

## Audit Report

Core Unit Name: DUX  
Audit ID: 2021-02-DUX-004  
Audit Cycle: 2022- 02 / 1  
Audit Result:

Audit Date: 02-28-2022  
CU published BS date: 02-25-2022  
Facilitator contact: @venture

Core Unit Clarification Received Date:

Transparency Report: <https://github.com/makerdao-dux/transparency-reporting/blob/main/Monthly%20Budget%20Statements/2022-02.md>

MIP40c3-SP26: <https://forum.makerdao.com/t/mip40c3-sp26-development-ux-core-unit-budget-dux-001/9774>

MIP40c3-SP52: <https://forum.makerdao.com/t/mip40c3-sp52-development-ux-core-unit-budget-dux-001/12085>

MIP40c3-SP27: <https://forum.makerdao.com/t/mip40c3-sp27-development-ux-core-unit-mkr-budget-dux-001/9777>



Core Unit December 2021 To-Up Date:  
Core Unit December 2021 To-Up Link:

#	Audit Question	Approved	Approved with comments	Needs action before approval	Audited	Audit Assessment	Core Unit's Clarification	Immediate CU Action to improve transparency report	Medium Term CU Action to improve transparency report
	Audit Questions to the structure of the transparency report and consistency with DUX MIP40c3-SP52								
0.1	Are the sections in the transparency report in the right order: Actuals, Forecast, MKR vesting and Transfers?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.			
0.2	Does the actual section include breakdowns per wallet with Budget Category, Forecast, Actuals, Difference and Payments?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.			
0.3	Does the budget forecast cover 3 months with summary and budget category breakdown?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.			
0.4	Does the budget forecast summary and breakdown contain the quarterly budget caps for comparison?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.			
0.5	Does the budget forecast summary contain the Global/total budget cap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.			
0.6	Are the budget forecast categories in the transparency report the same as in the MIP40c3-SP52?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.			
0.7	Is the operational wallet Multi-sig wallet setup the same as described in the MIP40c3-SP52?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>No. ETH address eth: 0x1d1c76c786a8eA08b18918a82e0c4A1463746c was added February 8th 2023 and eth: 0x6d6e92886DE7064A5DDE173Ae238be15e850DA was removed on February 8th 2023.</p> <p>Operational wallet controlled by the current DUX Core Unit team Address: 0x5C03a45C32498Aa0b72b6680E1da5A284C69aC7 Signers eth: 0x14341f81dF14cA86E1420c306A8d842f61c5d6C eth: 0x388e9c5a883cA0F3f752C1Af1F88750Df571aE eth: 0x8967A3a4d597a0b8007922A0b34d0631cb2d5D6d eth: 0xd797d7ea48440aA01319D5A8e8CF1C97970a1018 eth: 0xd48F36EDD1475988E1382a50Fc280775A0f942A eth: 0x911c76c786a8eA08b18918a82e0c4A1463746c</p>		Please clarify the reason change of eth address in the operational wallet.	The Budget Implementation diagram in the MIP40c3-SP52 should be updated with the new operational wallet eth address eth: 0x1d1c76c786a8eA08b18918a82e0c4A1463746c and the removal of eth address eth: 0x6d6e92886DE7064A5DDE173Ae238be15e850DA.
0.8	Is the DUX operational wallet controlled by more than 1 signer?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, the DUX operational wallet has a current policy of 3 out of 6 signers			
0.9	Is the auditor's wallet Multi-sig wallet setup the same as described in the MIP40c3-SP52?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Yes. The Auditor Wallet requires 2 out of 2 confirmations. Auditor's wallet eth address: eth: 0x5A994D8428CCeBCC153863CCdA9D28e6352f89ad Signers: Accountant role wallet eth: 0xA2A855Ac8D2a92a8A5a437690875261535c8320C Auditor role wallet eth: 0xB2da57e224949acDDe173a5b8A8160c023ea86e6</p>			
0.10	Has the DUX auditor wallet receive the funds from the protocol?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, the Auditor Wallet has received 359,120 DAI from the protocol on November 2021. <a href="https://etherscan.io/tx/0xc476cda0d8bea385824fda9c75cb6a84020dc814db24399dd3d3a1e9a2f4c24c">https://etherscan.io/tx/0xc476cda0d8bea385824fda9c75cb6a84020dc814db24399dd3d3a1e9a2f4c24c</a> .			
0.11	Has the DUX auditor wallet sufficient funds to top up the Dux operational wallet?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes. The Auditor Wallet current balance is 148,199.40 on February 28th, 2022.			
0.12	Has the DUX operational wallet received a top-up after the audit of the last transparency report?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, the DUX operational wallet received the top-up amount 84,800 DAI as requested in the January 2022 Budget Statement. <a href="https://etherscan.io/tx/0x27890e47b585d6166ce8ad8ca7bdd22aa3d7c478bae98da41b8">https://etherscan.io/tx/0x27890e47b585d6166ce8ad8ca7bdd22aa3d7c478bae98da41b8</a>			

Audit Questions to Section Transparency Report - Section 1. Last Month Actuals -								
1.1	Is the actuals budget category breakdown the same as in the MIP40c3-SP52?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.		
1.2	Is the transparency report actual's forecast the same as the forecast last published for the same month?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.		
1.3	Are the differences between forecast and actuals explained in the transparency report?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No.		Suggestion: Dux could add the reason(s) for the differences btw. forecast and actuals in the actuals' table.
1.4	Are the DUX actual expenses within the montly MIP40c3-SP52 buget cap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.		
1.5	Are the DUX actual expenses within the Global/total MIP40c3-SP52 budget cap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.		
1.6	Has the DUX contributor fees any significant deviations between forecast and actuals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There is a positive difference of 7,995.78 DAI, the forecast is 55,000 DAI and the actual expense is 87,004.22 DAI.	DUX contributor's payments are up to date.	Suggestion: DUX should forecast the contributor's compensations as close as possible to the actual payments to minimize significant deviations btw. Forecast and actuals.
1.7	Has the DUX travel costs any significant deviations between forecast and actuals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, the forecast is 7,000 and the actual expense is 1,245.71 DAI. The difference is 5,754.29 DAI	DUX attended the ETH Denver conference, all travel expenses are not reimbursed yet.	Suggestion: Dux should gather all travel expenses no later than March 31st to close the travel reimbursements asap.
1.8	Has the DUX IT Infrastructure and services costs any significant deviations between forecast and actuals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, the forecast is 5,400 DAI and the actual expense is 4,872.63 DAI, the difference is 527.37.	Lower IT infrastructure costs in February 2022.	
1.9	Has the DUX gas fees any significant deviations between forecast and actuals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No.		
1.10	Has the DUX Legal Services costs any significant deviations between forecast and actuals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No.		
1.11	Has the DUX one time expense any significant deviations between forecast and actuals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, the forecast is 500 DAI, and the actual expense is 0.	Dux has no one time expenses in February 2022.	
1.12	Has the DUX payment fees any significant deviations between forecast and actuals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, the forecast is 4,500 DAI, and the actual expense is 4,910 DAI. The difference is 410.	The payment fees are higher than expected due to increased payments in February via the payment processor.	
1.13	Has the DUX Contractor Services any significant deviations between forecast and actuals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No.		
1.14	Has the DUX presented the correct calculation of amounts for the actuals, forecast and difference?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.		
1.15	Has the DUX any budget category that seems inconsistent and needs further investigation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No.		
Audit Questions to Section Transparency Report - Section 2. Budget Forecast -								
2.1	Does the transparency report display the MIP40c3-SP52 caps for both total and budget categories?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.		
2.2	Are the montly and quarterly budget caps (both totals and per category) the same as in the MIP40c3-SP52?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.		
2.3	Are the quarterly forecast within the bounds of the MIP40c3-SP52 budget caps?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.		
2.4	Are the montly forecast totals within the MIP40c3-SP52 montly budget cap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.		
2.5	Has the DUX presented the correct calculation of amounts for the budget forecast?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes. There is, however, a typo error in the contingency buffer amount of 63.075 a (,) instead of a (.) 63,075. The latter is the correct amount.		Dux should correct the Contingency buffer amount in the budget forecast section, the correct amount is 63,075.
Audit Questions to Section Transparency Report - Section 3. MKR Vesting Overview -								
3.1	Has the DUX indicated the number of FTE in the transparency report's MKR vesting overview?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, the FTE is included in the MKR Vesting overview section of the transparency report.		
3.2	Has the MKR vesting overview the same FTE comparing it to the MIP40c3-SP27?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No. The FTE has changed from 6.0 to 5.0.		
3.4	Are the MKR vesting dates the same as in the MIP40c3-SP27?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No, the MIP40c3-SP27 includes the following vesting date December 2021 = 0 MKR. However, all other vesting dates are the same as in the MIP40c3-SP27.		
3.5	Is the MKR total budget cap in the transparency report the same as in the approved MIP40c3-SP27?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.		

3.6	Has DUX changed the MKR amounts comparing it to the last published transparency report?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No, the total MKR amount published last month is 1,080.5 and the total MKR amount in the February Budget Statement is 1,99.26 MKR. There is a difference of 118.77 MKR due to salary adjustments.		Dux should use two decimals to calculate the MKR for all the vesting periods for consistency.	
3.7	Has DUX explained the MKR change in the transparency report?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This control can only be made if the answer to the above question is yes.			
Audit Questions to Section Transparency Report - Section 4. Transfers -									
4.1	Does the DUX operational wallet balance match the transparency report current balance in the calculation made for the new transfer?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes. The current wallet balance is 218,500 DAI. DUX is requesting a transfer of 84,800 DAI.			
4.2	Are the payments from the operational wallet the same as in the actuals payments?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, there is a perfect match, DUX reported the payment of 47,000 + 39,500 = 86,500 DAI that matches the wallet outgoing transactions. <a href="https://etherscan.io/tx/0xe587b7adc0624dae06053f4f25c72a2617b0db8e680a32f560b9a75b370d809a">https://etherscan.io/tx/0xe587b7adc0624dae06053f4f25c72a2617b0db8e680a32f560b9a75b370d809a</a>			