

Audit Report

Core Unit Name: TechOps-001

Audit ID: 2022-11-TechOps-001

Audit Cycle: 2022-11/1

Audit Result: Approved with comments

Audit Date: 12-23-2022 & 2023-01-23

Submission Date: 11-23-2022

Facilitator contact: @oskp

Core Unit Clarification Received on Date: 01-23-2023

https://github.com/MakerOps/tech-001.transparency-reporting/blob/draft_11/2022-11.md

<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](https://forum.makerdao.com/t/mip40c3-sp54-techops-core-unit-mkr-budget/12079)



#	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 consistency with MIP40c3-SP53.								
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"/>	Yes.			
0.2	Does the actual section include breakdowns per Budget Category, Forecast, Actuals, Difference and Payments?	<input checked="" 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"/>	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"/>	Yes.			
0.5	Does the budget forecast summary contain the Global/total budget cap?	<input checked="" 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-SP53?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Techops has adopted the standard MakerDAO budget categories.			
	Is the Multi-sig operational wallet setup the same as described in MIP40c3-SP53?				Yes: TechOps/TDCU-001 Operational Wallet quorum (2:2) Controlled by the TechOps Core Unit team Eth Address: 0x1a3DA79ee7d830466a752DE6a750DF5e655b2f6 Signers: eth:0A60C77ef659166F1C4a6cE2512F3c8F451fbc5 eth:0xbcd4f8a6c26014f2f7924bca6178d42ca258			
0.7		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
0.8	Is the TechOps operational wallet controlled by more than 1 signer?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, the TechOps operational wallet has a current policy of 2 out of 2 signers Yes, TechOps received the requested 150,178.50 DAI on November 26th, 2022. https://etherscan.io/tx/0b52e6eb9133b3f1c5ef5c62410bedba0c4a630cd927			
0.9	Has the TechOps operational wallet received the funds requested in the last Budget Statement?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes: Techops Auditor Wallet quorum (2:2) Controlled by the SIS Core Unit. Address: eth:0b2dcd020A736D1F40893B9481D8968E4D7424bC08 Signers: Accountant Role Wallet 0xA2A855Ac8D2a92a8A5a437690875261535c8320C Auditor Role Wallet 0x82da57e22499acDDe173a5b8A8160c023ae86e6 MCD-Pause_Proxy eth:0xbE8E3a3618747f8cB1d074A2a6afFe007E98fB Yes, The TechOps Auditor wallet received the initial funds of 1,069,250 DAI on Jan 31, 2022.			
0.10	Is the Multi-sig auditor wallet setup the same as described in the Techops Auditor Flow?							
0.11	Has the Auditor wallet received the initial funds from the protocol?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
0.12	Has the TechOps Auditor wallet sufficient funds to send to the TechOps operational wallet?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, The TechOps Auditor wallet had a balance of 393,127.81 DAI on December 23th, 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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?	<input checked="" 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"/>	Yes.			
1.4	Are the TechOps CU actual expenses within the monthly approved MIP40c3-SP53 budget cap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.			
1.5	Are the TechOps CU actual expenses within the Global/total MIP40c3-SP39 budget cap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.			

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1.6	Has the TechOps CU Compensation & Benefits any significant deviations between forecast and actuals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No.			
	Has the TechOps CU Gas Expense any significant deviation between forecast and actuals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, the forecast is 100 and the actual expense is 0.	No purchase of ETH this month.		
1.8	Has the TechOps CU Professional Services any significant deviations between forecast and actuals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes, the forecast is 5,000, and the actual expense is 7,594.51, this gives a negative diff. of 2,594.51. The actual expense for this category is over the Mthly budget but within the total Mthly budget cap.	"Expected lower invoice for services"		
1.7	Has the TechOps CU Admin Expense any significant deviation between forecast and actuals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, the forecast is 350 and the actual is 322.82, this gives a positive diff. of 27.18.	"Expeted higher fees"		
1.9	Has the TechOps CU Software Expense any significant deviations between forecast and actuals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes. The forecast is 3,000 and the actual expense is 3,942.16, this gives a negative difference of 942.16.	"Tools cost depends on monthly usage"		
1.10	Has the TechOps CU Software Development Expense any significant deviations between forecast and actuals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes. The forecast is 20,000 and the actual expense is 18,618.80, this gives a positive diff. of 1,381.20.	"AWS bills depend on usage that month"		
1.11	Has the TechOps CU Travel & Entertainment any significant deviation between the forecast and the actuals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The forecast is 5,000 and the actual expense is 0.	"No travel expenses this month"		
1.12	Has the TechOps CU Recruiting fees any significant deviation between the forecast and the actuals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No actuals in the budget statement for this category in November 2022.			
1.13	Has the TechOps CU any significant deviation between the total actuals and the total payments?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, the total actuals amount is 110,552.49 and the total on chain payment is 115,609.79 DAI.			
1.14	Has the TechOps CU presented the correct calculation of amounts for the actuals, forecast and difference?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.			
1.15	Has the TechOps CU budget statement any budget category that seems inconsistent and needs further investigation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.			
2.2	Are the monthly and quarterly budget caps (both totals and per category) the same as in the MIP40c3-53?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.			
2.5	Has the TechOps CU presented the correct calculation of amounts in the forecast table?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.			
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.			
3.2	Has the MKR vesting overview the same FTE comparing it to the MIP40c3-SP38?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Techops has changed the current MKR amounts published in October 2022 back to original amounts.			
3.6	Other Observations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No.			
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes.			
4.2	Are the payments from the operational wallet the same as in the actual section payments?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, the total payment in the budget statement is 115,609.79 DAI the total onchain payment is 115,609.79 DAI.			
4.3	Are the values in the TechOps Auditor wallet table correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes. The auditor wallet received 3,001,945.87 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 1,460,514.84 DAI.			
4.4	Does the TechOps Auditor wallet balance match the transparency report auditor current balance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes. The techops auditor wallet had a balance of 393,127.81 DAI.			