## **Audit Report**

Core Unit Name: SAS

Audit ID: 2022-04-SAS001

Audit Cycle: 2022 - 04/ 1

Audit Result: Approved with comments

Audit Date: 05-05-2022

Budget Statement Submission Date: 05-04-2022

Facilitator contact: @danik

Core Unit Clarification Received on Date:

 ${\bf Transparency. Report: https://github.com/makerdao-sas/transparency-reporting/blob/main/Monthly%20Budget%20Statements/2022-04.md$ 

AIP40c3-SP43: https://forum.makerdao.com/t/mip40c3-sp43-adding-sidestream-auction-services-core-unit-budget-sas-001/10799

MIPAQ-3-5P44. https://forum.makerdao.com/r/mipaQ-3-5p44-adding-sidestream-auction-services-core-unit-mike-budget-sa-00/2/M09Z										
	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-SP43									
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-SP43?				Yes.					
0.7	Is the SAS operational Multi-sig wallet setup the same as described in the MIP40c3-SP43?				Yes. SAS Operational Wallet quorum (2:3)  Controlled by the SAS Core Unit team Address: 0x465AA62a82E220B331f5ECcA697c20E89554B298 Signers 0x274736890166046f00f424fEB64b2E468841ebfE 0x4f387fb6204C61482870e1f50Dc1C99175631678 0x958802afC02849eSC1a6016044d08fe37EAfEc9d					
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/0xab810a967ba4a68862c4433ec4185fbe1a3ff121bf4b38535a2aa b4a8e9908a4 The MIP40c3-SP43 total busget cap less contingency buffer is 245,737.50 DAI.					
0.10	Has the SAS operational wallet received a top-up after the audit of the last transparency report?				Yes, the SAS operational wallet received 83,773.60 DAI on April 8, 2022. https://etherscan.io/address/0x465AA62a82E220B331f5ECcA697c20E89554B298#tokent					
0.11	Is the SAS Auditor Multi-sig wallet setup the same as described in the MIP40c3-SP43?	✓ □			Yes. SAS Auditor Wallet quorum (2:2) eth address:0xb1f950a51516a697E103aaa69E152d839182f6Fe Signers: SES Auditor Role Wallet eth:0xB2da57e224949acDDe173a5b8A8160c023ea86e6 SES Accountant Role Wallet eth:0xA2855Ac8D2a92e8A5aa37690875261535c8320C					
0.12	Has the SAS Auditor wallet received the funds from the protocol?	✓ □			Yes. Last transaction was 111,532.749118748728123729 DAI recieved on March 22nd, 2022. The auditor wallet balance on Maj 5, 2022 is 22,432.66013918 DAI. SES will coordinate the transactions of funds from the protocol to the SAS Auditor wallet.					
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-SP43?	✓ □			Yes.					
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-SP43 buget cap?		<b>✓</b>		No. The monthly budget cap is 81,912.50, and the actual expenses for April 2022 are 82,789.26. The actual expenses are however within the qly budget cap.		
1.5	Are the SAS actual expenses within the quarterly total MIP40c3-SP43 budget cap?	~			Yes.		
1.6	Has the SAS contractor fees any significant deviations between forecast and actuals?	~			No. There is a perfect match.		
1.7	Has the SAS travel & events costs any significant deviations between forecast and actuals?		<b>~</b>		Yes. The forecast is 2,500, and the actual expense is 2,850, this gives is a negative difference of 350.	SAS explains in the budget statement that this diff. is due to "Higher costs due to ETH Amsterdam bookings."	
1.8	Has the SAS IT Infrastructure and subscriptions costs any significant deviations between forecast and actuals?	<b>V</b>			Yes. The IT infrastructure and subscriptions costs forecast is 2,506.00 and the actual expense is 1,864.73, this gives a positive difference of 641.27 DAI.	SAS explains that this is due to optimizations resulting in lower infrastructure costs.	
1.9	Has the SAS gas fees any significant deviations between forecast and actuals?	~			Yes. The gas fees forecast is 1,000, and the actual expense is 825, this results in a positive difference of 175 DAI.	The difference is due to lower gas fees and less transactions.	
1.10	Has the SAS professional and Legal Services costs any significant deviations between forecast and actuals?	~			Yes. The forecast is 4,996 and the actual expense is 5,534.66. This gives a negative difference of 538.66.	SAS explains in the budget statement that this diff. is due to "Higher Tax Advisor costs."	
1.11	Has the SAS Engineer Contractor costs any significant deviations between forecast and actuals?				No. There is a perfect match.		
1.12	Has the SAS office space any significant deviations between forecast and actuals?	~			No.		
1.13	Has the SAS other services fees any significant deviations between forecast and actuals?	<b>V</b>			Yes. The SAS other services forecast is 4,937.21 and the actual expense is 5,922.37, this gives a negative difference of 985.16.	The difference is due to higher payment processor fees.	
1.14	Has the SAS presented the correct calculation of amounts for the actuals, forecast and difference?	~			Yes.		
1.15	Has the SAS 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 MIP40c3-SP43 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-SP43?	~			Yes.		
2.3	Are the monthly forecast totals within the MIP40c3-SP43 monthly budget cap?		<b>~</b>		The IT infrastructure, is above the approved qly budget category cap.		
2.4	Is the quarterly forecast within the bounds of the MIP40c3-SP43 budget caps?	~			Yes.		
2.5	Has the SAS presented the correct calculation of amounts in the budger 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?	<b>V</b>			Yes.		SAS should add the year complete the December 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.		
	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 transaparency report is 163,391.03 DAI and the actual balance in the operational wallet on Maj 5, 2022 is 163,391.03 DAI.  163,391.03 DAI.  https://gnosis-safe.io/app/eth: 0x465AA62a82E220B331f5ECcA697c20E89554B298/balances"		
4.2	Are the payments from the operational wallet the same as in the actual section payments?	<b>~</b>			Yes. The payment amount is 81,804.10 DAI on April 28, 2022. https://etherscan. io/tx/0x80224cb72831d3e3d67cfbef0a5e48adc8500374784fb4ed62b3		