CoRelayer

COOPERATIVE RELAYER INFRASTRUCTURE FOR AUTONOMOUS TRANSACTIONS

CoreLayer Units Token whitepaper

CRL-aaf104 on MultiversX

REVISION	DATE
1.1	7 November 2026

ABOUT THIS DOCUMENT

CoreLayer Units

CRL-aaf104 on MultiversX

DOCUMENT	REVISION	DATE
Token whitepaper	1.1	7 November 2026

AUTHOR	CONTACT	WEBSITE
CoRelayer	support@co-relayer.com	co-relayer.com

ABSTRACT

CoreLayer Units · CRL-aaf104 · MultiversX. CoRelayer is for developers and AI agents. CRL is for people who want to support the project and be part of it. This paper describes the token, its supply and its allocation, the path of each sale to the CRL/WEGLD pool, and the hourly additions that deepen it.

NOTICE

Not an offer or advice. CoreLayer Units give no right to CoRelayer's revenue, assets or decisions. Built on MultiversX. CoRelayer is an independent project and is not affiliated with, endorsed by, or a product of MultiversX.

TOKEN WHITEPAPER

Contents

01 Purpose 04

02 The token 05

03 Supply and allocation 07

04 From sale to liquidity 10

05 The CRL/WEGLD pool 13

06 Liquidity and volatility 17

07 Sources 18

08 Glossary 19

01

Purpose

CoRelayer is for developers and AI agents. CRL is for people who want to support the project and be part of it.

CoRelayer pays the network fee on MultiversX transactions for its customers' users. Developers and AI agents buy plans in USDC; a relayer in the sender's shard adds its signature and pays the network fee in EGLD. The service does not use CoreLayer Units.

The rest of every sale, once the relayers and the running costs are paid, is added to the CRL/WEGLD pool on xExchange as liquidity held by the CoRelayer contract. This paper describes the token, its supply and allocation, the path of a sale to the pool, and the pool itself.

Each statement that a record can show is followed, under **On record**, by the transaction, event or view that shows it. Figures are as of the date of this paper; the token page at co-relayer.com/token shows the current values.

02

The token

CoreLayer Units is an ESDT token on MultiversX. One issue transaction minted the whole supply and fixed the token's properties for good.

display name	CoreLayer Units
on-chain name	CoreLayerUnits (a token name on MultiversX cannot hold a space)
full identifier	CRL-aaf104
ticker	CRL
network	MultiversX, as an ESDT token
decimals	18
issued	19 October 2026
issued supply	100,000,000 CRL, minted by the issue transaction; none since
manager	the treasury wallet, which issued the token; it can hand management on and grant special roles, and every grant is public
role of the CoRelayer contract on the token	none: it only holds CRL and adds it to the CRL/WEGLD pool

The full identifier is the ticker, a dash and the six hexadecimal characters MultiversX assigned at issue. Every CoRelayer page and document shows the identifier in full at its first mention of the token.

2.1 Settings of the issue transaction

At the network's defaults, a new token stays upgradable and open to new roles. The issue transaction turned upgrades off, so its properties can never change, and left roles open. Table 1 lists each setting and what it decides.

PROPERTY	VALUE	WHAT IT DECIDES
`canUpgrade`	false	No property of the token can change after the issue.
`canAddSpecialRoles`	true	The manager can grant special roles, such as the role that creates units or the role that restricts transfers. Every grant is a public transaction.
`canFreeze`	false	No account can be frozen, the pool's included.
`canWipe`	false	No balance can be wiped.
`canPause`	false	Transfers cannot be stopped.
`canChangeOwner`	true	Management can be handed to another account.
`canMint`, `canBurn`	false	They have had no effect on MultiversX since epoch 432.

Table 1 Properties set by the issue transaction, and what each decides.
MultiversX documentation: fungible tokens (ESDT)

No address holds `ESDTRoleLocalMint`, the role that creates new units. The network sets `ESDTRoleBurnForAll` on every token. Any holder can destroy its own CRL; the token's supply record shows how much has been destroyed.

2.2 The issued supply

100,000,000 CRL were minted at issue and none since. No address holds the role that mints CRL.

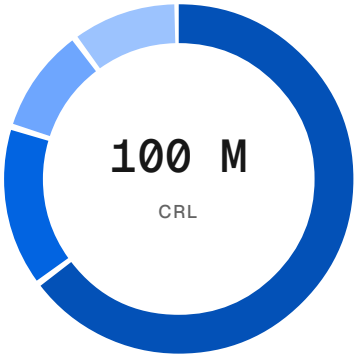
On record. The token's supply record: 100,000,000 CRL minted at the issue and nothing since. Its roles, read through the view `getSpecialRoles` of MultiversX's token system contract: no holder of `ESDTRoleLocalMint`. Its properties, read through `getTokenProperties`: `canUpgrade` false.

The issue transaction minted 10^{26} base units (hexadecimal 52b7d2dcc80cd2e4000000); with 18 decimals, 100,000,000 CRL.

03

Supply and allocation

The issue transaction minted the whole supply to the treasury wallet, which places each allocation: 65% for liquidity, 15% for the ecosystem, 10% for the treasury and 10% for the team.



- Liquidity — 65 %
  65,000,000 CRL: the first deposit into the pool and the inventory of the CoRelayer contract
- Ecosystem and partnerships — 15 %
  15,000,000 CRL in the ecosystem wallet
- Treasury — 10 %
  10,000,000 CRL in the treasury wallet
- Team — 10 %
  10,000,000 CRL in the team wallet

Figure 1 Allocation of the 100,000,000 CRL minted at the issue, by share.
CoreLayer Units allocation

ALLOCATION	SHARE	CRL	PLACED IN	USED FOR
Liquidity	65%	65,000,000	1,000,000 in the CRL/WEGLD pool as its first deposit; 64,000,000 in the CoRelayer contract as its inventory	the first deposit and the hourly additions of chapter 5
Ecosystem and partnerships	15%	15,000,000	the ecosystem wallet	grants to partners and listings, under the spending policy
Treasury	10%	10,000,000	the treasury wallet, separate from the revenue wallet	running the project, under the spending policy
Team	10%	10,000,000	the team wallet	under the spending policy

Table 2 The four allocations: where each is placed and what it is used for.
CoreLayer Units allocation

In basis points of the issued supply S: liquidity = S × 6,500 / 10,000; ecosystem = S × 1,500 / 10,000; treasury = team = S × 1,000 / 10,000. Each result is an exact number of base units. The contract's inventory is the liquidity share less the first deposit: 65,000,000 − 1,000,000 = 64,000,000 CRL.

3.1 The liquidity share

65% of the supply is set aside for liquidity: 1% seeded the CRL/WEGLD pool at launch and 64% is held by the CoRelayer contract, which adds it to the pool over time.

On record. The transactions of the pool's first deposit and of the 64,000,000 CRL sent to the CoRelayer contract. The contract's view `getLiquidityState` reports the CRL deposited and the CRL held.

3.2 Team, treasury and ecosystem tokens

Team, treasury and ecosystem tokens (35% of the supply) are not locked. They sit in three published wallets and are spent only under a published spending policy; nothing on the blockchain enforces that policy.

On record. The three allocation wallets and their transactions. The token page shows each wallet's address and balance; Table 3 sets out the policy.

NO.	RULE
1	Every transfer out of the treasury wallet (`erd1mf4u0jr6786wtz7s7dj6gmpyfafg8e0exh5wvye5cygvvxyyxhpsmj8q0e`) is announced at least 48 hours ahead with its amount and purpose, and published with its transaction.
2	Team (`erd1sdnv72exza83t9pggltfffyznj5kn7gee984rs45npympayaxucsneh83z`): at most 416,667 CRL per 30 days.
3	Ecosystem (`erd19yslnn8kdv4jfetqwqhwxue3d4w0srzk9k0ak8f0gz6duky6p4zsxupw7m`): grants to partners and listings, as each partnership requires.
4	No CRL from these wallets is ever traded to move the pool price around a liquidity addition, neither in one trade nor gradually over hours or days.
5	CoRelayer does not manipulate the price of CRL.

Table 3 Spending policy for the team, treasury and ecosystem tokens. The 416,667 CRL of rule 2 is 1/24 of the team's 10,000,000 CRL, rounded up.

CoreLayer Units allocation

3.3 Circulating supply

Circulating supply is the issued supply less the CRL destroyed by holders, the inventory the CoRelayer contract holds for future additions, and the balances of the three allocation wallets. The allocation wallets are shown on their own lines with their balances and the words "not locked"; readers may count them as

they wish. The CRL in the pool is circulating, since anyone can buy it, and is shown on its own line with the protocol's share of the pool.

Formula 1 states the same count in this paper's terms; Table 4 lists the lines in the order the token page shows them.

$$circulating = issued - destroyed - inventory - wallets \quad (1)$$

issued	the issued supply: 100,000,000 CRL
destroyed	the CRL its holders have destroyed, read from the token's supply record
inventory	the CoRelayer contract's inventory, held for future additions
wallets	the balances of the treasury, team and ecosystem wallets, each shown on its own line

LINE	WHAT IT COUNTS
Issued supply	100,000,000 CRL, from the token's supply record
Destroyed by holders	the CRL its holders have destroyed
Held by the CoRelayer contract for future additions	the contract's inventory
Treasury wallet — not locked	the balance of the treasury wallet
Team wallet — not locked	the balance of the team wallet
Ecosystem wallet — not locked	the balance of the ecosystem wallet
Circulating	the issued supply less the five lines above
of which in the CRL/WEGLD pool	the CRL side of the pool's reserves
protocol's share of the pool	the contract's pool tokens, as a share of all pool tokens

Table 4 The lines of the supply table, as the token page shows them with current values.
The token's supply record, the CoRelayer contract and the three allocation wallets

04

From sale to liquidity

Customers pay the CoRelayer contract in USDC. In the same transaction the contract swaps the payment to WEGLD on xExchange's WEGLD/USDC pool and divides it in a fixed order: relayers, network-fee reserve, running costs, liquidity.

Relayers 01

Exactly enough EGLD, counted at the worst case, to pay for every transaction the payment makes available.

Network-fee reserve 02

The reserve that pays the network fees of CoRelayer's own transactions, such as settlement and pool additions: refilled by at most 3.5 EGLD per 30 days, never above 4 EGLD held.

Running costs 03

Up to the running-cost budget of 120 USDC per 30 days, sent to the revenue wallet and swapped to USDC daily.

Liquidity 04

The remainder, held in the contract as WEGLD until an hourly addition takes it into the CRL/WEGLD pool (chapter 5).

After the relayers are paid for the capacity a sale switches on and the month's running costs are covered, the rest of every sale goes to the CRL/WEGLD pool as liquidity owned by the protocol. It is added in a separate step once an hour, at the pool's current price; a large amount is added over several hours.

On record. The contract's `paymentSplit` events give the part of each sale left for liquidity; its `liquidityAdded` and `liquidityDeferred` events record every hourly step.

4.1 Relayers first

The contract counts every transaction any customer can still use at the highest network fee it can cost, and the EGLD delivered to the relayers always covers that count. A sale is refused if its swap would give less, so no sale is made below its own worst-case cost.

Real transactions usually cost less than the worst case. After a plan period ends, the difference is proven from the relayers' real fees and released after 48 hours. Released funds then follow the same order without its first step: network-fee reserve, running costs, liquidity.

4.2 Break-even

Break-even: about $158–$263 of sales per 30 days (server budget 120 USDC per 30 days)

Until the month's sales pass this level, sales add no liquidity: running costs come first. Where in the range depends on what customers buy. Low sales can leave the running costs uncovered.

The break-even is the level of sales per 30 days that covers the running-cost budget and the refill of the network-fee reserve. Table 5 computes it for four ways of buying from the WEGLD/USDC pool as read on 7 November 2026 at 11:31 UTC; the token page recomputes it from the values in force.

WHAT CUSTOMERS BUY	SALE (USDC)	RELAYERS' SHARE OF THE WEGLD	USD LEFT PER USDC	BREAK-EVEN
Pay-as-you-go deposit, used at the metered rate	100	21.1%	0.7866	$157.86
Starter plan at list price	10	31.7%	0.6806	$182.46
Growth plan	200	39.5%	0.6027	$206.03
Pay-as-you-go deposit, used at the lowest rate the plan rules allow	100	52.7%	0.4715	$263.37

Table 5 Break-even sales per 30 days for four ways of buying, at a running-cost budget of 120 USDC per 30 days.
CoRelayer's computation from the WEGLD/USDC pool, read on 7 November 2026 at 11:31 UTC

Formula 3 gives the USD one USDC of a sale leaves once the relayers are paid; formula 2 divides the month's costs by it.

$$S = (B + F \times P) / r \qquad (2)$$

- S the sales per 30 days that cover both the running-cost budget and the refill of the network-fee reserve
- B the running-cost budget: 120 USDC per 30 days, the first step of its ladder
- F the refill of the network-fee reserve: 1.326 EGLD per 30 days, an estimate
- P the EGLD price in USD, read from the WEGLD/USDC pool every sale is swapped on
- r the USD left after the relayers for each USDC of sales (formula 3)

$$r = ((E - R) / A) \times P \quad (3)$$

- A one sale, in USDC
- E the WEGLD its swap gives
- R the WEGLD the relayers receive for the capacity it switches on, the per-sale allowance included

EGLD price P	$3.151425: 727,751.482579 USDC against 230,927.712537672586388577 WEGLD in the WEGLD/USDC pool, read on 7 November 2026 at 11:31 UTC
running-cost budget B	120 USDC per 30 days, the first step of its ladder
network-fee refill F	1.326 EGLD per 30 days, an estimate
price per transaction	0.01 USDC per credit; a credit is the list price of one transaction, up to 0.001 EGLD of network fee
per-sale allowance	0.004 EGLD to the relayers with every sale
E of a 100 USDC sale	31.632143 WEGLD, after the WEGLD/USDC pool fee of 0.3%
E of a 10 USDC sale	3.163604 WEGLD, after the same fee
E of a 200 USDC sale	63.255622 WEGLD, by the same pool formula

4.3 Every split is public

Every sale's split is public: what went to relayers, to running costs and to liquidity, per transaction.

On record. Each sale emits one `paymentSplit` event carrying the USDC paid, the WEGLD from the swap and the parts that went to the relayers, the network-fee reserve, the servers and liquidity. The parts add up to the WEGLD from the swap. The contract's address is published at co-relayer.com/.well-known/corelayer.json.

05

The CRL/WEGLD pool

A sale never touches the CRL/WEGLD pool. Liquidity reaches it through a separate hourly transaction, capped in size and made regardless of price.

5.1 Set-up

The owner wallet creates the CRL/WEGLD pool through xExchange's router and makes the first deposit: 1,000,000 CRL and 100 WEGLD. Table 6 lists the steps in order.

STEP	WHAT HAPPENS
1	The token is issued with the settings of chapter 2.
2	The owner wallet creates the pool through xExchange's router.
3	The pool token, CRLWEGLD-3929a6, is issued through the router. CoRelayer names it by its identifier only, because whoever issues it chooses its display name.
4	The owner wallet makes the first deposit, 1,000,000 CRL and 100 WEGLD, and receives its pool tokens. It commits them all to xExchange until epoch 2274. No one can swap in the pool before step 8.
5	The CoRelayer contract, deployed with additions paused and with xExchange's router set in it once, is pointed at the pool and receives its 64,000,000 CRL. The router never changes.
6	Once that commitment ends, the owner wallet moves the pool tokens into the contract, all but about 1%, and additions are switched on.
7	The owner wallet commits that 1% to xExchange again, for three epochs: it is the part xExchange asks to see committed before it opens swaps.
8	The owner wallet presents that part to xExchange's router, which opens swaps and hands the part back. From then on the pool charges a 1% fee on every swap.
9	When that part is free again, the owner wallet moves it into the contract too, and the contract holds about all of the pool tokens.

Table 6 The set-up of the pool, in order.
The pool's transactions and the CoRelayer contract

Pool tokens belong to the owner wallet until they are in the contract, and the owner wallet can withdraw them from the pool once it has them back from xExchange. The token page shows the pool tokens the owner wallet holds for as long as it holds any.

5.2 Hourly additions

Once an hour the contract adds the WEGLD that sales set aside for liquidity to the pool, together with CRL from its allocation, at the pool's current price, whatever that price is. Each addition is at most 1% of the WEGLD the contract has itself put into the pool.

Formula 4 gives the most one addition may take; WEGLD beyond it waits for the following hours.

$$W = \min(own, book) \times c \;/\; 10{,}000 \qquad (4)$$

W	the most WEGLD one addition may take
own	the WEGLD of the contract's position in the pool when the addition is made
book	the WEGLD put into the pool by the contract, through its own deposits and additions
c	the cap of one addition in basis points: 10 to 100, and 100 by default

The base is the smaller of own and book, so WEGLD that other traders bring to the pool never enlarges an addition. For the pool as first deposited, with all its pool tokens in the contract, own and book are both 99.999999999999999 WEGLD and c is 100: one addition takes at most 0.99999999999999999 WEGLD.

On record. The contract's `liquidityAdded` events give the WEGLD and CRL of every addition, its price in CRL per WEGLD, its cap and the pool tokens received. A step that adds nothing emits `liquidityDeferred` with its reason: pool paused by xExchange or not readable; nothing to add yet; amount too small to add; swaps blocked by xExchange; pool tokens paused or frozen by xExchange; an account on the owner's side holding an xExchange owner or pause right on the pool, or CRL paused or limited to holders of a role.

5.3 Fees and custody

The pool's trading fees stay in the pool, where most of the position belongs to the protocol.

The CoRelayer contract has no function that withdraws its CRL or its pool tokens. The contract can be upgraded by its owner; every upgrade is announced at least 7 days ahead and published as a verified build.

On record. The pool's views `getFeeState` and `getTotalFeePercent` give its fee state and its fee. The contract's pool tokens, set against all pool tokens, give its share of the position.

5.4 When the contract's CRL runs low

When the contract's own CRL runs low, part of each pool addition buys CRL on the market first.

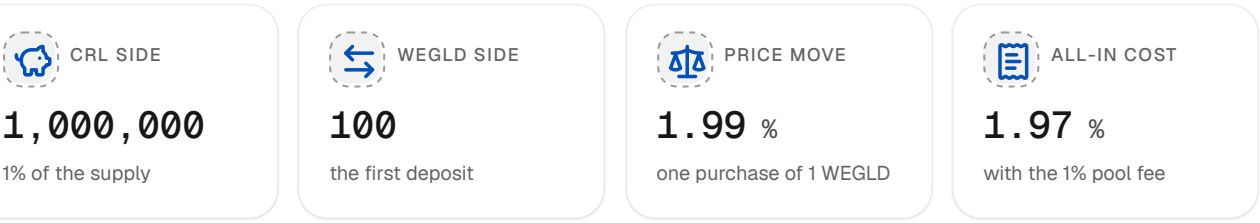
This applies only while the contract holds less than 10% of the CRL deposited into it: 6,400,000 of 64,000,000 CRL. Below that level the swapped part grows as the contract's CRL falls, up to 51% of an addition when none is left.

On record. The `liquidityAdded` events carry the WEGLD swapped and the CRL received.

5.5 The first deposit

At launch the pool holds 1,000,000 CRL and 100 WEGLD, about $315 on each side at today's EGLD price. A 1 WEGLD purchase moves the price by about 2% and costs about 2% including the 1% pool fee. Prices in a thin pool can move sharply.

On record. The pool's reserves, as the pool's own views return them. The EGLD price is the one read from the WEGLD/USDC pool on 7 November 2026 at 11:31 UTC, $3.151425, so 100 WEGLD is $315.14; the token page recomputes the dollar figure when it is viewed.



The price move compares the pool's price after a purchase with its price before. The all-in cost compares the CRL received with what the same WEGLD would buy at the price before, so it includes the pool fee. Table 7 shows the same purchase in pools of three sizes, computed with formula 5.

POOL RESERVES	PRICE MOVE	ALL-IN COST
500,000 CRL and 50 WEGLD	4.01%	2.92%
1,000,000 CRL and 100 WEGLD (first deposit)	1.99%	1.97%
5,000,000 CRL and 500 WEGLD	0.39%	1.19%

Table 7 One purchase of 1 WEGLD in pools of three sizes, each with the first deposit's ratio of CRL to WEGLD and its 1% fee. The rows are fixed test cases of formula 5, not forecasts of the pool's size.

Formula 5, computed for this paper

$$q = a \times k \times C \;/\; (W \times 100{,}000 + a \times k) \qquad (5)$$

q	the CRL a purchase receives
a	the WEGLD it pays: 1 WEGLD in the table
k	100,000 − f, with f the pool fee per 100,000: 1,000 for the 1% fee, so k is 99,000
C	the CRL reserve of the pool before the purchase
W	the WEGLD reserve of the pool before the purchase

06

Liquidity and volatility

Two properties of the market for CoreLayer Units follow from the pool: how deep it is, and how far its price moves.

01 LIQUIDITY

The depth of the pool that pairs CRL with WEGLD on xExchange sets how far a trade moves the price. Every liquidity addition deepens the pool.

02 VOLATILITY

The price of CRL is set by trading in the pool, not by CoRelayer, and can move sharply in either direction, especially while the pool is small.

6.1 Regulatory statements

This paper is not an offer or advice, and CoreLayer Units give no right to CoRelayer's revenue, assets or decisions. Regulation (EU) 2023/1114 requires the following statements, given here in its words.

This crypto-asset white paper has not been approved by any competent authority in any Member State of the European Union. The offeror of the crypto-asset is solely responsible for the content of this crypto-asset white paper.

This crypto-asset white paper complies with Title II of Regulation (EU) 2023/1114 of the European Parliament and of the Council and, to the best of the knowledge of the management body, the information presented in the crypto-asset white paper is fair, clear and not misleading and the crypto-asset white paper makes no omission likely to affect its import.

The crypto-asset referred to in this crypto-asset white paper may lose its value in part or in full, may not always be transferable and may not be liquid.

07

Sources

[1] CoRelayer — the constants of CoRelayer on MultiversX, among them the address of the CoRelayer contract, whose transactions, events and views each statement points to.
co-relayer.com/.well-known/corelayer.json

[2] CoRelayer — the CoreLayer Units page: current figures, the three allocation wallets and the spending policy.
co-relayer.com/token

[3] MultiversX Explorer — the token: its issue transaction, properties, roles, supply and holders.
explorer.multiversx.com/tokens/CRL-aaf104

[4] MultiversX Explorer — the pool token of the CRL/WEGLD pool: its supply and the accounts that hold it.
explorer.multiversx.com/tokens/CRLWEGLD-3929a6

[5] MultiversX documentation — fungible tokens (ESDT): issuing a token, its properties and its roles.
docs.multiversx.com/tokens/fungible-tokens

[6] Regulation (EU) 2023/1114 of the European Parliament and of the Council on markets in crypto-assets.
eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32023R1114

[7] Commission Implementing Regulation (EU) 2024/2984 on the forms, formats and templates of crypto-asset white papers.
eur-lex.europa.eu/eli/reg_impl/2024/2984/oj

08

Glossary

Addition	One hourly transaction in which the CoRelayer contract adds waiting WEGLD, and CRL from its inventory, to the CRL/WEGLD pool at the pool's current price.
Basis point	One hundredth of a percent: 100 basis points are 1%.
Credit	The unit a payment becomes inside the CoRelayer contract, counted from the USDC paid. One credit is the list price of one transaction: up to 0.001 EGLD of network fee.
EGLD, WEGLD	EGLD is MultiversX's native token, in which network fees are paid. WEGLD is EGLD wrapped as an ESDT token, one for one, so that pools can hold it.
Epoch	A numbered period of MultiversX, about 24 hours long. xExchange counts a commitment of pool tokens in epochs.
ESDT	The token standard built into MultiversX (eStandard Digital Token): the network itself issues and transfers ESDT tokens, without a token contract.
Inventory	The CRL the CoRelayer contract holds for future additions: 64,000,000 CRL when deposited, less what additions have used.
Network fee	The fee MultiversX charges for every transaction, paid in EGLD.
Network-fee reserve	The reserve, held in the CoRelayer contract and refilled from sales, that pays the network fees of CoRelayer's own transactions.
Owner	The holder of the CoRelayer contract's owner key. The owner wallet is the treasury wallet.
Pool tokens (LP)	The tokens a pool issues to whoever deposits into it; each stands for a share of the pool's reserves.
Price per transaction	The USDC price of one credit, set in the CoRelayer contract. The break-even of chapter 4 is computed at 0.01 USDC.
Relay Unit	The name the CoRelayer docs and API give to the counting unit of transactions: one per 0.001 EGLD of worst-case network fee. It is distinct from CoreLayer Units.

Relayer	A MultiversX wallet CoRelayer operates that adds its signature to a user's transaction and pays its network fee, with no authority over any balance. It must be in the sender's shard.
Relayer funds	The EGLD each sale delivers to the relayers: exactly enough, at the worst case, for every transaction the sale makes available.
Revenue wallet	The wallet that receives the running-cost part of each sale and swaps it to USDC daily. It is separate from the treasury wallet.
Running-cost budget	The most that sales may pay for running costs in 30 days: 120 USDC on the date of this paper, raised only one step at a time along a fixed ladder (120, 180, 450, 800 and 1,700 USDC).
Special role	A permission on an ESDT token, such as creating units or restricting transfers, that the token's manager can grant while `canAddSpecialRoles` is true. Every grant is a public transaction.
Spending policy	The published rules under which the team, treasury and ecosystem tokens are spent (chapter 3).
Treasury wallet	The wallet that issued the token and holds the treasury allocation; the set-up of the pool calls it the owner wallet.
Verified build	Contract code that anyone can rebuild from its published source and match byte for byte with the deployed code.
xExchange	The exchange on MultiversX whose pools CoRelayer uses: WEGLD/USDC for the swap of every sale, CRL/WEGLD for the protocol's liquidity.