

Open Banking performance and availability quarterly report

HSBC Innovation Banking

7 August to 30 September 2023

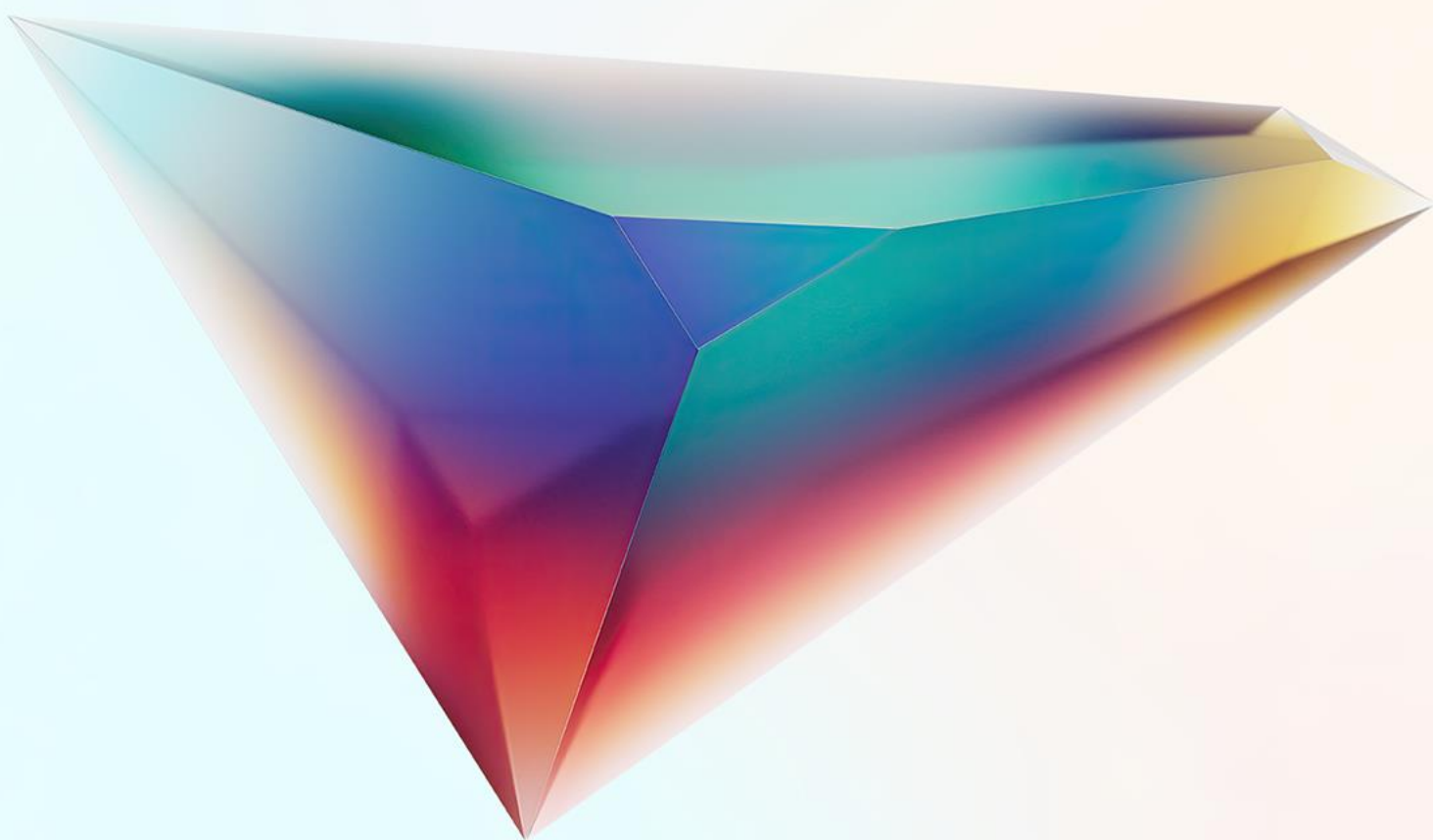


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What's the purpose of this report?

The purpose of this report is to show how our Open Banking channel is performing and, where applicable, compare performance to our direct digital channels – Internet Banking and the Banking app – which, for the purposes of this report, we refer to collectively as our customer channels.

It highlights:

- the percentage of time each of our digital channels is available or 'up'
- the time it takes our digital channels to respond to requests for account information, to initiate payments or to process confirmation of funds checks
- the percentage of requests to our Open Banking APIs which fail due to an error with our systems

Open Banking is based on APIs (Application Programming Interfaces), a technology which enables the secure exchange of information between banks and TPPs (Third Party Providers). More information can be found on the [Open Banking page](#) of our website.

We publish this report each quarter and the next report covering October 2023 to December 2023 will be published in January 2024.

This quarter's report is based on data from 7th August as this is the first business day after the migration of SVB UK customers to HSBC was completed. All future reports will be based on 3 months' worth of daily data.

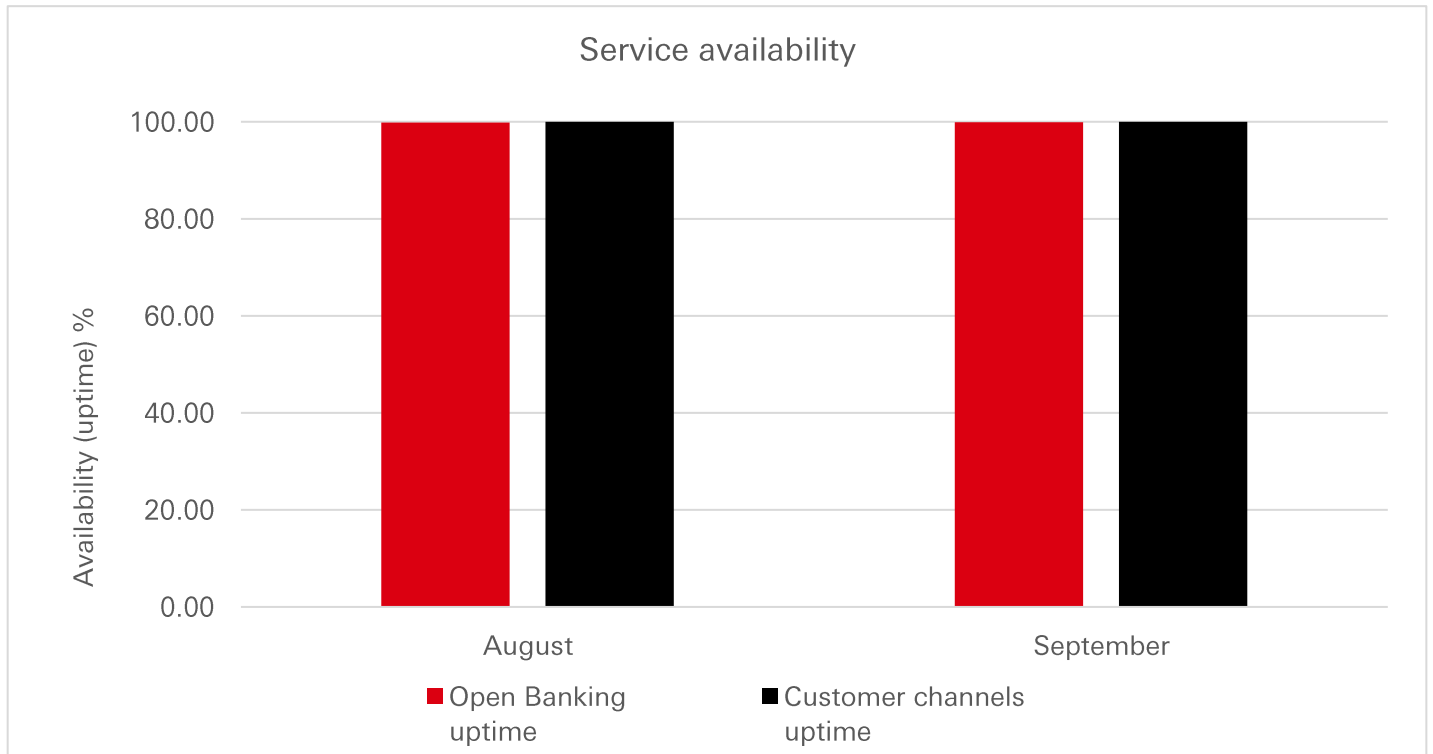
Service availability

The chart and figures below show the daily average availability (or uptime) of each of our digital channels over the last three months.

Uptime is calculated as 100% minus percentage downtime.

Our Open Banking service is regarded as down if five consecutive TPP requests to any of our APIs fail within thirty seconds.

Our customer channels are regarded as down if users are unable to log into their account due to a system error and they can't view balances or transactions and can't initiate payments.



Month	Open Banking uptime %	Customer channels uptime %
August	99.85	100.00
September	99.83	100.00

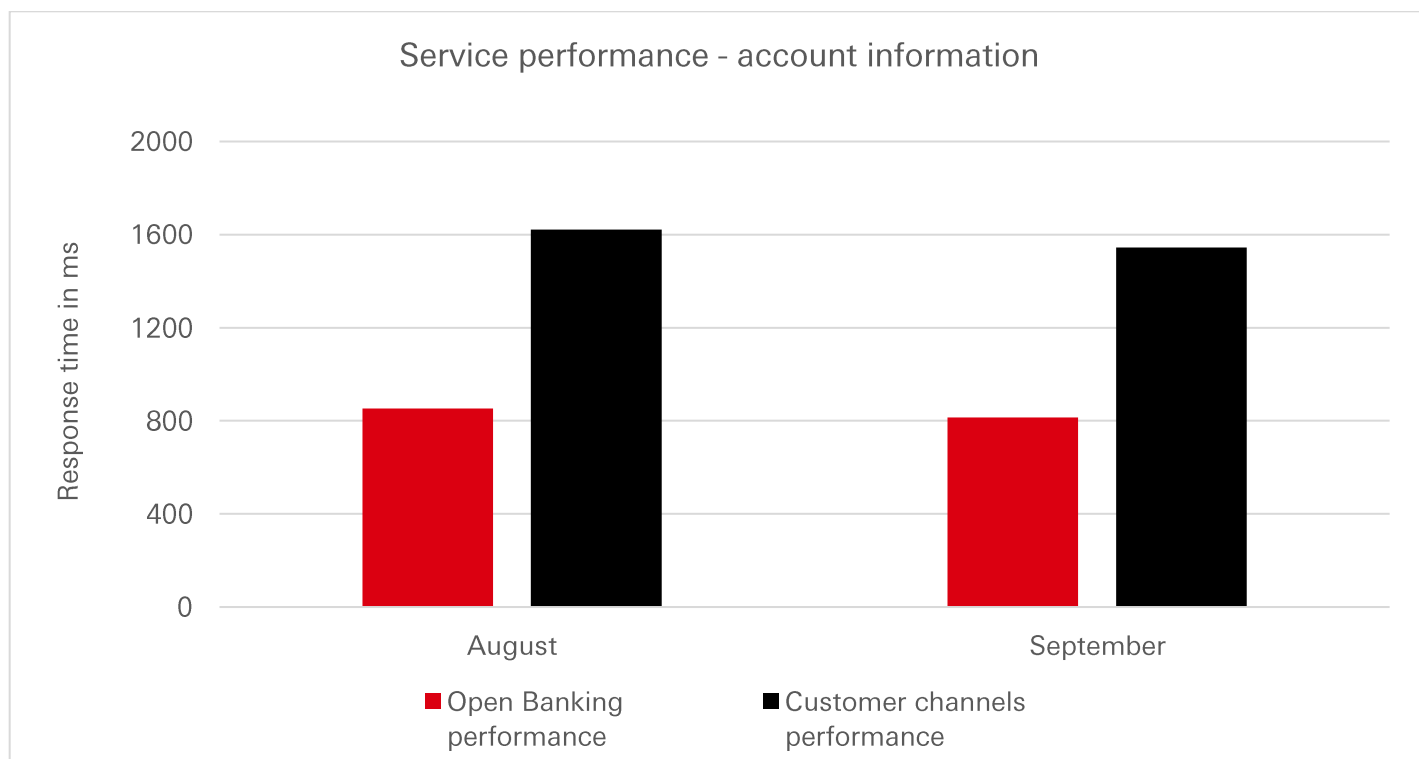
Service performance - account information

The chart and figures below show the daily average time taken in milliseconds by each of our digital channels to respond to requests for account information over the last three months.

Account information can include account balance, transaction history, payees and details of scheduled payments, standing orders and Direct Debits.

To allow a meaningful comparison with the Open Banking channel, our customer channels performance figures:

- include the time taken for our backend systems to respond to the customer interface and
- exclude the time taken for that interface to present the response (e.g. account and transaction information) to the customer.



Month	Open Banking performance ms	Customer channels performance ms
August	853	1622
September	815	1545

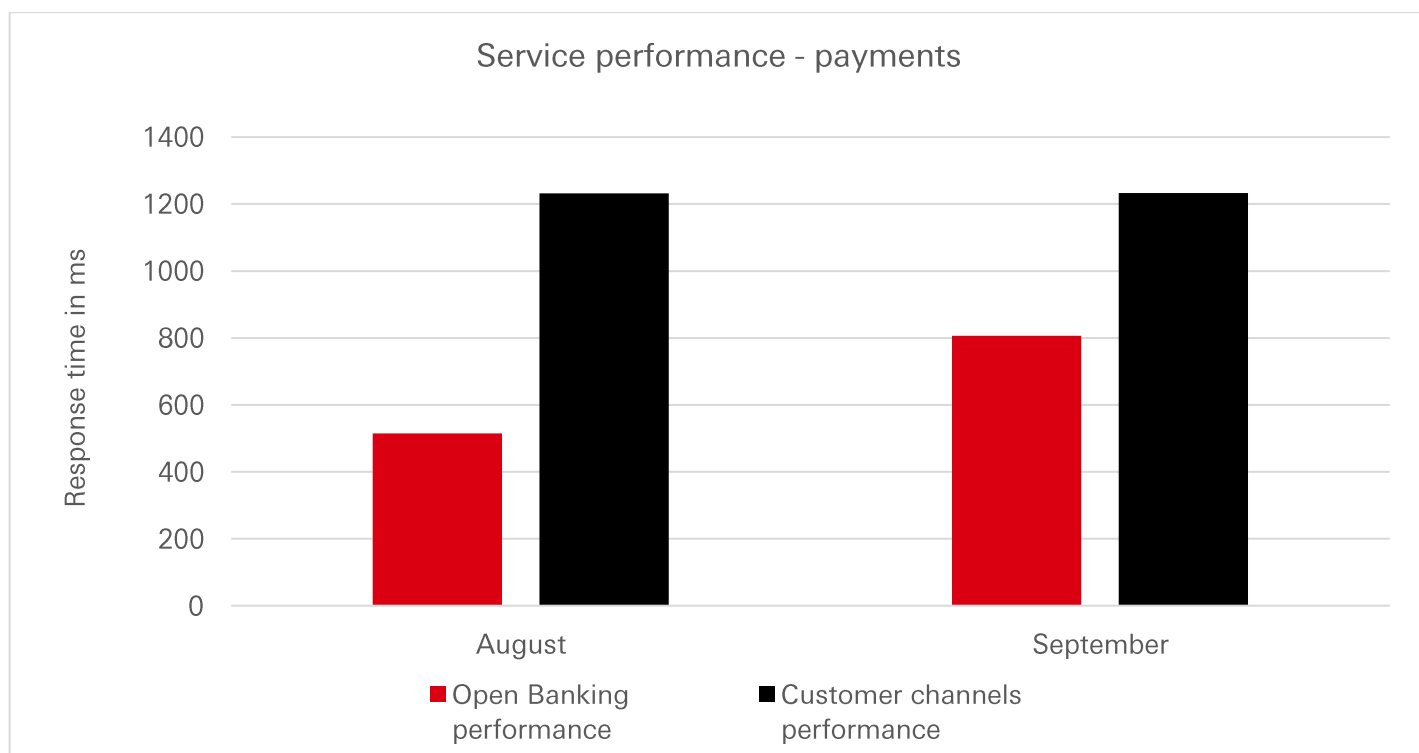
Service performance – payments

The chart and figures below show the daily average time taken in milliseconds by each of our digital channels to process requests to initiate payments over the last three months.

Payments can include single immediate payments or future dated payments.

To allow a meaningful comparison with the Open Banking channel, our customer channels performance figures:

- include the time taken for our backend systems to respond to the customer interface and
- exclude the time taken for that interface to present the response (e.g. payment confirmation) to the customer.

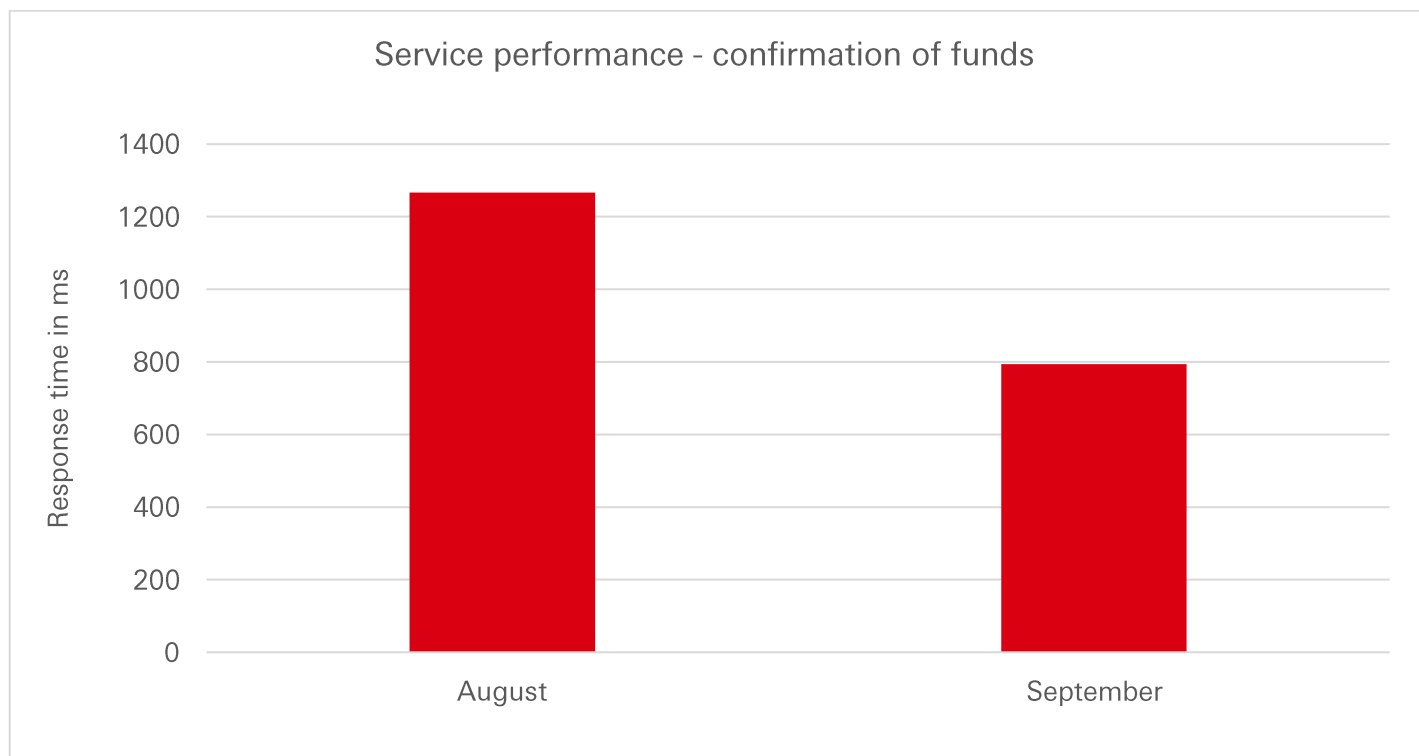


Month	Open Banking performance ms	Customer channels performance ms
August	515	1232
September	806	1233

Service performance - confirmation of funds

The chart and figures below show the daily average time taken in milliseconds by our Open Banking channel to respond to confirmation of available funds requests from TPPs over the last three months.

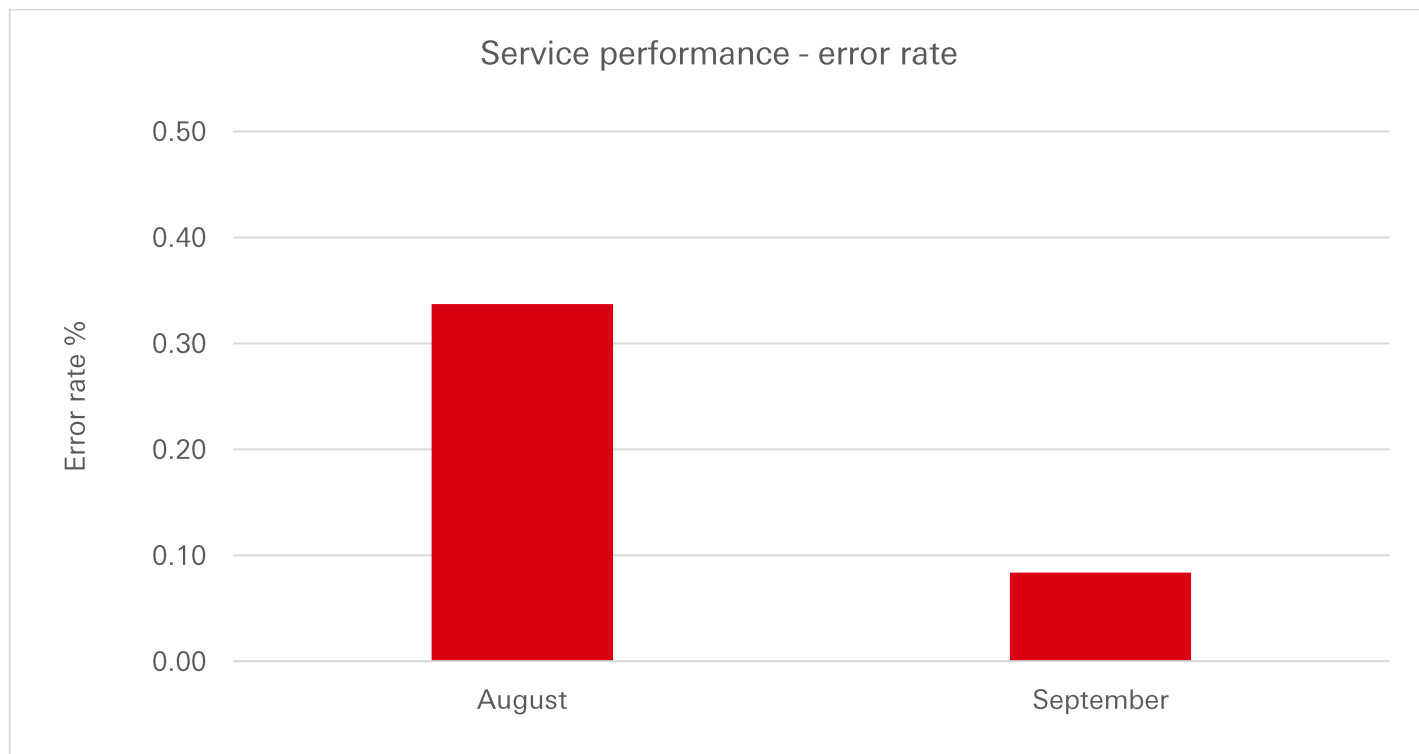
Confirmation of funds is an Open Banking service which enables TPPs to check that sufficient funds are available before initiating a payment.



Month	Open Banking performance ms
August	1267
September	794

Service performance - error rate

The chart and figures below show the daily average performance of our Open Banking channel over the last three months in terms of the percentage of all requests from TPPs which failed due to errors attributable to our systems.



Month	Open Banking error rate %
August	0.34
September	0.08

The tables below contain the daily performance and availability data which was used to create the charts shown in this report.

Date	Uptime % Open Banking	Downtime % Open Banking	Uptime % Customer Channels	Downtime % Customer Channels	Accounts Response Time (ms) Open Banking	Accounts Response Time (ms) Customer Channels	Payments Response Time (ms) Open Banking	Payments Response Time (ms) Customer Channels	Confirmation of Funds Response Time (ms) Open Banking	Error Rate % Open Banking
7-Aug-23	99.37	0.63	100.00	0.00	847	1922	325	1230	0	1.04
8-Aug-23	99.69	0.31	100.00	0.00	815	1895	230	1224	0	1.30
9-Aug-23	99.80	0.20	100.00	0.00	888	1876	746	1223	2284	0.53
10-Aug-23	99.93	0.07	100.00	0.00	866	1932	390	1229	1081	0.15
11-Aug-23	99.90	0.10	100.00	0.00	859	1902	863	1218	0	0.20
12-Aug-23	99.91	0.09	100.00	0.00	721	1485	0	1307	0	0.16
13-Aug-23	99.91	0.09	100.00	0.00	843	1573	1256	1252	1102	0.21
14-Aug-23	99.85	0.15	100.00	0.00	837	1729	407	1220	0	0.38
15-Aug-23	99.90	0.10	100.00	0.00	805	1793	238	1212	0	0.19
16-Aug-23	99.87	0.13	100.00	0.00	934	1667	241	1210	0	0.26
17-Aug-23	99.94	0.06	100.00	0.00	855	1708	238	1210	0	0.34
18-Aug-23	99.87	0.13	100.00	0.00	822	1592	831	1203	1264	0.21
19-Aug-23	99.89	0.11	100.00	0.00	766	1230	247	1276	0	0.24
20-Aug-23	99.92	0.08	100.00	0.00	808	1486	1297	1306	0	0.39
21-Aug-23	99.83	0.17	100.00	0.00	818	1592	238	1229	0	0.49
22-Aug-23	99.89	0.11	100.00	0.00	898	1581	348	1216	0	0.24
23-Aug-23	99.89	0.11	100.00	0.00	887	1586	357	1219	0	0.16
24-Aug-23	99.89	0.11	100.00	0.00	935	1226	954	1220	1167	0.24
25-Aug-23	99.80	0.20	100.00	0.00	874	1282	271	1212	0	0.36
26-Aug-23	99.89	0.11	100.00	0.00	865	1177	222	1254	0	0.21
27-Aug-23	99.89	0.11	100.00	0.00	853	1080	0	1276	0	0.18
28-Aug-23	99.88	0.12	100.00	0.00	837	1847	300	1245	815	0.16
29-Aug-23	99.82	0.18	100.00	0.00	918	1810	369	1225	0	0.30
30-Aug-23	99.87	0.13	100.00	0.00	922	1799	400	1202	1033	0.22
31-Aug-23	99.88	0.12	100.00	0.00	860	1779	1070	1186	1389	0.27

Date	Uptime % Open Banking	Downtime % Open Banking	Uptime % Customer Channels	Downtime % Customer Channels	Accounts Response Time (ms) Open Banking	Accounts Response Time (ms) Customer Channels	Payments Response Time (ms) Open Banking	Payments Response Time (ms) Customer Channels	Confirmation of Funds Response Time (ms) Open Banking	Error Rate % Open Banking
1-Sep-23	99.92	0.08	100.00	0.00	873	1642	410	1200	2521	0.16
2-Sep-23	99.90	0.10	100.00	0.00	812	1372	236	1244	0	0.21
3-Sep-23	99.88	0.12	100.00	0.00	822	1710	0	1248	0	0.18
4-Sep-23	99.85	0.15	100.00	0.00	798	1644	855	1201	0	0.22
5-Sep-23	99.85	0.15	100.00	0.00	784	1554	968	1206	0	0.24
6-Sep-23	99.90	0.10	100.00	0.00	800	1557	924	1208	2044	0.16
7-Sep-23	99.81	0.19	100.00	0.00	798	1566	963	1215	1613	0.26
8-Sep-23	99.87	0.13	100.00	0.00	802	1488	802	1214	1805	0.23
9-Sep-23	98.92	1.08	100.00	0.00	781	1256	1081	1313	1306	0.27
10-Sep-23	100.00	0.00	100.00	0.00	753	1511	919	1294	0	0.03
11-Sep-23	100.00	0.00	100.00	0.00	873	1560	723	1230	1500	0.01
12-Sep-23	100.00	0.00	100.00	0.00	841	1554	746	1216	853	0.02
13-Sep-23	100.00	0.00	100.00	0.00	845	1549	870	1228	1227	0.02
14-Sep-23	100.00	0.00	100.00	0.00	831	1537	791	1216	719	0.01
15-Sep-23	100.00	0.00	100.00	0.00	822	1545	808	1206	542	0.01
16-Sep-23	100.00	0.00	100.00	0.00	740	1178	1046	1290	0	0.03
17-Sep-23	100.00	0.00	100.00	0.00	794	1559	1010	1278	0	0.06
18-Sep-23	100.00	0.00	100.00	0.00	813	1663	777	1228	98	0.04
19-Sep-23	100.00	0.00	100.00	0.00	848	1673	891	1229	577	0.01
20-Sep-23	100.00	0.00	100.00	0.00	830	1648	844	1219	0	0.01
21-Sep-23	99.97	0.03	100.00	0.00	835	1557	909	1223	288	0.10
22-Sep-23	100.00	0.00	100.00	0.00	791	1592	763	1216	261	0.00
23-Sep-23	100.00	0.00	100.00	0.00	734	1304	870	1245	246	0.01
24-Sep-23	100.00	0.00	100.00	0.00	928	1831	823	1326	285	0.12
25-Sep-23	100.00	0.00	100.00	0.00	828	1596	883	1240	257	0.05
26-Sep-23	100.00	0.00	100.00	0.00	791	1588	1055	1248	245	0.01
27-Sep-23	100.00	0.00	100.00	0.00	794	1641	571	1251	294	0.00
28-Sep-23	100.00	0.00	100.00	0.00	866	1664	651	1208	291	0.01
29-Sep-23	100.00	0.00	100.00	0.00	885	1523	543	1144	236	0.02