

PIRAEUS BANK



Provision of Statistical Information on the Availability & Performance of rAPIdLink

April 2025 (2025Q1)

To achieve optimum levels of provided service quality, the following KPIs are being calculated and monitored on a daily basis, regarding the availability and performance of the dedicated API interface and the online channel (winbank) used as benchmark:

1. Average daily uptime of all interfaces
2. Average daily downtime of all interfaces (both planned and unplanned)
3. Daily average response time per PIS request
4. Daily average response time per AIS request
5. Daily average response time per CoF request (to PIIS API)
6. Daily average error rate for ASPSP errors

Table 1 below summarizes the results of above.

	Dedicated Interface	Online Interface (winbank)
Average daily downtime of all interface (see Table 2)s: * Planned, due to End-of-Day and Beginning-of-Day tasks * Unplanned	* < 1 min * < 1 min	* < 1 min * < 1 min
Average daily uptime of all interfaces (24h – average daily downtime)	23h:59min	23h:59min
Daily average error rate for ASPSP errors (see Table 3)	0.28117%	-
Daily average response time per PIS request (see Table 4)	997milliseconds (includes latency due to technical calls)	804 milliseconds
Daily average response time per AIS request (see Table 5)	1514 milliseconds (includes latency due to technical calls)	1345 milliseconds
Daily average response time per CoF request (see Table 6)	0 milliseconds	-

Table 1: Availability & Performance KPIs

During the first quarter, there were no requests performed from registered TPPs to our PSD2 PIIS APIs, for confirmation of funds. On the contrary, there were numerous calls to our PSD2 AIS APIs, for account information retrieval, and to our PSD2 PIS APIs for payment initiation.

Based on the definition of “downtime” as the amount of time during which the interface was unavailable (i.e. there were at least five consecutive AIS, PIS or CoF requests receiving errors with code “500” or “503” within a timeframe of 30 seconds), there were certain cases of unplanned downtime. These cases were mostly linked to unplanned downtime in the backend systems, which are common for both the dedicated (rapidlink) and web interface (winbank), although there were also a few cases where a massive request load from a couple of TPPs caused a momentary unavailability. Proper actions were taken to address the issue, by both contacting the TPPs and improving our APIs to sustain such traffic.

On the other hand, during the execution of planned maintenance and end-of-day (EOD) and beginning-of-day (BOD) tasks, there was little evidence of “downtime” on the dedicated interface within the particular period, due to the way the dedicated interface, the online channel and the backend services are implemented. More specifically, even if certain subsystems are “down”, rendering certain endpoints, like cards, unavailable, all other related resources are constantly available.

Table 2 below summarizes the downtime incidents within the particular period, while explaining their origin.

From	To	Duration (Milliseconds)	Duration (Minutes)	Comments
2025-01-02 21:37:46.1870000	2025-01-02 21:38:09.5920000	23405	0.390	rapidlink downtime
2025-01-09 14:49:10.8280000	2025-01-09 14:49:11.5000000	672	0.011	rapidlink downtime
2025-01-12 08:43:47.3420000	2025-01-12 08:43:48.5730000	1231	0.021	rapidlink downtime
2025-01-15 09:33:03.6040000	2025-01-15 09:33:04.8150000	1211	0.020	rapidlink downtime
2025-01-19 14:20:58.7590000	2025-01-19 14:21:14.3440000	15585	0.260	rapidlink downtime
2025-01-21 05:55:36.6710000	2025-01-21 05:55:37.9960000	1325	0.022	rapidlink downtime
2025-01-22 05:32:58.2470000	2025-01-22 05:32:59.5250000	1278	0.021	rapidlink downtime
2025-01-29 05:30:32.7430000	2025-01-29 05:30:34.2600000	1517	0.025	rapidlink downtime
2025-01-29 05:31:32.6150000	2025-01-29 05:31:33.2880000	673	0.011	rapidlink downtime
2025-01-29 05:36:33.2860000	2025-01-29 05:36:34.5130000	1227	0.020	rapidlink downtime
2025-01-29 13:09:45.8650000	2025-01-29 13:09:47.1600000	1295	0.022	rapidlink downtime
2025-02-03 12:31:57.6480000	2025-02-03 12:32:12.1900000	14542	0.242	rapidlink downtime
2025-02-03 12:32:21.0950000	2025-02-03 12:32:47.2820000	26187	0.436	rapidlink downtime
2025-02-03 12:37:48.7440000	2025-02-03 12:38:12.7960000	24052	0.401	winbank downtime
2025-02-03 12:38:17.6400000	2025-02-03 12:38:28.8820000	11242	0.187	winbank downtime
2025-02-03 12:38:33.8620000	2025-02-03 12:38:57.0400000	23178	0.386	winbank downtime
2025-02-03 12:39:00.2550000	2025-02-03 12:39:13.5810000	13326	0.222	winbank downtime
2025-02-03 16:33:30.5530000	2025-02-03 16:33:31.3800000	827	0.014	rapidlink downtime
2025-02-03 18:27:01.9730000	2025-02-03 18:27:03.3280000	1355	0.023	rapidlink downtime
2025-02-11 13:39:26.2830000	2025-02-11 13:39:27.7570000	1474	0.025	rapidlink downtime

2025-02-11 13:39:34.0850000	2025-02-11 13:39:35.8780000	1793	0.030	rapidlink downtime
2025-02-11 13:40:34.0890000	2025-02-11 13:40:35.2830000	1194	0.020	rapidlink downtime
2025-02-11 13:43:00.4500000	2025-02-11 13:43:01.1940000	744	0.012	rapidlink downtime
2025-02-11 17:56:05.2630000	2025-02-11 17:56:06.4480000	1185	0.020	rapidlink downtime
2025-02-12 15:16:44.5590000	2025-02-12 15:16:45.8190000	1260	0.021	rapidlink downtime
2025-02-13 02:06:26.2570000	2025-02-13 02:06:26.5060000	249	0.004	rapidlink downtime
2025-02-20 08:24:46.8770000	2025-02-20 08:24:52.7290000	5852	0.098	rapidlink downtime
2025-02-22 11:55:59.6780000	2025-02-22 11:56:00.6210000	943	0.016	rapidlink downtime
2025-02-25 14:29:37.5760000	2025-02-25 14:29:38.7920000	1216	0.020	rapidlink downtime
2025-02-25 14:32:42.7490000	2025-02-25 14:32:43.4000000	651	0.011	rapidlink downtime
2025-02-27 13:14:24.0060000	2025-02-27 13:14:25.2820000	1276	0.021	rapidlink downtime
2025-02-28 05:42:55.7990000	2025-02-28 05:42:56.4210000	622	0.010	rapidlink downtime
2025-03-04 07:43:50.0560000	2025-03-04 07:43:51.9560000	1900	0.032	rapidlink downtime
2025-03-04 08:05:31.6670000	2025-03-04 08:05:33.4830000	1816	0.030	rapidlink downtime
2025-03-04 18:47:36.8720000	2025-03-04 18:47:38.2170000	1345	0.022	rapidlink downtime
2025-03-06 21:35:30.1640000	2025-03-06 21:39:16.2860000	226122	3.769	rapidlink downtime
2025-03-11 09:07:41.8150000	2025-03-11 09:07:42.8120000	997	0.017	rapidlink downtime
2025-03-11 21:37:47.7950000	2025-03-11 21:38:01.1840000	13389	0.223	rapidlink downtime
2025-03-12 10:29:41.5950000	2025-03-12 10:29:42.8880000	1293	0.022	rapidlink downtime
2025-03-12 15:25:34.3250000	2025-03-12 15:25:35.0950000	770	0.013	rapidlink downtime
2025-03-14 05:37:23.7560000	2025-03-14 05:37:24.9670000	1211	0.020	rapidlink downtime

2025-03-18 05:33:51.2560000	2025-03-18 05:33:52.0460000	790	0.013	rapidlink downtime
2025-03-18 12:37:35.8050000	2025-03-18 12:37:37.0590000	1254	0.021	rapidlink downtime
2025-03-20 21:37:58.0620000	2025-03-20 21:38:14.1250000	16063	0.268	rapidlink downtime
2025-03-22 06:54:35.7260000	2025-03-22 06:54:36.7490000	1023	0.017	rapidlink downtime
2025-03-22 21:35:59.1110000	2025-03-22 21:36:02.6610000	3550	0.059	rapidlink downtime
2025-03-23 21:34:34.6540000	2025-03-23 21:35:13.9470000	39293	0.655	rapidlink downtime
2025-03-26 13:36:12.2110000	2025-03-26 13:36:25.3050000	13094	0.218	rapidlink downtime
2025-03-26 13:36:53.6860000	2025-03-26 13:37:41.4400000	47754	0.796	rapidlink downtime
2025-03-26 13:37:46.6770000	2025-03-26 13:37:51.3030000	4626	0.077	rapidlink downtime
2025-03-26 13:56:33.5590000	2025-03-26 13:56:41.9590000	8400	0.140	rapidlink downtime
2025-03-26 13:56:43.2890000	2025-03-26 13:57:11.1250000	27836	0.464	rapidlink downtime
2025-03-26 13:57:13.6440000	2025-03-26 13:57:17.5130000	3869	0.064	rapidlink downtime
2025-03-26 13:57:29.5710000	2025-03-26 13:58:09.4740000	39903	0.665	rapidlink downtime
2025-03-26 13:58:09.8550000	2025-03-26 13:58:15.7950000	5940	0.099	rapidlink downtime
2025-03-26 13:58:17.2400000	2025-03-26 13:58:38.3320000	21092	0.352	rapidlink downtime
2025-03-29 06:32:10.6120000	2025-03-29 06:32:11.3480000	736	0.012	rapidlink downtime
2025-03-30 20:34:34.9840000	2025-03-30 20:35:07.5520000	32568	0.543	rapidlink downtime
2025-03-30 20:38:16.8280000	2025-03-30 20:38:25.3810000	8553	0.143	rapidlink downtime

Table 2: Downtime incidents

Moving on to the next KPI, the dedicated interface's daily average error rate is calculated as the ratio of total daily number of requests returning an http error status code "500" (Internal Server Error) or "503" (Service Unavailable) to the total daily number of successful requests.

The following table summarizes the daily results for the particular period:

date	# unsuccessful_requests	# successful_requests	error_rate
1/1/2025	534	85610	0.62376%
2/1/2025	515	105090	0.49006%
3/1/2025	491	103497	0.47441%
4/1/2025	303	88775	0.34131%
5/1/2025	823	88629	0.92859%
6/1/2025	618	87388	0.70719%
7/1/2025	445	111719	0.39832%
8/1/2025	536	113452	0.47245%
9/1/2025	650	108843	0.59719%
10/1/2025	407	110387	0.36870%
11/1/2025	598	90303	0.66221%
12/1/2025	305	85336	0.35741%
13/1/2025	617	110065	0.56058%
14/1/2025	592	109978	0.53829%
15/1/2025	277	106240	0.26073%
16/1/2025	542	107449	0.50443%
17/1/2025	776	107561	0.72145%
18/1/2025	533	93140	0.57226%
19/1/2025	740	86830	0.85224%
20/1/2025	621	120359	0.51596%
21/1/2025	558	128032	0.43583%
22/1/2025	488	107876	0.45237%
23/1/2025	491	107969	0.45476%
24/1/2025	628	115279	0.54477%
25/1/2025	700	101855	0.68725%

26/1/2025	429	84429	0.50812%
27/1/2025	562	113524	0.49505%
28/1/2025	303	113775	0.26632%
29/1/2025	578	115101	0.50217%
30/1/2025	701	114946	0.60985%
31/1/2025	523	122784	0.42595%
1/2/2025	409	94714	0.43183%
2/2/2025	357	87930	0.40600%
3/2/2025	495	115336	0.42918%
4/2/2025	368	113259	0.32492%
5/2/2025	422	109282	0.38616%
6/2/2025	329	109904	0.29935%
7/2/2025	253	109526	0.23100%
8/2/2025	317	90909	0.34870%
9/2/2025	512	85337	0.59997%
10/2/2025	350	112650	0.31070%
11/2/2025	513	112562	0.45575%
12/2/2025	507	110418	0.45916%
13/2/2025	416	107817	0.38584%
14/2/2025	507	108279	0.46823%
15/2/2025	502	90174	0.55670%
16/2/2025	519	85443	0.60742%
17/2/2025	468	110382	0.42398%
18/2/2025	490	110213	0.44459%
19/2/2025	333	109528	0.30403%
20/2/2025	310	115655	0.26804%
21/2/2025	242	127709	0.18949%
22/2/2025	232	86046	0.26962%
23/2/2025	386	85500	0.45146%
24/2/2025	227	111311	0.20393%
25/2/2025	282	112517	0.25063%

26/2/2025	193	114464	0.16861%
27/2/2025	193	114862	0.16803%
28/2/2025	241	112881	0.21350%
1/3/2025	399	93778	0.42547%
2/3/2025	289	86026	0.33594%
3/3/2025	303	87065	0.34802%
4/3/2025	439	120458	0.36444%
5/3/2025	229	116250	0.19699%
6/3/2025	300	110139	0.27238%
7/3/2025	304	108316	0.28066%
8/3/2025	295	90589	0.32565%
9/3/2025	203	85039	0.23871%
10/3/2025	182	112975	0.16110%
11/3/2025	453	113576	0.39885%
12/3/2025	339	113172	0.29954%
13/3/2025	315	111525	0.28245%
14/3/2025	313	114651	0.27300%
15/3/2025	321	90583	0.35437%
16/3/2025	347	85539	0.40566%
17/3/2025	310	112374	0.27586%
18/3/2025	443	114642	0.38642%
19/3/2025	455	109952	0.41382%
20/3/2025	376	118850	0.31637%
21/3/2025	351	124767	0.28132%
22/3/2025	427	89297	0.47818%
23/3/2025	316	84671	0.37321%
24/3/2025	397	110231	0.36015%
25/3/2025	399	87552	0.45573%
26/3/2025	495	112322	0.44070%
27/3/2025	318	114576	0.27755%
28/3/2025	261	115182	0.22660%

29/3/2025	310	92914	0.33364%
30/3/2025	435	98548	0.44141%
31/3/2025	361	119757	0.30144%
Average Daily Error Rate			0.40792%

Table 3: Daily Error Rates of PSD2 APIs

Finally, regarding the average daily response times per service (AIS. PIS. CoF), as mentioned previously, traffic data showed that only AIS and PIS endpoints were called during the selected period. Therefore, Table 6 is empty, while Tables 4 and 5 summarize the results for PSD2 PIS and AIS APIs respectively. It must be stressed that average response times from the dedicated interface also include latency caused by technical calls.

Date	Number of requests	Average response time for PSD2_PIS APIs (milliseconds)
1/1/2025	2088	866
2/1/2025	4623	779
3/1/2025	3055	1217
4/1/2025	2123	958
5/1/2025	1751	960
6/1/2025	2324	807
7/1/2025	3785	1062
8/1/2025	2898	986
9/1/2025	3844	859
10/1/2025	2679	1122
11/1/2025	2337	814
12/1/2025	2546	816
13/1/2025	3034	1003
14/1/2025	2938	930
15/1/2025	3695	1043
16/1/2025	2950	987

17/1/2025	3271	903
18/1/2025	3392	668
19/1/2025	2035	932
20/1/2025	2669	891
21/1/2025	3535	942
22/1/2025	3648	899
23/1/2025	3912	835
24/1/2025	5036	745
25/1/2025	4090	656
26/1/2025	1514	1013
27/1/2025	3958	868
28/1/2025	3572	967
29/1/2025	3720	988
30/1/2025	2891	1156
31/1/2025	3183	1185
1/2/2025	2840	972
2/2/2025	2838	884
3/2/2025	3892	1100
4/2/2025	3078	1134
5/2/2025	3159	1050
6/2/2025	3885	919
7/2/2025	3228	1003
8/2/2025	1660	1107
9/2/2025	2302	962
10/2/2025	3573	909
11/2/2025	4267	1023
12/2/2025	4618	853
13/2/2025	3816	901
14/2/2025	2620	1083
15/2/2025	2301	877
16/2/2025	1356	1346

17/2/2025	2591	1201
18/2/2025	3506	942
19/2/2025	2703	1119
20/2/2025	3606	861
21/2/2025	2946	910
22/2/2025	1391	1207
23/2/2025	1459	1164
24/2/2025	3663	999
25/2/2025	3569	1020
26/2/2025	4955	847
27/2/2025	3325	1128
28/2/2025	4596	796
1/3/2025	2264	980
2/3/2025	1655	1096
3/3/2025	1853	1124
4/3/2025	4427	1139
5/3/2025	3481	1124
6/3/2025	3531	961
7/3/2025	2730	1064
8/3/2025	2739	916
9/3/2025	2149	880
10/3/2025	3181	1071
11/3/2025	3267	1059
12/3/2025	2662	1112
13/3/2025	1196	1512
14/3/2025	2088	968
15/3/2025	1504	848
16/3/2025	1006	996
17/3/2025	2148	1123
18/3/2025	3118	928
19/3/2025	2390	1050

20/3/2025	1577	1307
21/3/2025	1956	1030
22/3/2025	1180	1037
23/3/2025	1075	970
24/3/2025	2113	1038
25/3/2025	1149	929
26/3/2025	2360	1238
27/3/2025	3038	1035
28/3/2025	2438	1103
29/3/2025	1756	959
30/3/2025	1340	867
31/3/2025	2613	1177
Average		997.9444 milliseconds

Table 4: Daily average response times per PIS request

Date	Number of requests	Average response time for PSD2_AIS APIs (milliseconds)
1/1/2025	84056	1336
2/1/2025	100982	1430
3/1/2025	100933	1454
4/1/2025	86955	1342
5/1/2025	87701	1313
6/1/2025	85682	1281
7/1/2025	108379	1455
8/1/2025	111090	1462
9/1/2025	105649	1407
10/1/2025	108115	1471
11/1/2025	88564	1311
12/1/2025	83095	1310
13/1/2025	107648	1431

14/1/2025	107632	1451
15/1/2025	102822	1459
16/1/2025	105041	1448
17/1/2025	105066	1426
18/1/2025	90281	1291
19/1/2025	85535	1297
20/1/2025	118311	1344
21/1/2025	125055	1422
22/1/2025	104716	1443
23/1/2025	104548	1447
24/1/2025	110871	1448
25/1/2025	98465	1300
26/1/2025	83344	1275
27/1/2025	110128	1471
28/1/2025	110506	1443
29/1/2025	111959	1474
30/1/2025	112756	1560
31/1/2025	120124	1482
1/2/2025	92283	1330
2/2/2025	85449	1338
3/2/2025	111939	1699
4/2/2025	110549	1473
5/2/2025	106545	1428
6/2/2025	106348	1427
7/2/2025	106551	1449
8/2/2025	89566	1309
9/2/2025	83547	1313
10/2/2025	109427	1444
11/2/2025	108808	1468
12/2/2025	106307	1533
13/2/2025	104417	1494

14/2/2025	106166	1518
15/2/2025	88375	1373
16/2/2025	84606	1337
17/2/2025	108259	1562
18/2/2025	107197	1488
19/2/2025	107158	1503
20/2/2025	112359	1506
21/2/2025	125005	1563
22/2/2025	84887	1431
23/2/2025	84427	1447
24/2/2025	107875	1659
25/2/2025	109230	1571
26/2/2025	109702	1593
27/2/2025	111730	1547
28/2/2025	108526	1597
1/3/2025	91913	1645
2/3/2025	84660	1652
3/3/2025	85515	1742
4/3/2025	116470	1875
5/3/2025	112998	2022
6/3/2025	106908	2145
7/3/2025	105890	2143
8/3/2025	88145	1489
9/3/2025	83093	1608
10/3/2025	109976	1782
11/3/2025	110762	1695
12/3/2025	110849	1721
13/3/2025	110644	1706
14/3/2025	112876	1711
15/3/2025	89400	1606
16/3/2025	84880	1619

17/3/2025	110536	1771
18/3/2025	111967	1661
19/3/2025	108017	1681
20/3/2025	117649	1658
21/3/2025	123162	1591
22/3/2025	88544	1387
23/3/2025	83912	1387
24/3/2025	108515	1526
25/3/2025	86802	1338
26/3/2025	110457	1858
27/3/2025	111856	1582
28/3/2025	113005	1563
29/3/2025	91468	1368
30/3/2025	97643	1345
31/3/2025	117505	1517
Average		1514.29318 milliseconds

Table 5: Daily average response times per AIS request

Date	Number of requests	Average response time for PSD2_PPIS APIs (milliseconds)
-	-	-
Average		0 milliseconds

Table 6: Daily average response times per CoF request