



Q4 2020: Quarterly Report

I Executive Summary

[Closing a Landmark Year](#)

Set against the context of a year that introduced unprecedented circumstances and dramatic changes to lives around the globe, 2020 proved to be a landmark year for the Stellar Development Foundation (SDF) and the Stellar network. The urgency of the moment helped propel renewed focus on the opportunities blockchain offers from countries and companies alike. Tapping into that momentum, SDF organized its work around three strategic [pillars](#) — ensuring the robustness and usability of Stellar, being the blockchain people know and trust, and fostering sustainable use cases. The strategy helped deliver not only significant growth in the ecosystem but also increased visibility and awareness among key audiences and stakeholders.

The year culminated with a banner Q4. In the final quarter of the year, SDF [announced a partnership with Centre Consortium](#) to bring USDC, one of the world's leading compliant and regulated digital dollar stablecoins, to the Stellar network, plus three other stablecoins — EURB, ARST, BRLT — launched by Stellar anchors Bitbond and Settle Network. At the end of December, [SDF also signed an MOU](#) with the Ukrainian Ministry of Digital Transformation to serve in an advisory capacity as they seek to develop a virtual assets strategy. SDF also [made its fourth enterprise fund investment](#) of the year in Settle Network to support their product growth for the world's first stablecoin exchange, bringing the total invested from the fund in FY20 to \$9.265M.

[Protocol 15](#), launched in November with the validator vote, delivered important technical upgrades and developments designed to make it easier than ever to connect global financial infrastructure, bolstered by two new compelling features: Claimable Balances and Sponsored Reserves. The year also closed out with further data demonstrating the



maturity and robustness of the network — Q4 increase in total accounts (3%), total payments (26%), average daily operations (12.9%), average daily DEX volume (138%), total operations processed (12.9%), and an astounding 1819% increase in relevant assets from the start to end of 2020.

SDF hosted its largest event of the year in Q4: Stellar’s 2nd annual conference, [Meridian](#). The virtual event, themed *Global Connections to Solve Real World Challenges*, featured [45 live-streamed sessions](#) with 95 speakers, in addition to 32 networking sessions and roundtable discussions. It garnered a global audience, with 2130 registrants from 87 countries. At the time of the conference, SDF’s marketing team launched a new [comprehensive case study](#) on the Nigeria-Europe corridor, highlighting the work of Stellar-based businesses, Cowrie Integrated Systems and Tempo France.

The SDF policy team engaged with policymakers in the US and internationally on two issues of importance to the Stellar ecosystem: [the regulation of stablecoins](#) and [tightening AML regulations for digital assets](#). SDF’s partnership with the World Economic Forum also provided the opportunity to showcase a Stellar use case in the [first publication](#) of the Global Future Council on Cryptocurrencies.

The following report details these accomplishments and more.

Stellar in the News

[Stellar Blockchain Will Soon Support USDC Stablecoin](#)

[One of the World’s Oldest Banks is Issuing a Euro Stablecoin on Stellar](#)

[SDF invests in Settle Network to support stablecoin-based payment](#)

[Op-Ed: Driving Financial Inclusion Through Compliance](#)

[Experts Answer: Did CBDCs Affect the Crypto Space in 2020](#)

[Decrypt Daily Podcast: Denelle Dixon](#)

[Pomp Podcast: Jed McCaleb](#)

Virtual Events

[Meridian 2020: Stellar Annual Conference](#)

[Achieving Network Effects on an Open Network: SDF Board Webinar](#)

[Singapore FinTech Festival: Will CBDCs Disrupt Stablecoins?](#)

[Chamber of Digital Commerce: The Future of Money](#)

[Reinventing Bretton Woods Committee: Financial inclusion, Digital Finance](#)

[LA Blockchain Week Summit: Digital Identity, Open Money, & Framework for a Decentralized Global Internet](#)

[IMF Annual Meetings: Cross-Border Payments Panel](#)

[Two Sides of the American Coin: Innovation & Regulation of Digital Assets](#)

II Network Stats

At the start of 2020, SDF established a select group of measures to assess growth of the network quarter over quarter and year over year. On all measures both from Q3 to Q4 and for the year as a whole, the Stellar network saw upward growth. In Q4 specifically, total accounts (see figure 1) grew by 3%, ending the year with almost 4.8 million Stellar accounts. The number of total payments grew by 26%, with a total of 15.18 million in Q4 compared to 12M in Q3 (see figure 2). The number of average daily operations grew 12.92%, and average daily volume on Stellar's decentralized exchange saw a 138.7% increase (see figure 3 and 4).

Figure 1. Total Accounts, Q3 - Q4

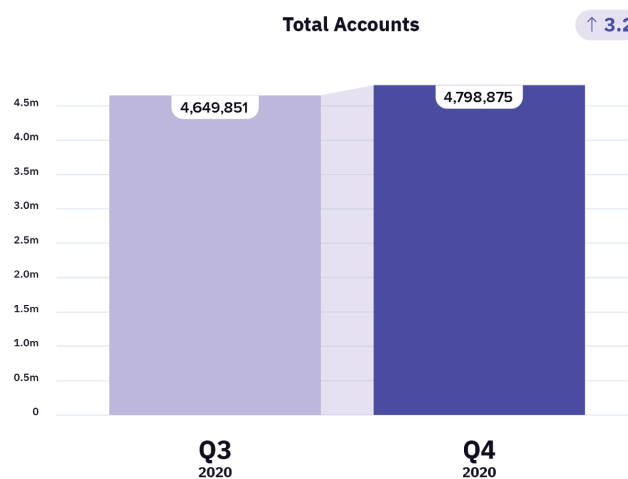


Figure 2. Total Payments, Q3 - Q4

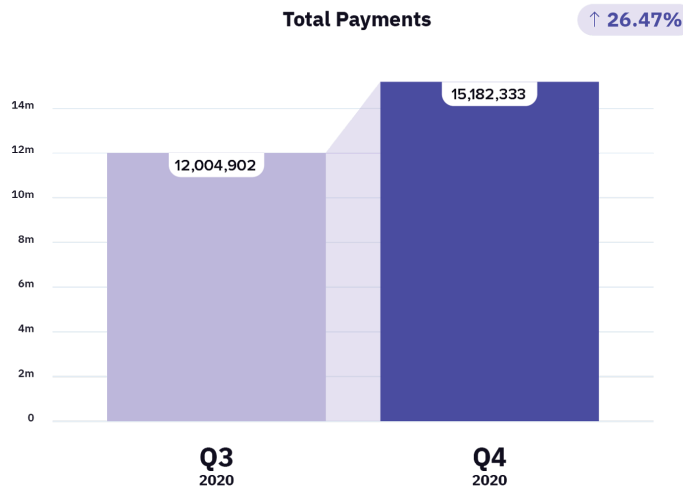


Figure 3. Average Daily Operations, Q3 - Q4

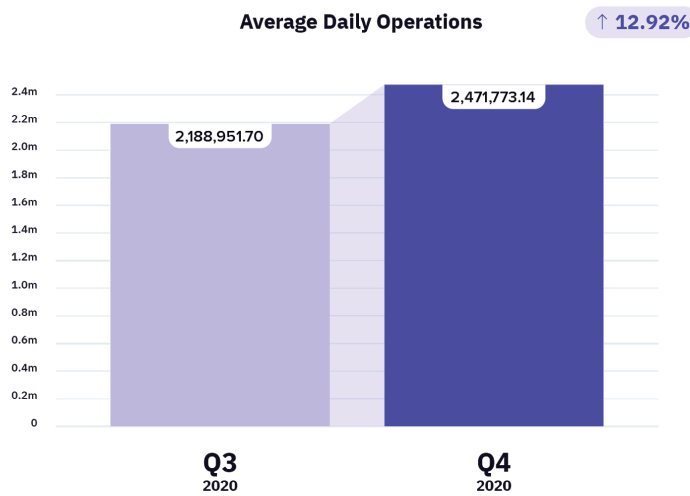
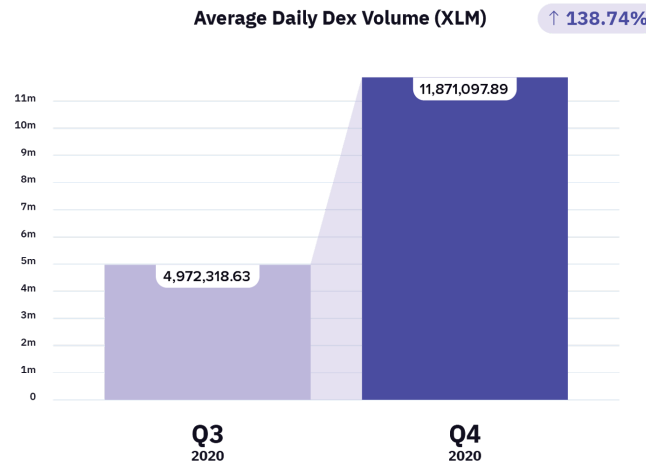


Figure 4. Average Daily DEX Volume



One of the most notable measures of growth is the number of operations processed on the network. In April of 2020, Stellar hit 1 billion total operations processed since the network began in 2015. Yet in the second half of the year, the acceleration in processed operations put Stellar on track to outpace that milestone annually: there were almost 430 million processed operations in Q3 and Q4 alone (see figure 5 and 6).

Figure 5. Total Operations Processed FY20 Q3 - FY20 Q4

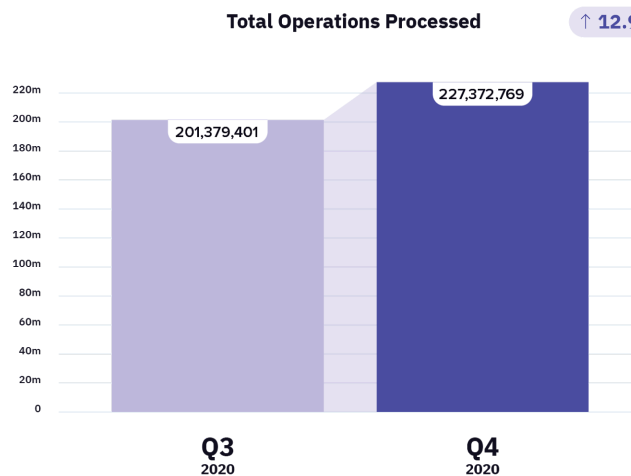
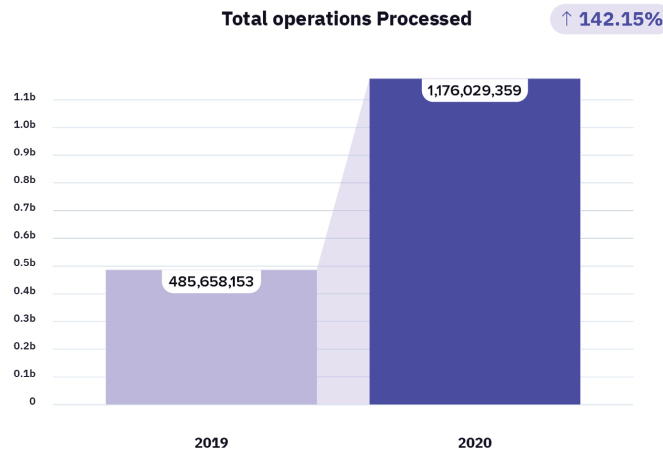


Figure 6. Total Operations Processed FY19 - FY20



In 2020, SDF also began tracking a new measure, Relevant Assets, which will be integrated into quarterly reports in 2021. SDF defines a relevant asset as an asset tethered to a real financial instrument, and believes these assets give a good indication of how well Stellar is moving towards connecting global financial systems. From January to December, the total number of these assets grew by 63% (see figure 7). In addition, the on-network transaction volume of relevant assets grew from \$2.5M to \$48.7M (1819%) by year's end (see figure 8).

Figure 7. Relevant Assets January FY20 - December FY20

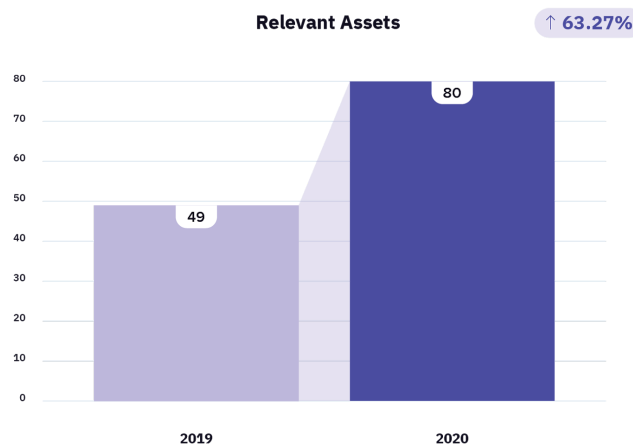
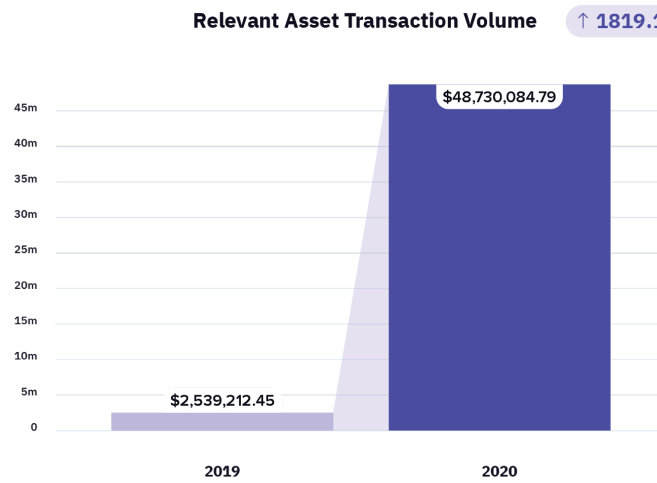


Figure 8. Relevant Asset Transaction Volume January FY20 - December FY20



The decentralization of the network (see figure 9) is consistent with the rest of the year. The network saw a 6% increase in unique assets, up from 8287 to 8794 on-chain assets at the end of Q4 (see figure 10).

Figure 9.

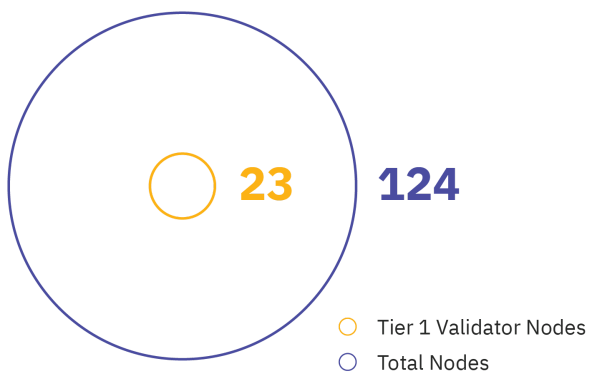


Figure 10.



III Network Development and Updates

General Engineering & Platform Updates

The engineering team released new documentation, integrations, and tools in Q4:

- [New Horizon API docs](#)
- [New ecosystem docs](#)
- Captive core Beta: a new release that simplifies Horizon deployment, improves robustness, and greatly speeds time to join for new Horizon operators.
- Integration of Protocol 13 and 15 functionalities to Vibrant to handle transactions fees and reserves sponsorship
- Project Hubble v2.0: a new ETL pipeline leveraging Horizon's new ingestion system, which will enable the public ledger dataset (on BigQuery) to be updated every 5 minutes (instead of daily)
- [Freighter](#): a safer alternative to sign Stellar transactions in web applications via a browser extension
- All-new [Account Viewer](#): a revamp of Stellar's basic user wallet, focused on increasing security and interoperability with hardware wallets and Freighter
- SEP-8 changes: added first-class support to regulated assets, tweaked SEP-8 to make it more flexible, and started specifying Clawback functionality on the Stellar network ([CAP-35](#)).

The team also began work on Project "Sidenet," prototyping and exploring solutions for privacy and layer-2 scalability for the Stellar network that experiments with adding blockchain proofs to traditional payment processing systems.

Stellar Core Updates

In Q4, SDF released a version of Stellar Core that supports Protocol 15, and shortly thereafter, the public network validators voted to accept the new version and to upgrade the network. That protocol release included a few new functionalities that make it easier to build user-friendly apps and services on the network.



Specifically, two new Protocol 15 features — Claimable Balances and Sponsored Reserves — enable issuers to offer seamless on-ramps and apps to safely cover users' lumen reserves. Combined, they simplify Stellar onboarding and account management and empower developers and businesses to create intuitive experiences that appeal to users far beyond the crypto savvy. For more details, check out our [Protocol 15 Improvements](#) blog post.

SDF Core team also made a lot of stability and performance improvements to consensus and peer-to-peer code that allow the network to be safer and use fewer resources.

IV Ecosystem and Partners

New Stablecoins on Stellar

In Q4 of 2020, the issuance of four new stablecoins were announced to the Stellar network.

- Argentine Peso (ARST) and Brazilian Real (BRLT), issued by [Settle Network](#): The first stablecoins for Argentina and Brazil went live in November of 2020. Both are fully-backed by domestic currencies and preserve close 1:1 rate between them and local currencies, involving bank grade KYC verification, AML controls and blockchain monitoring.
- Euro (EURB), issued by [Bitbond](#) and [Bankhaus von der Heydt](#): In December 2020, Bitbond and Bankhaus von der Heydt (BVDH) announced the first stablecoin issued directly by a banking institution on Stellar and one of the first of its kind in the crypto market. The Euro (EUR) stablecoin (EURB) is [live](#) and available today on the Stellar network.
- US Dollar (USDC), issued by [Circle](#): The Centre Consortium announced Stellar as an official chain for USDC, one of the world's leading compliant and regulated digital dollar stablecoins. It is expected to be live in Q1 of 2021.

Anchor Update

SDF's Business Development team saw significant traction in bringing more anchors onto the Stellar network in Q4. [Perahub](#), a majority owned subsidiary of the Union Bank of the Philippines, signed and [announced](#) they are joining the network, which will enable cash out to over 3,000 points of sales in the Philippines, one of the world's largest receiving markets for remittances. In parallel, [Chynge](#), a digital cross-border payments business based in Singapore, is onboarding as an anchor and will serve as the sending partner for the Singapore/Philippines remittance corridor. SDF also signed an anchor agreement with [Stably](#), a US-based asset tokenization platform, to enable easy on and off ramps for [USDC](#) as well as their own USD stablecoin in Q1 2021.

Businesses on Stellar

The decentralized and open nature of Stellar means organic growth is continuously happening on the network. SDF knows of 13 new projects that launched on Stellar this quarter, but this figure represents only the fraction of the projects building on the network that we have heard about or been involved in.¹

Stellar-based products launched in Q4 include:

- [Freighter](#), a non-custodial wallet extension that enables you to sign Stellar transactions via your browser.
- The [Coinqvist Shopify integration](#), which allows merchants to accept XLM, BTC, ETH, and other cryptocurrencies in their Shopify stores, and to automatically settle in their local currency.
- The [Stellar.Expert directory interface](#), which makes it easy for Stellar users to tag known Stellar addresses in order to share knowledge and protect consumers.

Partner Spotlight: Bitbond and Bankhaus von der Heydt

[Bitbond](#), a Germany-based tokenization and digital asset custody technology provider, and Bankhaus von der Heydt (BVDH), one of Europe's oldest banks, have partnered to issue a Euro stablecoin on the Stellar network. The new EURB stablecoin is the first to be issued directly on Stellar by a banking institution and one of the first of its kind on the crypto market.

This partnership is a testament to the ways traditional banking and blockchain can work together. Stellar-based businesses such as DSTOQ, Lobstr, and DTransfer by SatoshiPay are already leveraging the stablecoin. With Bitbond's cutting-edge technology, BVDH can now accelerate asset issuance and work with banking clients to issue tokenized financial assets of their own with full on-chain settlement. Learn more about the other benefits of this partnership in [our press release](#).

¹ A list of projects built on Stellar known to SDF is available at: <https://www.stellar.org/ecosystem/projects>.

Community Development

Several new initiatives aimed at growing, engaging, and connecting the vibrant community of Stellar developers and enthusiasts also launched in Q4.

Two noteworthy developments:

- [Stellar Quest](#), a gamified intro to Stellar that encourages hands-on learning through code-based challenges, launched and, over the course of two series, drew in a new crop of Stellar developers. Over 2,000 people joined Stellar Quest, and over 500 completed a challenge and claimed a badge.
- [Stellar Global](#), a new Discord server created by and for the community that features educational, developer-focused, and region-specific channels, grew from zero to over 500 members. It's a highly active channel, and we're excited to see how much the community is coming together, and how much they are teaching one another.

V Visibility & Engagement

Marketing and Communications

SDF Marketing and Communications efforts in Q4 were predominantly focused on bringing [Meridian 2020](#), Stellar's 2nd annual conference, to life. The team built the virtual conference from the ground up — organizing a 45-session program with 95 speakers from within and beyond the blockchain industry, building a technology platform to support a virtual event with engagement tools, and executing a marketing campaign to drive awareness and participation in the event. The session content is now available on the [Meridian website](#) and [a recap of the event](#) is available on the SDF blog.

Promoting real use cases of the Stellar network is a top priority for SDF. SDF's marketing team was proud to launch [a new case study video and landing page](#), highlighting the Nigeria-Europe corridor operated by Stellar-based businesses, Cowrie Integrated Systems and Tempo France. In addition to the content living on the landing page, it is also being leveraged in paid media advertising opportunities and social media. The team

plans to build on this success to create and distribute more of this type of content in 2021.

The marketing team penned 11 blogs for SDF channels in Q4, including:

- [Making Cross-Border Payments Easier in East Africa with ClickPesa](#)
- [Achieving Network Effects on an Open Network](#), informed by the webinar with SDF Board Members on the topic
- [Custodial vs. Non-Custodial Apps: Which side are you on?](#),
- [SDF at IMF-World Bank Annual Meetings](#)
- [USDC is Coming to Stellar!](#)
- [The Story of 2020: Lighting up the Stellar map.](#)

SDF leaders participated in 7 industry events in Q4: Singapore FinTech Festival, Paris Blockchain Week Summit (which SDF also sponsored), 2 [Chamber of Digital Commerce](#) Webinars, [Reinventing Bretton Woods Committee](#) conference, 2 sessions at [LA Blockchain Week Summit](#), and the [IMF Annual Meetings](#). SDF's press team also coordinated coverage for three launches: [Centre Consortium Announces Stellar as an Official Chain for USDC](#), [Bitbond and Bankhaus von der Heydt Issue Euro Stablecoin \(EURB\) on the Stellar Network](#), and [Stellar Development Foundation Invests \\$3M in Settle Network](#). Notable SDF press from the quarter include Jed McCaleb on the [Pomp Podcast](#), Denelle Dixon on [Decrypt Daily Podcast](#), and Candace Kelly's joint Op-Ed in the FinTech Times on [Driving Financial Inclusion Through Compliance](#).

Policy

Q4 saw policymakers in the US and internationally focus more intently on two issues of importance to the Stellar ecosystem: [the regulation of stablecoins](#) and [tightening AML regulations for digital assets](#). The SDF policy team engaged directly with policymakers on both issues, including FinCEN, the Administration, the House Financial Services Committee, and the Senate Banking Committee. SDF coordinated closely with the Blockchain Association and the Chamber of Digital Commerce in these efforts.



SDF continued conversations started in Q3 with the Inter-American Development Bank and began a new conversation with the International Monetary Fund in coordination with the World Economic Forum. SDF's partnership with the World Economic Forum also provided the opportunity to showcase a Stellar use case in the [first publication](#) of the Global Future Council on Cryptocurrencies. SDF submitted three use cases from the Stellar ecosystem and WEF ultimately selected Cowrie Integrated Systems.

VI Mandate and Distribution

Mandate Overview

SDF is a non-profit organization whose mission is to create equitable access to the global financial system. SDF has no shareholders, no dividends, and no profit motive. The Foundation is funded by some of the lumens generated by the Stellar protocol at inception. Today, SDF holds roughly 30 billion lumens, and all of those lumens will eventually be used to enhance and promote Stellar.

Live accounting of the addresses with those lumens and funds are available on SDF's [mandate page](#). SDF details exactly which ledger addresses hold those funds and exactly how those funds will contribute to Stellar's success. Anyone can observe progress towards SDF's stated goals, more or less in real time. Below is a summary of how lumens were allocated in Q4 of 2020.

Q4 Mandate Status

The below table summarizes SDF's use of lumens in the fourth quarter.

Table 1. Lumen Distribution October 1 - December 31, 2020

Mandate Category	Wallet	Amount	Uses
Direct Development ²	Various	1,104,347,027 ³	SDF Operations
Ecosystem Support	Currency Support	1,999,056	Grants to Saldo, nTokens, and

² Starting with this quarter, we have updated our methodology for reporting Direct Development distributions, to exclude any Lumen loans extended or returned in the quarter.

³ The number of lumens used from Direct Development was higher this quarter than in previous quarters. XLM trade volumes on exchanges increased at the end of Q4, which increased SDF's exchange sales consistent with our internal policy for sales of the Direct Development fund lumens. Additionally, there was an increase in early employees exercising their option grants.

			ClickPesa; AnchorCoin Loan
	Developer Support	3,802,509	Infrastructure Grants, SCF Grants, DSTOQ Grants, StellarBattle
User Acquisition	Enterprise Fund	11,995,506	Settle Network Investment
	Marketing Support	317,613	DSTOQ - Marketing
Use-Case Investment	In-App Distribution	35,000	Vibrant - User Testing
	New Products	0	N/A

The table below reflects the ending balances in SDF's wallets as of January 1, 2021.

Table 2. SDF Account Balances as of January 1, 2021

Direct Development	Direct Development	519,985,326
	Jan 1 2021 Escrow	3,000,000,003
	Jan 1 2022 Escrow	3,000,000,003
	Jan 1 2023 Escrow	3,000,000,003
	Direct Development Hot Wallets ⁴	331,061,327
Ecosystem Support	Developer Support	919,158,646
	Developer Support Hot Wallets	20,654,310
	Currency Support	980,454,469,
Use-Case Investment	New Products	2,000,000,001
	Enterprise Fund	7,943,754,784
User Acquisition	In-App Distribution	3,941,964,174
	In-App Distribution (Hot)	26,320,647
	Marketing Support	1,999,511,078

⁴ SDF maintains multiple hot wallets, which in this chart are aggregated by category. A complete list of SDF accounts can be found on Stellar Expert ([https://stellar.expert/directory?tag\[\]=sdf](https://stellar.expert/directory?tag[]=sdf)) or on the SDF Mandate Page (<https://www.stellar.org/foundation/mandate>).