudan, with limited infrastructure and low mobile penetration. However, the picture is extremely varied, with significant mobile use by displaced people where networks exist.

¹ GSMA and UNHCR. (2022). [The Digital Worlds of Displacement-Affected Communities](#).

² UN OCHA. (22 November 2023). [South Sudan: Response to the Sudan Crisis Situation Report No. 20 \(as of 17 November 2023\)](#).

Displacement context

According to the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), since the onset of the Sudan conflict in April 2023, more than a million individuals have been displaced from Sudan to neighbouring countries, with 386,973 of them arriving in South Sudan as of 19 November 2023. Of these, 83% are South Sudanese returnees while 16% are Sudanese refugees. Approximately half of the arrivals are female and nearly half are children under the age of 18.

Factors such as subnational violence and natural disasters, including floods and dry spells, contribute significantly to widespread displacement within South Sudan. The Sudan crisis, coupled with the substantial

influx of returnees and refugees, has exacerbated the humanitarian situation in a country where 9.4 million people required humanitarian assistance in 2023, including more than 2.3 million IDPs. Challenges posed by the rainy season, population movements and inadequate hygiene and sanitation facilities contribute to disease outbreaks.

According to a recent assessment by the World Food Programme (WFP), 90% of returnee families are grappling with moderate to severe food insecurity. Data from border crossing screenings indicate that nearly 20% of children under the age of five, and more than a quarter of pregnant and lactating women (PLW), are experiencing malnutrition.³

Figure 1
Displaced populations in South Sudan



³ UN OCHA. (31 October 2023). *South Sudan: Response to the Sudan Crisis Situation Report No. 20 (as of 27 October 2023)*.

Connectivity context

South Sudan has one of the lowest rates of mobile access and connectivity in the world, with market penetration of just 25.65% (unique mobile subscribers aged 15 and older). Until relatively recently, MTN and Zain were the only two mobile network operators (MNOs) in South Sudan. The newest MNO, Digitel, was launched in 2021 by President Salva Kiir. Connectivity and infrastructure vary across the country, with transport conditions and fuel prices creating major barriers for MNOs to implement and maintain infrastructure. High rates of displacement also means that populations move from areas of connectivity to areas where there is no connectivity infrastructure at all. Conflict has also had a significant impact on MNOs in South Sudan. Zain suffered major infrastructure losses in 2016 and has since reduced staff numbers and downsized operations. According to their Managing Director, half of Zain's telecommunications infrastructure has been destroyed since 2013. Consequently, connectivity access and mobile ownership varies widely across the country.⁴

South Sudan has limited access to the internet, and internet penetration is relatively low, with 7 active mobile broadband subscriptions per 100 people, against the average for Africa of 44.8.⁵ Many areas of the country have no internet access or rely on slow and unreliable connections. 2G networks for voice predominate - only 15% of the population is covered by 3G or 4G service.⁶

Despite overall low mobile phone penetration and connectivity, research has found the connectivity landscape to be extremely variable between different areas. In Mayom County, Unity State, for example, where there is a significant IDP population, mobile access and ownership are unexpectedly high. According to findings by the Norwegian Refugee

Council, 76.5% of the population have used a mobile phone (for any purpose), and 98.6% of these users own the phone, either personally (35.5%) or jointly with their household (63.1%). The vast majority of respondents - 86.3% - confirmed there is enough network coverage to make a call and send text messages (SMS) from their mobile phone at home. This is because the area is adequately covered by a mobile network, primarily Zain. Digital literacy and knowledge levels also influence the ways in which people use mobile services. Most respondents (85.2%) reported knowing how to turn their mobile phones on and off, and the same percentage can use the flashlight on their phone.

GSMA research in Bor County in 2022 showed that mobile access and ownership is also high among displaced people and the host community.⁷ In a survey, 79% of IDPs reported owning a mobile phone and 90% reported having access to one. For displaced people, mobile phones are vital to communicating with friends and family in other parts of South Sudan, and outside the country, through calls and social media. In the IDP camp where there are no employment opportunities, mobile phones are also used heavily for digital entertainment, with young people emphasising the importance of finding ways to pass the time.

While there are significant benefits to mobile use, there are concerns about the spread of false and fabricated information, particularly regarding the conflict and peace agreement in South Sudan.

Mobile money platforms available in South Sudan include m-GURUSH and Zain Cash. However, mobile money uptake is low, largely due to people not having enough money to send via mobile money and high transaction costs.

⁴ GSMA and UNHCR. (2022). [The Digital Worlds of Displacement-Affected Communities](#).

⁵ ITU. (2023). [World Telecommunication/ICT Indicators Database 2023](#). 27th Edition - July 2023.

⁶ Ibid.

⁷ GSMA and UNHCR. (2022). [The Digital Worlds of Displacement-Affected Communities](#).

Legal and regulatory environment

Refugee policy environment

As signatories to refugee conventions and protocols, South Sudan is responsible for supporting refugees within its borders. However, due to political instability and financial constraints, the country has struggled to adequately provide for refugees and IDPs. South Sudan has adopted the Comprehensive Refugee Response Framework (CRRF), a global framework designed to promote a more comprehensive and integrated approach to refugee response. The CRRF emphasises the need for a whole-of-society approach to refugee management that involves government, civil society and the private sector. South Sudan has also ratified the Kampala Convention, a regional agreement that sets out the rights and protections afforded to refugees and other displaced persons in Africa. The Convention emphasises the need for durable solutions to displacement, including voluntary return, local integration and resettlement. South Sudan has endorsed the Global Compact on Refugees, a UN-led initiative aimed at improving the international response to refugee situations. The Compact emphasises the need for burden sharing and cooperation between governments and other stakeholders.

The Comprehensive Peace Agreement (CPA), signed in 2005, also includes provisions related to IDPs, including the right to return to their homes or to receive compensation for lost property. The South Sudanese government, with the support of international organisations, worked on initiatives for the voluntary repatriation and reintegration of refugees and IDPs. These efforts aimed to help individuals return to their places of origin and rebuild their lives.

South Sudan's policy environment has been significantly constrained by the volatile security situation, which has often made it difficult to deliver humanitarian assistance and protection services effectively. The on-going conflict and displacement crisis have been major impediments to comprehensive refugee and IDP support.

Telecoms policy environment

The regulatory authority responsible for overseeing the telecommunications sector in South Sudan is the National Communication Authority (NCA). Telecoms operators in South Sudan are required to obtain licences from the NCA to provide services, including for mobile, fixed-line and internet services.

South Sudan does not have specific policies or regulations related to refugees obtaining mobile phones or SIM cards. Refugees, like other residents, are generally allowed to acquire mobile phones and SIM cards, subject to the standard requirements and procedures set by telecoms providers. The government and MNOs have generally allowed refugees to access mobile services, subject to standard requirements and procedures that include providing a form of ID. Refugees are generally required to register with the government and receive a refugee ID card, but obtaining one in South Sudan can be a lengthy and complex process. Some refugees may face challenges accessing the necessary documentation or not have it at all.

Communication and connectivity needs

Expanded mobile network coverage

Expanding mobile network coverage to reach remote and underserved areas is vital. While there is connectivity in some pockets, improving coverage is essential for connecting people in rural and underserved areas.

Improved internet access

South Sudan needs better and more widespread internet access to facilitate communication and access to information.

Infrastructure development

Building and maintaining critical infrastructure, such as roads, power supply and transport, is crucial for the deployment and operation of telecommunications networks.

Telecoms infrastructure

Investing in telecommunications infrastructure development and upgrades, including mobile and fixed-line networks, is essential to provide reliable coverage and services throughout the country, particularly to remote and rural areas. Due to the on-going conflict and insecurity in some regions, there is a need for infrastructure and connectivity that can withstand disruptions and ensure continuity of services.

Digital skills and literacy

Many underserved populations may lack the knowledge and skills to make the most of digital communication tools. Investing in digital literacy and technology skills is essential and would contribute to return on investment (ROI) and the sustainability of connectivity initiatives.

Underserved communities

Ensuring that people with disabilities, women and other vulnerable groups have equitable access to communication and connectivity services is a priority for inclusion and social development.

Energy solutions

Access to affordable charging is key barrier to phone use in South Sudan. Investment in off-grid energy solutions, such as pay-as-you-go (PAYG) solar home systems, would be beneficial.

Support for humanitarian communication

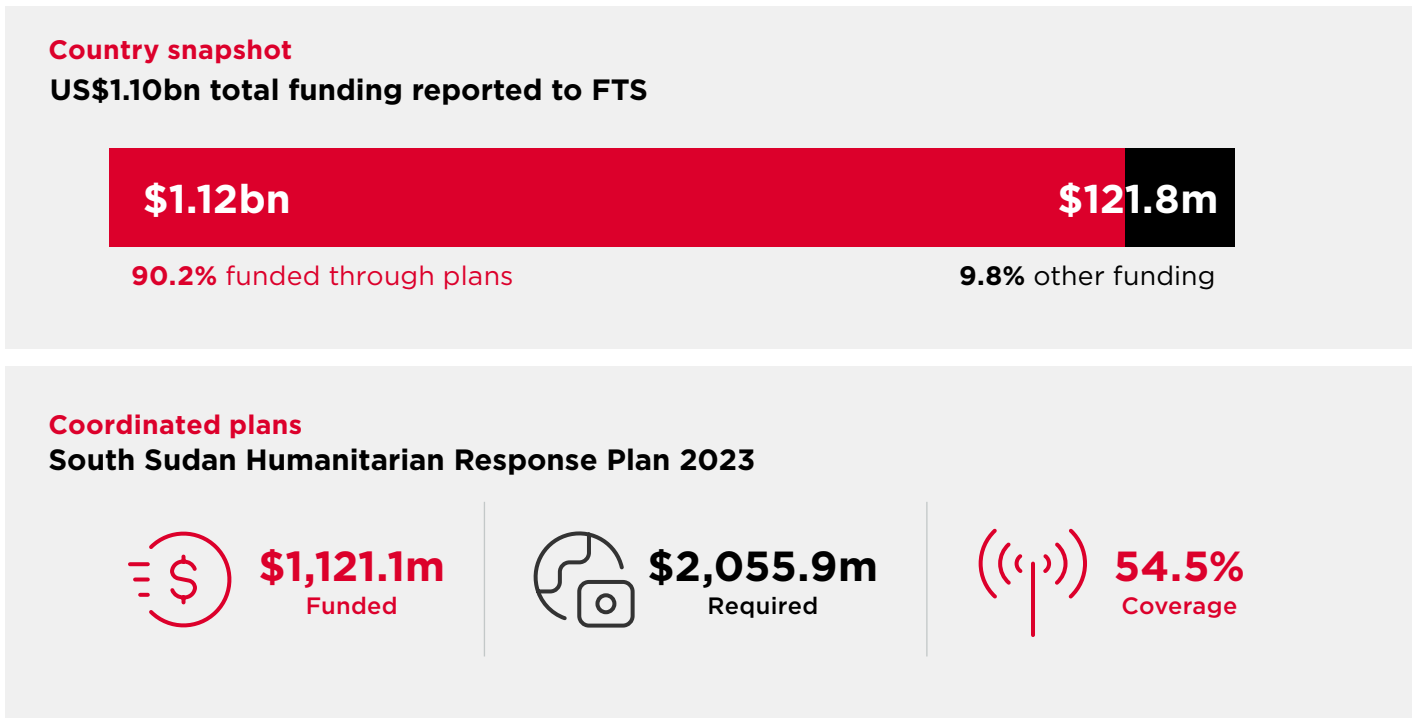
Effective communication is crucial for humanitarian organisations operating in South Sudan. Ensuring that these organisations have the connectivity they need to deliver aid and coordinate efforts is essential.

Wider humanitarian investment

More than \$1.2 billion in humanitarian funding has been reported for South Sudan in 2023 (as of November), including to meet the acute needs of IDPs. More than \$125 million of this amount was received by UNHCR and the International

Organization for Migration (IOM) to respond to the needs of displaced people, but significant funding also flowed through other agencies that support their needs. Specific breakdowns for connectivity services for refugees are not readily available.

Figure 3
Humanitarian funding to South Sudan 2023



Source: OCHA Financial Tracking Service: <https://fts.unocha.org/countries/211/summary/2023>

Engagement opportunities

Directing investments to build and expand telecommunications infrastructure in displacement camps and surrounding areas, including mobile networks and internet access, can substantially enhance connectivity. This improved access to information and communication services is crucial during crises, such as conflict outbreaks or natural disasters, and can also contribute to long-term economic opportunities that support livelihoods.

One strategic entry point for investors and donor governments is public-private partnerships (PPPs) and collaborations with humanitarian organisations and government agencies that focus on connectivity and digital inclusion. For instance, supporting programmes that enhance access to mobile and internet connectivity through affordability initiatives or shared access spaces can make a substantial difference. Similarly, investments in initiatives offering digital skills training to displaced people would not only improve their access to information and communication, but also equip them with valuable employment skills.

A combination of immature digital financial services, low levels of digital financial literacy and low-to-no incomes in both contexts mean that when people use mobile money, it is almost entirely for meeting their basic needs.⁸ The ability to receive money is potentially life saving for people with few other income opportunities and high levels of food insecurity. Supporting platforms that provide financial services to displaced people, such as mobile banking and money transfer services, could contribute significantly to self-sufficiency, improved livelihoods and financial inclusion.

Investing in renewable energy solutions for affordable charging in remote camps and rural areas can also provide more sustainable access to connectivity and services.

Conclusion

South Sudan contends with one of the lowest rates of mobile access and connectivity globally. With infrastructure challenges, and the impact of conflicts on telecommunications, the connectivity landscape is highly variable across regions but often characterised by underdeveloped telecommunications infrastructure and limited access to reliable electricity. The digital divide is evident, posing challenges for refugees, returnees and IDPs to access information, communication and essential services. Meanwhile, data on connectivity access, needs and usage is sparse and unreliable.

Reliable and accessible connectivity plays a pivotal role in enabling displaced people to stay connected with loved ones, access vital information and participate in the digital economy. Investments in building and expanding telecommunications infrastructure, PPPs and initiatives supporting digital inclusion and skills training, are all crucial to enhancing connectivity for refugees and IDPs in South Sudan, and ensuring they have the tools and opportunities necessary for resilience, self-sufficiency and social well-being.

⁸ GSMA and UNHCR. (2022). [The Digital Worlds of Displacement-Affected Communities](#).

For more information:
www.refugeeconnectivity.org