Audit Report

Core Unit Name: TechOps-001

Audit ID: 2022-10-TechOps-001

Audit Cycle: 2022-10/1

Audit Result: Approved with comments

Audit Date: 11-25-2022

Submission Date: 11-24-2022

Facilitator contact: @eskp

Core Unit Clarification Received on Date: 11-25-2022

Transparency Report: https://github.com/MakerOps/tech-001-transparency-reporting/blob/main/2022-10.md

MIP40c3-SP53: https://forum.makerdao.com/t/mip40c3-sp53-techops-core-unit-dai-budget/12072

MIP40c3-SP54: https://forum.makerdao.com/t/mip40c3-sp54-techops-core-unit-mkr-budget/12079

Approved				
Approved with comments				
Needs action before approval				
For a vote				

#	Audit Question	🟩	🟨	🟧	🟥	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 consitency with MIP40c3-SP53.								
0.1	Are the sections in the transparency report in the right order: Actuals, Forecast, MKR vesting and Transfers?	☑	☐	☐	☐	Yes.			
0.2	Does the actual section include breakdowns per Budget Category, Forecast, Actuals, Difference and Payments?	☑	☐	☐	☐	Yes.			
0.3	Does the budget forecast cover 3 months with summary and budget category breakdown?	☑	☐	☐	☐	Yes.			
0.4	Does the budget forecast summary and breakdown contain the quarterly budget caps for comparison?	☑	☐	☐	☐	Yes.			
0.5	Does the budget forecast summary contain the Global/total budget cap?	☑	☐	☐	☐	Yes.			
0.6	Are the budget forecast categories in the transparency report the same as in the MIP40c3-SP53?	☑	☐	☐	☐	Yes.			
0.7	Is the Multi-sig operational wallet setup the same as described in MIP40c3-SP53?	☑	☐	☐	☐	Yes: TechOps/TOCU-001 Operational Wallet quorum (2:2) Controlled by the TechOps Core Unit team Eth Address: 0x1a3DA79ee7dB30466cA752DE6a75DEf5e635b2f6 Signers: eth:0xA60C77efe539166F1C4a6cE2512F3cBF451fFbc5 eth:0xcebd4Fa8c2c6014F2F7924De3Ae617BdD42ca25B			
0.8	Is the TechOps operational wallet controlled by more than 1 signer?	☑	☐	☐	☐	Yes, the TechOps operational wallet has a current policy of 2 out of 2 signers			
0.9	Has the TechOps operational wallet received the funds requested in the last Budget Statement?	☑	☐	☐	☐	Yes. TechOps received the requested 135,606.31 DAI on November 8th, 2022. https://etherscan.io/tx/0x52ecb9133b3f1c5eff5c62410bedba0e4a630ed9279a0e2fe93cea2389865aeb			
0.10	Is the Multi-sig auditor wallet setup the same as described in the Techops Auditor Flow?	☑	☐	☐	☐	Yes: Techops Auditor Wallet quorum (2:2) Controlled by the SES Core Unit. Address: eth:0x2dC0420A736D1F40893B9481D8968E4D7424bC0B Signers: Accountant Role Wallet 0xA2A855Ac8D2a92e8A5a437690875261535c8320C Auditor Role Wallet 0xB2da57e224949acDDe173a5b8A8160c023ea86e6 MCD-Pause_Proxy eth:0xBE8E3e3618f7474F8cB1d074A26afFef007E98FB			
0.11	Has the Auditor wallet received the initial funds from the protocol?	☑	☐	☐	☐	Yes. The TechOps Auditor wallet received the initial funds of 1,069,250 DAI on Jan 31, 2022.			
0.12	Has the TechOps Auditor wallet sufficient funds to send to the TechOps operational wallet?	☑	☐	☐	☐	Yes. The TechOps Auditor wallet has a balance of 543,306.31 DAI on November 25th, 2022.			
	Audit Questions to Transparency Report - Section 1. Last Month Actuals -								
1.1	Is the actuals budget category breakdown the same as in the MIP40c3-SP53?	☑	☐	☐	☐	Techops is applied the MakerDAO standard budget categories.			
1.2	Is the transparency report actual´s forecast the same as the last published forecast for the same month?	☑	☐	☐	☐	Yes.			
1.3	Are the differences between forecast and actuals explained in the transparency report?	☑	☐	☐	☐	Yes.			
1.4	Are the TechOps CU actual expenses within the montly approved MIP40c3-SP53 buget cap?	☑	☐	☐	☐	Yes.			
1.5	Are the TechOps CU actual expenses within the Global/total MIP40c3-SP39 budget cap?	☑	☐	☐	☐	Yes.			

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1.6	Has the TechOps CU Compensation & Benefits any significant deviations between forecast and actuals?	☑	☐	☐	☐	No.			
1.7	Has the TechOps CU Admin Expense any significant deviation between forecast and actuals?	☑	☐	☐	☐	Yes, the forecast is 300 and the actual is 568.39, this gives a negative diff. of 268.39.	"Expected lower bank fees"		
1.8	Has the TechOps CU Professional Services any significant deviations between forecast and actuals?	☐	☑	☐	☐	Yes, the forecast is 17,130, and the actual expense is 45,058.21, this gives a negative diff. of 27, 828.21. The actual expense for this category is over the Mthly budget but within the total Mthly budget cap.	"Expected lower invoice for services"		
1.9	Has the TechOps CU Software Expense any significant deviations between forecast and actuals?	☐	☑	☐	☐	Yes. The forecast is 20,000 and the actual expense is 18,824.87, this gives a positive diff. of 1,175.13. This expense is over the Mthly approved budget for this category but within the Mthly total budget cap.	"AWS bills depend on usage that month"		
1.10	Has the TechOps CU Software Development Expense any significant deviations between forecast and actuals?	☑	☐	☐	☐	Yes. The forecast is 3,000 and the actual expense is 3,540.20, this gives a negative difference of 540.20.	"Some tools bills depend on usage that month"		
1.11	Has the TechOps CU Travel & Entertainment any significant deviation between the forecast and the actuals?	☐	☐	☐	☐	No actuals in the budget statement for this category in October 2022.			
1.12	Has the TechOps CU Recruiting fees any significant deviation between the forecast and the actuals?	☐	☐	☐	☐	No actuals in the budget statement for this category in October 2022.			
1.13	Has the TechOps CU any significant deviation between the total actuals and the total payments?	☑	☐	☐	☐	Yes, the total actuals amount is 148,065.87 and the total on-chain payment is 156,128.50 DAI.	The difference is due to " Difference between Actuals total and Payments total due to positive balance with Accountable"		
1.14	Has the TechOps CU presented the correct calculation of amounts for the actuals, forecast and difference?	☐	☑	☐	☐	Yes.			
1.15	Has the TechOps CU budget statement any budget category that seems inconsistent and needs further investigation?	☑	☐	☐	☐	No.			
	Audit Questions to Transparency Report - Section 2. Budget Forecast -								
2.1	Does the transparency report display the summary of the MIP40c3-SP53 approved caps for both total and budget categories?	☑	☐	☐	☐	Yes.			
2.2	Are the monthly and quarterly budget caps (both totals and per category) the same as in the MIP40c3-53?	☑	☐	☐	☐	TechOps has forecasted only the relevant budget categories for November, December and January 2022.			
2.3	Are the monthly forecast totals within the MIP40c3-53 monthly budget caps?	☐	☑	☐	☐	The compensation & benefits is above the qly budget cap but within the global budget cap.			
2.4	Is the quarterly forecast within the bounds of the MIP40c3-39 budget caps?	☑	☐	☐	☐	Yes.			
2.5	Has the TechOps CU presented the correct calculation of amounts in the forecast table?	☑	☐	☐	☐				
	Audit Questions to Section Transparency Report - Section 3. MKR Vesting Overview -								
3.1	Has the TechOps CU indicated the number of FTE in the transparency report´s MKR vesting overview?	☑	☐	☐	☐	Yes.			
3.2	Has the MKR vesting overview the same FTE comparing it to the MIP40c3-SP38?	☑	☐	☐	☐	No. The FTE has increased from 4.7 to 5.7 due to new hires.			
3.3	Are the MKR vesting dates the same as in the MIP40c3-SP38?	☑	☐	☐	☐	No, the vesting dates are changed for better alignment and new vesting dates are added due to new hires.			
3.4	Has TechOps CU changed the MKR amounts comparing it to the MIP40c3-SP38?	☑	☐	☐	☐	Yes. Techops has changed the MKR amounts due to calculation correction and new hires.			

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3.5	Has TechOps CU explained the MKR change in the transparency report?	☑	☐	☐	☐	Yes. Techops explained the changes in the August 2022 Budget statement.	"Correction exercise: we did correction exercise based on our MIP submission: previosly we used Lock-in price (agreed in MIP in December 2021)$2,852.87 for MKR and now we used MKR price floor (p_floor - price floor is lowered by Max Repricing Drop = 30% also agreed in our MIP) $1,997.01."		
3.6	Other Observations	☐	☑	☐	☐	Yes. Techops needs to update the October 2022 Actuals in the MakerDAO dashboard.		Techops needs to update the October 2022 Actuals in the MakerDAO dashboard.	
	Audit Questions to Transparency Report - Section 4. Transfers -								
4.1	Does the TechOps operational wallet balances match the transparency report current balance in the calculation made for the new transfer?	☑	☐	☐	☐	Yes, the TechOps operational wallet balance is 180,394.10 DAI.			
4.2	Are the payments from the operational wallet the same as in the actual section payments?	☑	☐	☐	☐	Yes, the total payment in the budget statement is 156,128.50 DAI the total onchain payment is 156,128.50 DAI.			
4.3	Are the values in the TechOps Auditor wallet table correct?	☑	☐	☐	☐	Yes. The auditor wallet received 1,589,129 DAI since inception from the protocol and 1 DAI from an external wallet for the wallet test. The lifetime transfer amount to the operational wallet is 1,310,336.34 DAI.			
4.4	Does the TechOps Auditor wallet balance match the transparency report auditor current balance?	☑	☐	☐	☐	Yes. The auditor wallet balance in the budget statement is 543,306.30 DAI, and the wallet balance is 543,306.30965812 DAI on November 25th, 2022.			