💰 Chainlink CCIP Fee-Handling Summary

When sending a cross-chain message (tokens, data, or both), CCIP charges a **single fee on the source chain**. This fee covers all execution costs on the destination chain.

🧮 Fee Formula

```
Total Fee = Blockchain Fee + Network Fee
```

🔹 Fee Token

- Specified by the user in the CCIP message.
- Can be:
    - Native token (e.g., ETH, MATIC)
    - Wrapped token (e.g., WETH)
    - LINK token

🔧 Blockchain Fee

Covers gas costs for executing the message on the destination chain.

```
Blockchain Fee = Execution Cost + Data Availability Cost
```

Execution Cost:

```
Execution Cost = gas price × gas usage × gas multiplier
```

- **gas price:** Destination chain gas price
- **gas usage:**
    - `gas usage = gas limit + destination gas overhead + destination gas per payload + gas for token transfers`
    - **gas limit:** Set by user; unspent gas is NOT refunded
    - **destination gas overhead:** Fixed cost for CCIP DONs
    - **destination gas per payload:** Depends on message size (0 if no data)
    - **gas for token transfers:** Cost of sending tokens (0 if no tokens)

- **gas multiplier:** Smart Execution buffer to handle gas spikes

Data Availability Cost:

- Applies to L2 rollups (e.g., Optimism, Arbitrum)
- Covers cost of posting calldata to L1

🔧 Network Fee

Covers service fees for CCIP node operators:

- Committing DON
- Executing DON
- Risk Management Network (RMN)

Depends on:

- Bridging mechanism (mint/burn, lock/unlock)
- Whether the message includes tokens, data, or both

Use the `getFee()` function on the Router contract to preview the total fee.