Audit Report

Core Unit Name: SAS
Audit ID: 2022-12-SAS001
Audit Cycle: 2022 - 12/1
Audit Result: Approved with comments
Audit Date: 01-13-2023
Budget Statement Submission Date: 01-05-2023
Facilitator contact: @danik
Core Unit Clarification Received on Date: 01-17-2023
Transparency Report: https://github.com/makerdao-sas/transparency-reporting/blob/main/Monthly%20Budget%20Statements/2022-12.md
MIP40c3-SP43: https://forum.makerdao.com/t/mip40c3-sp43-additional-maximum-action-services-core-unit-budget-sas-001/17959
MIP40c3-SP44: https://forum.makerdao.com/t/mip40c3-sp44-additional-maximum-action-services-core-unit-budget-sas-001/17962

Approved
Approved with comments
Needs action before approval
Failed

#	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 SAS MIP40c3-SP85 New Bear Budget					Note:- This audit has assessed the data published by SAS in Github "SAS: December 2022 Budget Statement" and the SAS MakerDAO expense site at https://expenses.makerdao.network/			
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. SAS has submitted a New budget request on October 6th, 2022 MIP40c3-SP85. The requested budget was rejected, however, the request of funds to cover expenses from Dec 2022 to March 2023 based on the New bear budget was granted.			
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-SP43?	☑	☐	☐	☐	SAS is using the MakerDAO standard budget categories in the budget statement.			
0.7	Is the SAS operational Multi-sig wallet setup the same as described in the MIP40c3-SP85?	☑	☐	☐	☐	Yes. SAS Operational Wallet quorum (2:3) Controlled by the SAS Core Unit to:m Address: 0x4654AA82e8322288331F5ECcA697c20E89554B298 Signers 0x2742368901660496f00424fEB64b2E468B41abfE 0x4f3671b6204C6348628F0c1f50Dc13C9917563167 8 0xC95482cfC02B49c5C1a6012G244d08fe37EAfcfed			
0.8	Is the SAS operational wallet controlled by more than 1 signer?	☑	☐	☐	☐	Yes, the SAS operational wallet has a current policy of 2 out of 3 signers			
0.9	Has the SAS auditor wallet receive the initial seed funds from the protocol prior transfer to the SAS wallet?	☑	☐	☐	☐	Yes, the auditor wallets has received 245,738 DAI from the protocol https://etherscan.io/tx/0xa1b81fa967be4a88862c4833ec4185fbe1a3ff121bf4b38513a22ab4abc9508ad The MIP40c3-SP43 total buaget cap less contingency buffer is 245,737.50 DAI and with the 15% buffer included the grand total is 282,598.13.			
0.10	Has the SAS operational wallet received a top-up after the audit of the last transparency report?	☐	☑	☐	☐	No, the SAS operational wallet did not receive the requested amount in the November 2022 expense report due to delay.			
0.11	Is the SAS Auditor Multi-sig wallet setup the same as described in the MIP40c3-SP85?	☑	☐	☐	☐	Yes. SAS Auditor Wallet quorum (2:2) eth address:0xb1f950a51516e697E103aaa69E152d8391828fFe Signers: SES Auditor Role Wallet eth:0xB2da57c224949acDDe173a5b8A8160c023ea86e6 SES Accountant Role Wallet eth:0xA2A85SAc8C0a92e8A5a457690875261535c8320C Maker Protocol MCD_Pause_Proxy 0x983E3e3618f7f47Af8cB1c074A26aFFcf0D7C98F9			
0.12	Has the SAS Auditor wallet received the funds from the protocol?	☑	☐	☐	☐	Yes. The last transaction was 177,605.74003198 DAI received on October 28th, 2022. The auditor wallet balance is 188,398.75281622 DAI on January 13, 2022. https://etherscan.io/tx/0x885b5862f787c00fb0b2e0f567721a1ae2e27f4f0926811272581d278c94d59 The SAS auditor wallet has returned 83,501.52 DAI to the protocol on November 10th, 2022. https://etherscan.io/tx/0xd3913941cf8f67cbd42aiebe7447dfb5cecc8837a653b139145ed278809c39df0			
0.13	Has the SAS Auditor wallet sufficient funds to be sent to the SAS operational wallet?	☑	☐	☐	☐	Yes.			
	Audit Questions to Transparency Report - Section 1. Last Month Actuals -								
1.1	Is the actuals budget category breakdown the same as in the MIP40c3-SP85?	☑	☐	☐	☐	SAS is using 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 SAS actual expenses within the monthly MIP40c3-SP85 buget cap?	☑	☐	☐	☐	Yes.			
1.5	Are the SAS actual expenses within the quarterly total MIP40c3-SP85 budget cap?	☑	☐	☐	☐	Yes.			
1.6	Has the SAS Compensation and Benefits cost any significant deviations between forecast and actuals?	☑	☐	☐	☐	No. There is a perfect match.			
1.7	Has the SAS Travel & Entertainment cost any significant deviations between forecast and actuals?	☑	☐	☐	☐	Yes. The forecast is 1,500, and the actual expense is 722, this gives a positive difference of 778.	"Less travelling than planned"		
1.8	Has the SAS Software Development Expense any significant deviations between forecast and actuals?	☑	☐	☐	☐	No.			
1.9	Has the SAS Software Expense any significant deviations between forecast and actuals?	☑	☐	☐	☐	Yes, the forecast is 1,256 and the actual expense is 1,839, this gives a negative diff. of 583. The actual expence is within the approved monthly budget for this category.	"higher infrastructure costs due to simulation testing"		
1.10	Has the Admin Expense any significant deviations between forecast and actuals?	☑	☐	☐	☐	No.			
1.11	Has the SAS Professional Services cost any significant deviations between forecast and actuals?	☑	☐	☐	☐	Yes. The forecast is 3,246 and the actual expense is 3,121, this gives a positive diff. of 125.	"Spend les on legal advisor"		
1.12	Has the SAS Gas Expense any significant deviations between forecast and actuals?	☑	☐	☐	☐	Yes. The gas fees forecast is 750 and the actual expense is 65 this gives a positive diff. of 685.	"lower gas fees than expected"		
1.13	Has the SAS presented the correct calculation of amounts for the actuals, forecast and difference?	☑	☐	☐	☐	Yes.	.		
1.14	Has the SAS any budget category that seems inconsistent and needs further investigation?	☑	☐	☐	☐	No.			
	Audit Questions to Transparency Report - Section 2. Budget Forecast -					Note that SAS MIP40c3-SP43 expired on November 2022. The assessment will be based on MIP40c3-SP85 NewBear budget.			
2.1	Does the transparency report display the MIP40c3-SP85 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-SP85?	☑	☐	☐	☐	Yes.			
2.3	Are the monthly forecast totals within the MIP40c3-SP85 monthly budget cap?	☑	☐	☐	☐	Yes.			
2.4	Is the quarterly forecast within the bounds of the MIP40c3-SP85 budget caps?	☑	☐	☐	☐	Yes.			
2.5	Has the SAS presented the correct calculation of amounts in the budget forecast section?	☑	☐	☐	☐	Yes.			
	Audit Questions to Transparency Report - Section 3. MKR Vesting Overview -								
3.1	Has the SAS 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-SP44?	☑	☐	☐	☐	Yes.			
3.3	Are the MKR vesting dates the same as in the MIP40c3-SP44?	☑	☐	☐	☐	Yes.			SAS should add the year complete the Decomber date 2023 on the original approved budget and review the MKR budget taking in consideration new onboardings.
3.4	Has SAS changed the MKR amounts comparing it to the MIP40c3-SP44?	☑	☐	☐	☐	No.			
3.5	Has SAS explained the MKR change in the transparency report?	☐	☐	☐	☐	This control can only be made if the above question is yes.			
3.6	Is the SAS auditor wallet´s lifetime MKR transfer amount correct?	☑	☐	☐	☐	Yes.			
3.7	Is the SAS MKR current balance in the auditor wallet correct?	☑	☐	☐	☐	Yes. The current MKR balance is 0.			
	Audit Questions to Transparency Report - Section 4. Transfers -								
4.1	Does the SAS operational wallet balances match the transparency report current balance in the calculation made for the new transfer?	☑	☐	☐	☐	Yes, the current balance in the transparency report is 1,962 DAI and the actual balance in the operational wallet is 1,962.0003133 DAI on January 13th, 2023. https://gnosis-safe.io/app/eth:0x4654Aa82e8322288331F5ECcA697c20E89554B298/balances"			

4.2	Are the payments from the operational wallet the same as in the actual section payments?	☑	☐	☐	☐	Yes. The payment amount in the budget statement is 71,827.50 DAI and on-chain trx. is 71,827.50 DAI on January 6th, 2023. https://etherscan.io/tx/0xbc1844b76e31a91a71a8411aa65679d2492fe5d8070e4b79e6d8b3b30ad93c			
4.3	Is the SAS latest Github Budget Statement consistent with the data provided in the MakerDAO Ecosystem Dashboard?	☑	☐	☐	☐	Yes.			