

II. Euro foreign exchange reference rates of the European Central Bank *

1. End-of-month and daily rates

EUR 1 = CU ...

EU member countries								
	Bulgaria	Czechia	Denmark	Hungary	Poland	Romania	Sweden	
Period	Bulgarian lev BGN	Czech koruna CZK	Danish krone DKK	Hungarian forint HUF	Polish zloty PLN	Romanian leu RON	Swedish krona SEK	
2023 Sep.	1.9558	24.339	7.4571	389.50	4.6283	4.9735	11.5325	
Oct.	1.9558	24.558	7.4647	382.13	4.4405	4.9659	11.8275	
Nov.	1.9558	24.292	7.4548	380.75	4.3490	4.9718	11.4308	
Dec.	1.9558	24.724	7.4529	382.80	4.3395	4.9756	11.0960	
2024 Jan.	1.9558	24.891	7.4550	384.90	4.3330	4.9758	11.2682	
Feb.	1.9558	25.363	7.4540	393.48	4.3208	4.9706	11.2150	
Mar.	1.9558	25.305	7.4580	395.26	4.3123	4.9735	11.5250	
Apr.	1.9558	25.140	7.4583	390.68	4.3178	4.9759	11.7530	
May	1.9558	24.709	7.4588	388.83	4.2645	4.9767	11.4210	
June	1.9558	25.025	7.4575	395.10	4.3090	4.9773	11.3595	
July	1.9558	25.457	7.4621	395.78	4.2908	4.9749	11.6125	
Aug.	1.9558	25.031	7.4589	392.53	4.2763	4.9768	11.3355	
Sep.	1.9558	25.184	7.4560	396.88	4.2788	4.9753	11.3000	
2024 Sep. 9	1.9558	25.051	7.4616	395.95	4.2780	4.9743	11.4550	
10	1.9558	25.058	7.4623	397.38	4.2833	4.9745	11.4355	
11	1.9558	25.088	7.4624	396.20	4.2873	4.9742	11.4350	
12	1.9558	25.122	7.4620	395.88	4.2978	4.9740	11.4140	
13	1.9558	25.147	7.4627	395.33	4.2898	4.9738	11.3635	
16	1.9558	25.128	7.4621	393.83	4.2708	4.9744	11.3195	
17	1.9558	25.125	7.4621	394.68	4.2683	4.9738	11.3245	
18	1.9558	25.070	7.4613	394.25	4.2700	4.9749	11.3240	
19	1.9558	25.081	7.4592	394.55	4.2658	4.9744	11.3175	
20	1.9558	25.078	7.4590	393.68	4.2763	4.9745	11.3810	
23	1.9558	25.098	7.4581	394.68	4.2750	4.9742	11.3620	
24	1.9558	25.155	7.4571	394.70	4.2665	4.9756	11.2935	
25	1.9558	25.123	7.4575	395.03	4.2643	4.9760	11.3110	
26	1.9558	25.159	7.4572	395.95	4.2710	4.9759	11.3000	
27	1.9558	25.158	7.4570	396.95	4.2738	4.9764	11.2730	
30	1.9558	25.184	7.4560	396.88	4.2788	4.9753	11.3000	
Oct. 1	1.9558	25.272	7.4578	397.83	4.2853	4.9759	11.3145	
2	1.9558	25.316	7.4593	399.53	4.2950	4.9763	11.3495	
3	1.9558	25.357	7.4595	401.43	4.3058	4.9766	11.3610	

Other European and non-European countries								
	Australia	Brazil	Canada	China	Hong Kong	Iceland	India	
	Australian dollar AUD	Brazilian real BRL	Canadian dollar CAD	Yuan (renminbi) CNY	Hong Kong dollar HKD	Icelandic krona ISK	Indian rupee INR	
2023 Sep.	1.6339	5.3065	1.4227	7.7352	8.2959	144.90	88.0165	
Oct.	1.6739	5.3743	1.4712	7.7686	8.3079	147.50	88.4195	
Nov.	1.6542	5.3984	1.4870	7.8008	8.5384	150.70	91.1143	
Dec.	1.6263	5.3618	1.4642	7.8509	8.6314	150.50	91.9045	
2024 Jan.	1.6468	5.3749	1.4558	7.7789	8.4734	148.30	90.0010	
Feb.	1.6684	5.4054	1.4719	7.7888	8.4735	149.30	89.7458	
Mar.	1.6607	5.4032	1.4672	7.8144	8.4594	150.30	90.1365	
Apr.	1.6423	5.4928	1.4672	7.7609	8.3817	150.30	89.4155	
May	1.6315	5.6418	1.4804	7.8577	8.4838	149.10	90.5255	
June	1.6079	5.8915	1.4670	7.7748	8.3594	148.90	89.2495	
July	1.6635	6.0874	1.4977	7.8194	8.4589	149.90	90.6250	
Aug.	1.6301	6.2155	1.4941	7.8585	8.6455	152.90	92.9485	
Sep.	1.6166	6.0504	1.5133	7.8511	8.6933	150.70	93.8130	
2024 Sep. 9	1.6596	6.2000	1.4979	7.8589	8.6101	152.30	92.7110	
10	1.6551	6.1530	1.4973	7.8530	8.6004	152.30	92.6325	
11	1.6560	6.2245	1.4997	7.8534	8.6106	152.70	92.7430	
12	1.6497	6.2309	1.4964	7.8441	8.5945	152.30	92.4900	
13	1.6542	6.2147	1.5061	7.8634	8.6411	152.30	92.9880	
16	1.6492	6.1772	1.5109	7.8953	8.6723	152.50	93.3020	
17	1.6472	6.1236	1.5134	7.9046	8.6796	152.30	93.3050	
18	1.6400	6.0942	1.5117	7.8797	8.6692	152.30	93.1315	
19	1.6352	6.0240	1.5110	7.8827	8.6952	152.50	93.3250	
20	1.6388	6.0570	1.5148	7.8776	8.7022	152.30	93.2740	
23	1.6274	6.1976	1.5065	7.8438	8.6576	151.70	92.8955	
24	1.6237	6.1370	1.5033	7.8290	8.6668	151.70	93.1510	
25	1.6276	6.1104	1.5044	7.8692	8.7160	150.50	93.5750	
26	1.6217	6.0372	1.5025	7.8213	8.6773	150.50	93.2970	
27	1.6180	6.0668	1.5036	7.8230	8.6737	150.70	93.3840	
30	1.6166	6.0504	1.5133	7.8511	8.6933	150.70	93.8130	
Oct. 1	1.6040	6.0377	1.4986	7.7807	8.6181	149.90	92.9310	
2	1.6048	5.9961	1.4932	7.7702	8.5947	149.90	92.9790	
3	1.6124	6.0304	1.4945	7.7477	8.5734	149.30	92.7230	

* See Explanatory notes, p. 48.

II. Euro foreign exchange reference rates of the European Central Bank *

1. End-of-month and daily rates (cont'd)

EUR 1 = CU ...

Other European and non-European countries (cont'd)								
Period	Indonesia Indonesian rupiah IDR	Israel New shekel ILS	Japan Japanese yen JPY	Korea, Republic of South Korean won KRW	Malaysia Malaysian ringgit MYR	Mexico Mexican peso MXN	New Zealand New Zealand dollar NZD	Norway Norwegian krone NOK
2023 Sep.	16,383.62	4.0472	158.10	1,425.26	4.9741	18.5030	1.7575	11.2535
Oct.	16,868.28	4.2756	160.30	1,434.66	5.0594	19.1551	1.8224	11.8735
Nov.	16,981.14	4.0597	161.19	1,418.78	5.0933	19.0235	1.7762	11.7200
Dec.	17,079.71	3.9993	156.33	1,433.66	5.0775	18.7231	1.7504	11.2405
2024 Jan.	17,076.29	3.9431	160.19	1,444.63	5.1259	18.5817	1.7705	11.3510
Feb.	17,038.18	3.8736	162.53	1,447.43	5.1375	18.4969	1.7807	11.4920
Mar.	17,157.87	3.9799	163.45	1,458.67	5.1168	17.9179	1.8092	11.6990
Apr.	17,422.11	4.0172	168.27	1,479.67	5.1130	18.1895	1.8035	11.8150
May	17,641.72	4.0342	170.52	1,501.11	5.1080	18.4387	1.7696	11.3830
June	17,487.21	4.0200	171.94	1,474.86	5.0501	19.5654	1.7601	11.3965
July	17,634.43	4.0822	162.76	1,485.96	4.9749	20.3317	1.8289	11.8175
Aug.	17,180.03	4.0245	161.19	1,478.60	4.7901	21.7581	1.7709	11.6620
Sep.	16,975.88	4.1491	159.82	1,469.11	4.6167	21.9842	1.7616	11.7645
2024 Sep. 9	17,083.30	4.1425	158.53	1,485.48	4.8274	21.9879	1.8004	11.9405
10	17,046.54	4.1539	157.81	1,480.59	4.7902	21.9527	1.7921	11.9020
11	17,020.19	4.1538	156.60	1,478.50	4.7816	21.9952	1.7966	11.9370
12	17,007.44	4.1344	157.02	1,477.30	4.7746	21.7456	1.7960	11.9340
13	17,072.28	4.1105	156.17	1,474.21	4.7665	21.5637	1.7973	11.8495
16	17,095.99	4.1641	155.66	1,467.42	4.7858	21.4029	1.7958	11.7800
17	17,082.55	4.1808	156.71	1,467.66	4.7441	21.5290	1.7965	11.7885
18	17,032.01	4.1916	157.94	1,473.65	4.7210	21.2402	1.7877	11.7753
19	16,924.49	4.1899	159.53	1,481.57	4.6967	21.3910	1.7845	11.6678
20	16,929.55	4.2077	161.08	1,491.51	4.6953	21.6089	1.7919	11.7330
23	16,886.09	4.2010	159.58	1,486.62	4.6733	21.5915	1.7770	11.6860
24	16,896.39	4.1947	160.14	1,485.87	4.6246	21.5748	1.7707	11.6120
25	16,922.87	4.2050	161.49	1,489.46	4.6242	21.7426	1.7725	11.6840
26	16,878.63	4.1132	160.78	1,478.62	4.6237	21.8299	1.7691	11.7865
27	16,859.24	4.1296	159.63	1,462.76	4.6027	21.8374	1.7649	11.7575
30	16,975.88	4.1491	159.82	1,469.11	4.6167	21.9842	1.7616	11.7645
Oct. 1	16,847.95	4.1262	159.37	1,463.99	4.6168	21.8444	1.7548	11.7305
2	16,913.83	4.1917	160.26	1,462.53	4.6205	21.6083	1.7614	11.6735
3	17,075.07	4.1859	161.98	1,472.89	4.6601	21.5389	1.7749	11.7195

Other European and non-European countries (cont'd)								
Period	Philippines Philippine peso PHP	Singapore Singapore dollar SGD	South Africa South African rand ZAR	Switzerland Swiss franc CHF	Thailand Thai baht THB	Turkey Turkish lira TRY	United Kingdom Pound sterling GBP	United States US dollar USD
2023 Sep.	59.969	1.4443	19.9813	0.9669	38.679	29.0514	0.86458	1.0594
Oct.	60.295	1.4525	19.9507	0.9607	38.266	30.0455	0.87366	1.0619
Nov.	60.623	1.4602	20.5703	0.9562	38.494	31.5441	0.86368	1.0931
Dec.	61.283	1.4591	20.3477	0.9260	37.973	32.6531	0.86905	1.1050
2024 Jan.	61.023	1.4517	20.3238	0.9348	38.461	32.8984	0.85435	1.0837
Feb.	60.858	1.4570	20.9007	0.9534	38.909	33.8067	0.85655	1.0826
Mar.	60.797	1.4587	20.5226	0.9766	39.412	34.9487	0.85510	1.0811
Apr.	61.830	1.4593	20.0682	0.9787	39.732	34.7045	0.85478	1.0718
May	63.604	1.4663	20.2927	0.9818	39.925	34.9691	0.85365	1.0852
June	62.560	1.4513	19.4970	0.9634	39.319	35.1868	0.84638	1.0705
July	63.218	1.4491	19.7400	0.9533	38.629	35.9085	0.84380	1.0828
Aug.	62.309	1.4441	19.5358	0.9416	37.541	37.7651	0.84120	1.1087
Sep.	62.740	1.4342	19.2258	0.9439	36.107	38.2693	0.83543	1.1196
2024 Sep. 9	62.354	1.4428	19.7659	0.9376	37.474	37.5989	0.84365	1.1043
10	62.216	1.4397	19.7464	0.9349	37.235	37.5708	0.84265	1.1031
11	61.706	1.4385	19.7394	0.9358	37.198	37.5570	0.84375	1.1043
12	61.852	1.4380	19.7713	0.9414	37.146	37.4020	0.84460	1.1016
13	62.041	1.4404	19.7185	0.9387	36.988	37.6148	0.84475	1.1081
16	62.094	1.4407	19.6277	0.9394	36.983	37.8040	0.84278	1.1126
17	61.966	1.4407	19.6418	0.9405	37.104	37.9137	0.84278	1.1139
18	61.988	1.4395	19.5531	0.9388	37.015	37.9429	0.84225	1.1124
19	61.949	1.4415	19.4454	0.9460	36.965	37.9584	0.83953	1.1156
20	62.150	1.4426	19.5684	0.9486	36.887	38.0857	0.83910	1.1166
23	62.300	1.4357	19.3253	0.9448	36.654	37.9745	0.83518	1.1119
24	62.601	1.4341	19.2869	0.9439	36.569	38.0064	0.83220	1.1133
25	62.609	1.4378	19.1932	0.9495	36.599	38.2090	0.83653	1.1194
26	62.423	1.4328	19.2380	0.9452	36.215	38.1022	0.83428	1.1155
27	62.591	1.4305	19.1092	0.9420	36.135	38.1336	0.83338	1.1158
30	62.740	1.4342	19.2258	0.9439	36.107	38.2693	0.83543	1.1196
Oct. 1	62.287	1.4268	19.1585	0.9394	36.124	37.9185	0.83193	1.1086
2	62.186	1.4266	19.2605	0.9388	36.296	37.8927	0.83288	1.1071
3	62.315	1.4315	19.3017	0.9387	36.567	37.7045	0.84258	1.1039

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