# Okcash Long Term Sustainable Staking

by Oktoshi

Abstract - The current Proof of Stake systems depend on a stable or short % changes in the yearly staking calculations, which results in short spans and/or unstable systems with no sustainability nor stability. In this paper a Long Term Sustainable Staking system is proposed to solve and improve over this issues.

### I. INTRODUCTION

Technical Sustainability: In aims of improving the system, sustainability and reliability in OK, while at the same time respecting scarcity.

We came up with a solution to empower OK and secure LTSS, Bitcoin has LTPoW lasting till the year 2140, with this implementation OK LTTS would be lasting till the year 2148, making it the best PoS partner for Bitcoin and MicroTransactions.

### II. SUSTAINABLE HALVINGS

Economics: the 11 planned halvings will help stabilize the currency and appreciation as they kick in. There will be some halvings with a 4 years period that will start to give OK more predictability for markets , securing the trust of services and markets, after the 11 th halving OK gets a fixated % (after year 2044\*), this will normalize the OK coins creation to grow in a constant and stable rate for the last 100 + years becoming the most secure, stable and mathematically predictable PoS coin with LTSS and scarcity.

If the % of network staking at X time grows slower than the expected % of growth, Consensus could be reached to integrate and extra halving with a higher stake % for the normalization with the schedule. Even so for this normalizing halving to get included, consensus should be reached.

## III. IMPLEMENTATION AND PERCENTAGES

Last OK coins to be PoS mined expected between years 2148 - 2188 depending on the % of Network Staking.

Glossary:

LTSS - Long Term Sustainable Staking.

LTPoW - Long Term Proof of Work.

Clean readable OK Staking % Calc. Improvements table [2.1] Html txt format [2.2]

format table:

Halvings Year end\* Year # Stake % Coins created for that year expected with 100% staking network.

\* Aprox year per block count.

					_ ,	45 45 45 4
-	2014		36,	297,000	End	of PoW Start of PoS
-	2015	1	69 25	5044930		61,341,930
1	2016	5 2	20 1	2268386		73,610,316
2	2017		10 7	361031.6		80,971,348
3	2018		-	48567.38		85,019,915
4	2019			2125497.8		87,145,413
5	2020			42908.25		88,888,321
-	2021	7	2 177	77766.42	2	90,666,088
-	2022	8	2 183	13321.75	1	92,479,409
-	2023	9	2 184	49588.18	6	94,328,997
6	2024	10	19	43289.97	47	95,272,287
-	2025			52722.87		96,225,010
						97,187,260
-	2026			52250.10		
-	2027			71872.60		98,159,133
7	2028					
-	2029	15	0.50	493249.	6435	99,143,178
-	2030	16	0.50	495715.	8917	99,638,894
-	2031	17	0.50	498194.	4711	100,137,089
8	2032			250342		
-	2033					100,638,400
			0.25		3703	
-	2034				00	100,889,996
-	2035		0.25			101,142,221
9	2036	22	0.10	101142	.221	101,243,363
-	2037	23	0.10	101243.	3632	101,344,607
-	2038	24	0.10	101344.	6066	101,445,951
_	2039	25	0.10	101445.	9512	101,547,397
	0 204		26 0.0			
	2041	27	0.05			101,648,970
-	-					
-	2042	28	0.05			101,699,794
-	2043	29	0.05	50849.8		101,750,644
1	1 204	4 3	0.0			
	2045	31	0.03	30534.35	5085	101,811,704
	2046	32	0.03	30543.51	l115	101,842,247
	2047	33	0.03	30552.67		101,872,800
	2048	34	0.03	30561.84		101,903,362
	2049	35	0.03	30571.00		101,933,933
		36		30580.17		
	2050		0.03			101,964,513
	2051	37	0.03	30589.35		101,995,102
	2052	38	0.03	30598.53		102,025,701
	2053	39	0.03	30607.71	1028	102,056,309
	2054	40	0.03	30616.89	9259	102,086,926
	2055	41	0.03	30626.07	7766	102,117,552
	2056	42	0.03	30635.26		102,148,187
	2057	43	0.03	30644.45		102,178,831
	2058	44	0.03	30653.64		102,209,485
	2059	45	0.03	30662.84		102,240,148
	2060	46	0.03	30672.04		102,270,820
	2061	47	0.03	30681.24	1596	102,301,501
	2062	48	0.03	30690.45	5034	102,332,192
	2063	49	0.03	30699.65		102,362,891
	2064	50	0.03	30708.86		102,393,600
	4004	50	0.03	20100.00	1131	104,373,000

2065	51	0.03	3071	8.08003	102,424,318
2066	52	0.03	30723	7.29545	102,455,045
2067	53	0.03		5.51364	102,485,782
2068	54	0.03		5.7346	102,516,528
2069	55	0.03	30754	4.95832	102,547,283
2070	56	0.03	3076	4.18481	102,578,047
2071	57	0.03	30773	3.41406	102,608,820
2072	58	0.03	30782	2.64608	102,639,603
2073	59	0.03		1.88088	102,670,395
2074	60	0.03		1.11844	102,701,196
	61				
2075		0.03		0.35878	102,732,006
2076	62	0.03	3081	9.60189	102,762,826
2077	63	0.03	30828	3.84777	102,793,655
2078	64	0.03	30838	3.09642	102,824,493
2079	65	0.03	30847	7.34785	102,855,340
2080	66	0.03	30856	6.60205	102,886,197
2081	67	0.03		5.85903	102,917,063
2082	68	0.03		5.11879	
					102,947,938
2083	69	0.03		4.38133	102,978,822
2084	70	0.03		3.64664	103,009,716
2085	71	0.03	30902	2.91474	103,040,619
2086	72	0.03	30912	2.18561	103,071,531
2087	73	0.03	3092	1.45927	103,102,452
2088	74	0.03		0.7357	103,133,383
2089	75	0.03		0.01493	103,164,323
	_				
2090	76	0.03		9.29693	103,195,272
2091	77	0.03		3.58172	103,226,231
2092	78	0.03	30967	7.86929	103,257,199
2093	79	0.03	3097	7.15965	103,288,176
2094	80	0.03	30986	5.4528	103,319,162
2095	81	0.03	30995	5.74874	103,350,158
2096	82	0.03		5.04746	103,381,163
2097	83	0.03		4.34898	103,412,178
		0.03		3.65328	
2098	84				103,443,201
2099	85	0.03		2.96038	103,474,234
2100	86	0.03		2.27027	103,505,276
2101	87	0.03	3105	1.58295	103,536,328
2102	88	0.03	31060	0.89842	103,567,389
2103	89	0.03	31070	0.21669	103,598,459
2104	90	0.03	31079	9.53776	103,629,539
2105	91	0.03		3.86162	103,660,628
2106	92	0.03		3.18828	103,691,726
				7.51773	
2107	93	0.03			103,722,833
2108	94	0.03		5.84999	103,753,950
2109	95	0.03		5.18504	103,785,076
2110	96	0.03	31135	5.5229	103,816,212
2111	97	0.03	3114	4.86355	103,847,357
2112	98	0.03	31154	4.20701	103,878,511
2113	99	0.03		3.55328	103,909,674
2114	100			72.9023	
2115	101			32.2542	
					, ,
2116	102			91.6088	
2117	103			00.9663	
2118	104			10.3266	
2119	105	0.03	312	19.6897	6 104,096,852
2120	106	0.03	3122	29.0556	7 104,128,081
2121	107			38.4243	
2122	108			47.7959	
2123	100			57.1702	
2124	110			56.5474	104,253,091
2125	111	0.03	312	75.9273	6 104,284,367

2126	112	0.03	31285.31014	104,315,652
2127	113	0.03	31294.69574	104,346,947
2128	114	0.03	31304.08414	104,378,251
2129	115	0.03	31313.47537	104,409,565
2130	116	0.03	31322.86941	104,440,888
2131	117	0.03	31332.26627	104,472,220
2132	118	0.03	31341.66595	104,503,562
2133	119	0.03	31351.06845	104,534,913
2134	120	0.03	31360.47377	104,566,273
2135	121	0.03	31369.88192	104,597,643
2136	122	0.03	31379.29288	104,629,022
2137	123	0.03	31388.70667	104,660,411
2138	124	0.03	31398.12328	104,691,809
2139	125	0.03	31407.54272	104,723,217
2140	126	0.03	31416.96498	104,754,634
2141	127	0.03	31426.39007	104,786,060
2142	128	0.03	31435.81799	104,817,496
2143	129	0.03	31445.24873	104,848,941
2144	130	0.03	31454.68231	104,880,396
2145	131	0.03	31464.11871	104,911,860
2146	132	0.03	31473.55795	104,943,333
2147	133	0.03	31483.00001	104,974,816
2148	134	0.03	31492.44491	105,006,309

<sup>\*</sup> extra normalization halving could be integrated on any halving schedule after the 4th halving (2.5%), this normalization halving could vary between 22-33% and could be implemented to last for 1-2 year based on consensus and estimated supply growth.

# III. SUMMARY

The proposed changes are intended to improve on stability and sustainability in the Okcash POS system [1].

# REFERENCES

- [1] Okcash pos protocol: https://github.com/okcashpro/okcash-whitepaper/blob/master/POS/okcash-pos-protocol-ltss-whitepaper.pdf
- [2.1] Improvement table: http://jsbin.com/pitehet/1
- [2.2] Html txt format: http://pastebin.com/ZBtKZwVG