

Centralna banka BOSNE I HERCEGOVINE Централна банка БОСНЕ И ХЕРЦЕГОВИНЕ



# PAYMENT SYSTEMS DEPARTMENT SECTION FOR OVERSIGHT AND DEVELOPMENT OF PAYMENT SYSTEMS

# Payment Systems in BH in 2023

Sarajevo, 29 March 2024



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#### 1 Introduction

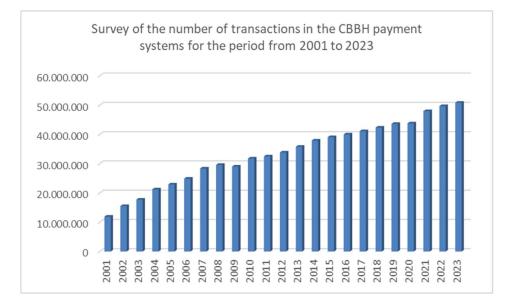
The report "Payment Systems in BH in 2023" as a regular annual report on the payment system operations in Bosnia and Herzegovina (hereinafter: BH), has been prepared on the basis of the data collected from 22 banks in BH and internal data of the Central Bank of Bosnia and Herzegovina (hereinafter: CBBH).

During 2023, the CBBH successfully responded to all tasks related to the stable functioning of the Payment system owned and operated by CBBH, and all transactions were settled during the working hours of the systems.

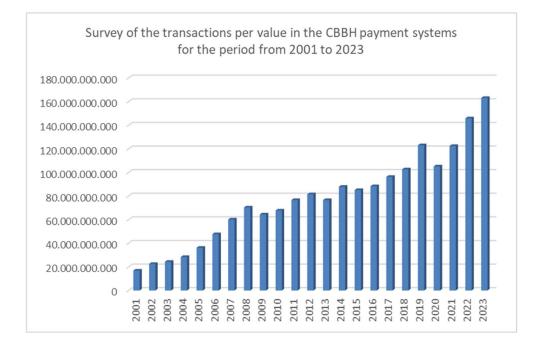
#### 2 RTGS and Giro Clearing transactions

During 2023, the growth of both the number and value of transactions was recorded in the payment systems of the CBBH.

Survey of	Survey of the number of transactions in the CBBH		
payment s	ystems for the period from 2001 to 2023		
Year	Number of transactions		
2001	11.916.222		
2002	15.526.839		
2003	17.721.251		
2004	21.242.162		
2005	22.909.427		
2006	24.900.936		
2007	28.367.097		
2008	29.598.572		
2009	29.039.567		
2010	31.774.686		
2011	32.489.826		
2012	33.837.361		
2013	35.799.626		
2014	37.930.337		
2015	39.086.648		
2016	40.004.202		
2017	41.107.361		
2018	42.334.026		
2019	43.601.606		
2020	43.774.406		
2021	47.971.726		
2022	49.700.235		
2023	50.822.188		
Total:	771.456.307		

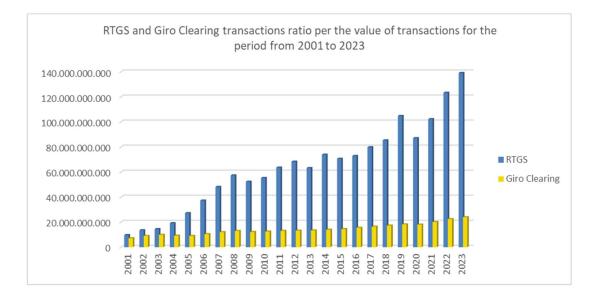


Survey	Survey of transactions per value in the CBBH				
	payment systems for the period from 2001 to 2023				
Year	Transactions per value in KM				
2001	16.844.843.315				
2002	22.509.671.792				
2003	24.342.825.574				
2004	28.383.452.792				
2005	36.194.883.247				
2006	47.727.696.822				
2007	60.192.696.720				
2008	70.344.517.441				
2009	64.457.938.969				
2010	67.778.691.332				
2011	76.653.471.820				
2012	81.533.268.431				
2013	76.604.896.747				
2014	87.858.114.404				
2015	85.105.843.766				
2016	88.379.953.010				
2017	96.243.249.000				
2018	102.669.704.908				
2019	123.046.070.387				
2020	105.132.312.596				
2021	122.403.038.511				
2022	145.825.330.468				
2023	163.096.124.957				
Total:	1.793.328.597.008				



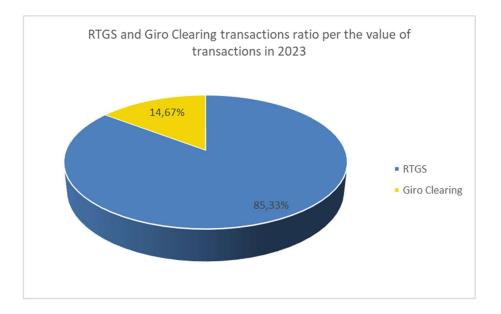
Survey of RTGS and Giro Clearing transactions in the CBBH payment systems for the period from						
2001 to 2023						
Year	RTGS		RTGS Giro Clearing			
	Number of		Number of			
	transactions	Value in KM	transactions	Value in KM		
2001	332.622	9.701.270.430	11.583.600	7.143.572.885		
2002	257.691	13.519.780.127	15.269.148	8.989.891.665		
2003	293.847	14.460.652.316	17.427.404	9.882.173.258		
2004	480.935	19.178.523.535	20.761.227	9.204.929.257		
2005	521.014	27.236.549.476	22.388.413	8.958.333.771		
2006	591.823	37.280.188.111	24.309.113	10.447.508.711		
2007	704.702	48.174.209.589	27.662.395	12.018.487.131		
2008	766.690	57.335.307.266	28.831.882	13.009.210.175		
2009	692.669	52.283.260.876	28.346.898	12.174.678.093		
2010	713.775	55.281.115.708	31.060.911	12.497.575.624		
2011	760.459	63.607.787.849	31.729.367	13.045.683.972		
2012	763.522	68.310.225.344	33.073.839	13.223.043.087		
2013	773.099	63.231.533.830	35.026.527	13.373.362.91		
2014	821.897	73.896.929.048	37.108.440	13.961.185.35		
2015	874.575	70.654.654.893	38.212.073	14.451.188.873		
2016	935.319	72.871.045.267	39.068.883	15.508.907.743		
2017	996.043	79.855.384.343	40.111.318	16.387.864.656		
2018	1.067.256	85.393.044.051	41.266.770	17.276.660.85		
2019	1.105.320	104.825.511.544	42.496.286	18.220.558.843		
2020	1.072.023	87.108.346.289	42.702.383	18.023.966.308		
2021	1.236.315	102.287.161.783	46.735.411	20.115.876.728		
2022	1.435.980	123.369.551.063	48.264.255	22.455.779.40		
2023	1.523.992	139.163.874.491	49.298.196	23.932.250.46		
Total:	18.721.568	1.469.025.907.228	752.734.739	324.302.689.78		





RTGS and Giro Clearing transactions ratio in 2023					
Number of transactionsShare in the totalValue in KM				Share in the total value	
RTGS	1.523.992	3,00%	139.163.874.491	85,33%	
Giro Clearing 49.298.196 97,00% 23.932.250.4				14,67%	
Total: 50.822.188 100% 163.096.124.957					





The share of the number of RTGS transactions in the total transactions in 2023 was 3.00%, while the share in the value was 85.33%.

The share of Giro Clearing transactions in the number of the total transactions was 97.00%, and that in the value was 14.67%.

#### 3 Concentration by the number and value of transactions

The first ten banks participated in the total number of RTGS and Giro Clearing interbank transactions during 2023 with 78.49%, this being an increase compared to 2022 (in 2022, ten banks accounted for 75.24% of all transactions).

The first five banks participated in the total number of RTGS and Giro Clearing interbank transactions during 2023 with 56.64%, this being an increase compared to 2022 (in 2022, the first five banks accounted for 53.32% of all transactions).

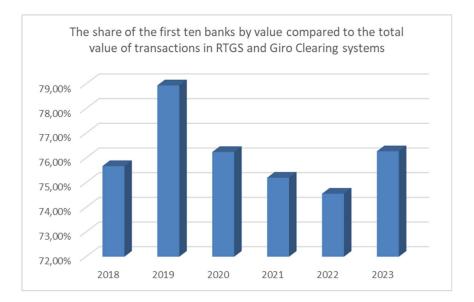
The share of the	The share of the first ten banks by the number of transactions in relation to				
the total numb	the total number of transactions in RTGS and Giro Clearing systems in 2023				
Year	Year Number of transactions %				
2023 39.897.787 78,49					



In the total value of transactions, the top ten banks participated with 76.27%, thus increasing their share, since in 2022 their share was 74.55%.

In the total value of transactions, the top five banks participated with 50.67%, thus increasing their share, since in 2022 their share was 50.42%.

The share of	The share of the first ten banks by value compared to the total value of				
trans	transactions in RTGS and Giro Clearing systems in 2023				
Year	Year Value of transactions %				
2023 124.785.154.685 76,2					



## 4 Time schedule of transactions

In accordance with the Operating Rules for Gyro clearing, net position settlement is carried out in the RTGS payment system for four clearing cycles during the day.

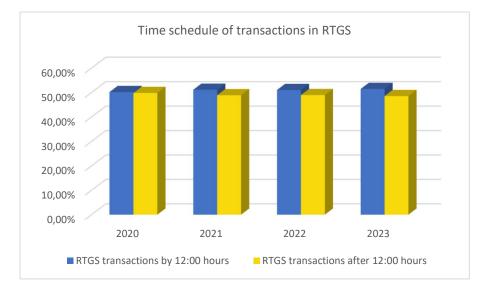
The percentual shares of banks' orders sent in particular clearing cycles in the Giro Clearing payment system during 2023 are the following:

Time schedule of transactions in Giro Clearing in %					
Giro Clearing cut-off time 2020 2021 2022 2023					
Giro Clearing cut-off time I	36.03%	37.51%	38.36%	38.58%	
Giro Clearing cut-off time II	24.61%	25.26%	25.24%	24.95%	
Giro Clearing cut-off time III	22.94%	22.47%	21.96%	21.52%	
Giro Clearing cut-off time IV	16.42%	14.76%	14.44%	14.95%	



Percentual shares of banks' orders sent in the RTGS payment system during 2023 are the following:

Time schedule of transactions in RTGS expressed in %				
RTGS cut-off time	2020	2021	2022	2023
RTGS transactions by 12:00 hours	50.18%	51.11%	51.03%	51.45%
RTGS transactions after 12:00 hours	49.82%	48.89%	48.97%	48.55%



# **5** International clearing

Through the system of international clearing of payments, the total of 11.655 orders were sent by banks from BH during 2023 (10.395 orders in 2022), in the value of EUR 221.290.817 (EUR 288.120.247 in 2022). Seven banks from BH participated in the clearing system of international payment, as it follows:

No.	Participant	BIC code
1	ASA Banka d.d. Sarajevo	IKBZBA2XXXX
2	Bosna Bank International d.d. Sarajevo	BBIBBA22XXX
3	ProCredit Bank d.d. Sarajevo	MEBBBA22XXX
4	NAŠA BANKA a.d. Bijeljina	PAVLBA22XXX
5	Atos bank a.d. Banja Luka	SABRBA2BXXX
6	Banka Poštanska štedionica a.d. Banja Luka	KOBBBA22XXX
7	MF banka a.d. Banja Luka	MFBLBA22XXX

The total number of orders and their value by years:

Year	Number of orders	Value of orders
2010	5.877	€ 56.895.162
2011	6.852	€ 84.244.664
2012	6.819	€ 93.651.205
2013	7.929	€ 122.641.627
2014	8.769	€ 131.046.506
2015	9.637	€ 176.275.344
2016	10.319	€ 197.607.823
2017	10.602	€ 172.103.917
2018	10.853	€ 224.074.932
2019	11.931	€ 265.096.190
2020	10.622	€ 235.143.401
2021	12.236	€ 352.790.320
2022	10.395	€ 288.120.247
2023	11.655	221.290.817€



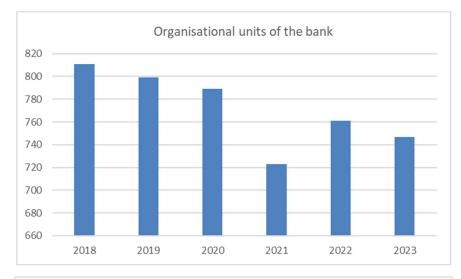


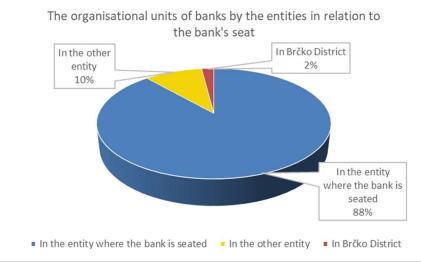
# 6 Organizational charts of banks

The total number of organizational units of banks at the end of 2023 was 747 (in 2022, banks had 761 organizational units).

Organizational units of the bank							
Year	In the entity where the bank is seated	In the other entity	In Brčko District	Total			
2018	699	92	20	811			
2019	706	75	18	799			
2020	695	76	18	789			
2021	643	64	16	723			
2022	673	72	16	761			
2023	661	71	15	747			

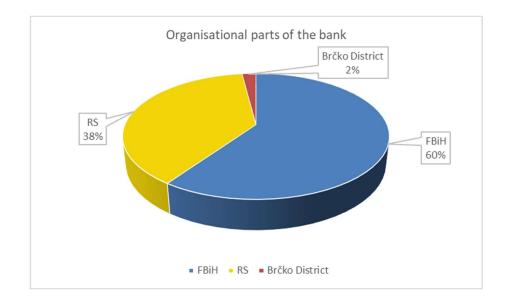
The table provides a survey of organizational units by the entities in relation to banks' headquarters:





The following table shows the number of organizational units of banks in the Federation of Bosnia and Herzegovina (hereinafter: FBiH), Republic of Srpska (hereinafter: RS) and Brcko District (hereinafter: DB):

Organizational parts of the bank				
Year FBH RS DB Total				Total
2023	446	286	15	747

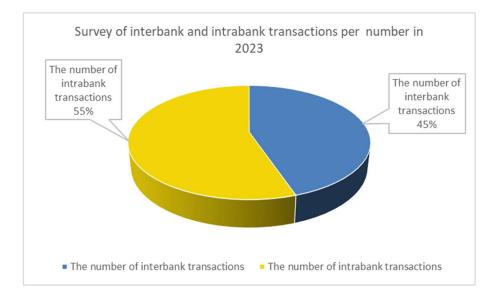


# 7 Interbank and intrabank transactions

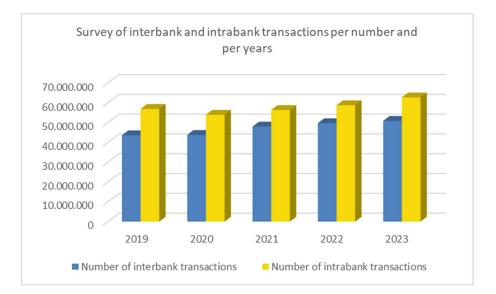
During 2023, 50.822.188 interbank payments were performed (in 2022, 49.700.235) and 62.676.044 intrabank payments were performed (in 2022, 58.727.637).

In percent, out of the total number of transactions, 45 % were interbank transactions (through the CBBH payment systems: RTGS and Giro Clearing), and 55 % orders sent within banks.

Survey of interbank and intrabank transactions per number in 2023			
The number of interbank	Total		
transactions	transactions		
50.822.188	62.676.044	113.498.232	
45%	55%	100%	

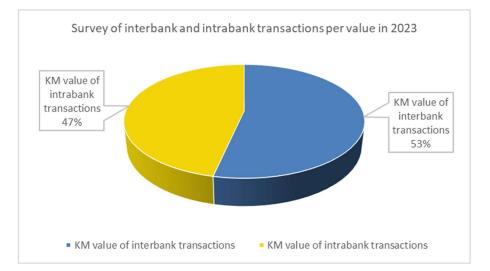


Survey of interbank and intrabank transactions per number and per years			
Year	Number of interbank	Number of intrabank	Total
	transactions	transactions	
2019	43.601.606	56.879.236	100.480.842
2020	43.774.406	53.927.204	97.701.610
2021	47.971.726	56.325.952	104.297.678
2022	49.700.235	58.727.637	108.427.872
2023	50.822.188	62.676.044	113.498.232

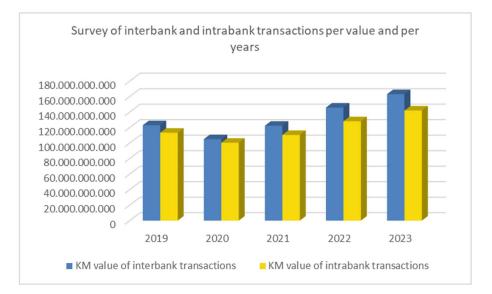


Observing the value in 2023, interbank orders amounted to KM 163.096.124.957 (in 2022, KM 145.825.330.468) and intrabank orders amounted to KM 142.025.862.822 (in 2022, KM 128.127.838.936). Interbank to intrabank orders ratio is as presented in the table:

Survey of interbank and intrabank transactions per value in 2023			
KM value of interbank	KM value of intrabank	Total	
transactions	transactions		
163.096.124.957	142.025.862.822	305.121.987.779	
53%	47%	100%	

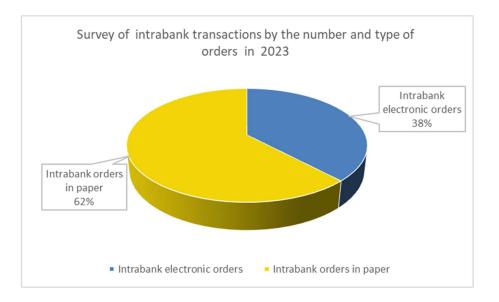


Survey of interbank and intrabank transactions per value and per years			
Year	KM value of interbank	KM value of intrabank	Total
	transactions	transactions	
2019	123.046.070.387	113.372.584.035	236.418.654.422
2020	105.132.312.596	100.429.423.241	205.561.735.837
2021	122.403.038.511	110.469.030.643	232.872.069.154
2022	145.825.330.468	128.127.838.936	273.953.169.404
2023	163.096.124.957	142.025.862.822	305.121.987.779

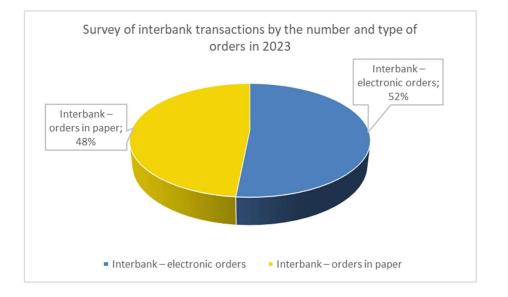


The survey of intrabank and interbank transactions per type of order initiation (electronic and paper) for 2023 is presented below. Survey provides the number and the value of orders:

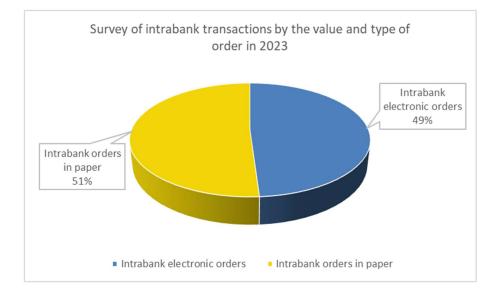
Survey of intrabank transactions by the number and type of orders in 2023			
Intrabank electronic orders Intrabank orders in paper Total			
38%	62%	100%	



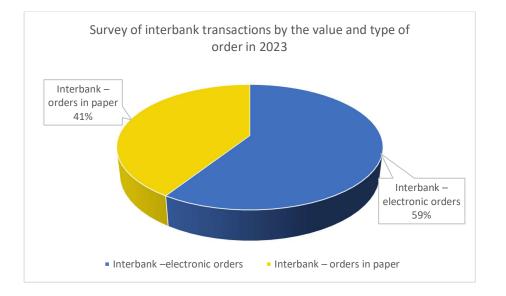
Survey of interbank transactions by the number and type of orders in 2023			
Interbank – electronic orders Interbank – orders in paper Total			
52%	48%	100%	



Survey of intrabank transactions by the value and type of order in 2023			
Intrabank electronic orders Intrabank orders in paper Total			
49%	51%	100%	

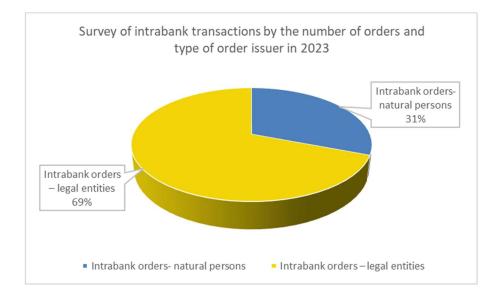


Survey of interbank transactions by the value and type of order in 2023			
Interbank –electronic orders Interbank – orders in paper Total			
59%	41%	100%	

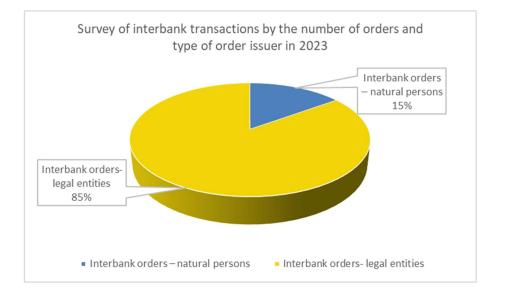


Survey of intrabank and interbank transactions by the type of order issuer (natural persons and legal entities) for 2023:

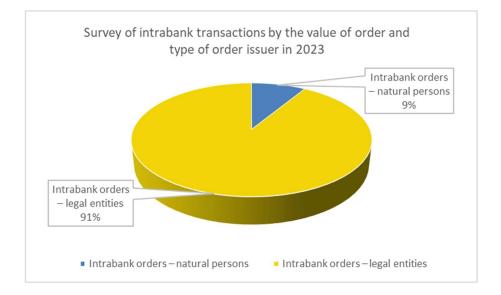
Survey of intrabank transactions by the number of orders and type of order issuer in 2023			
Intrabank orders- natural Intrabank orders – legal		Total	
persons	entities	10141	
31%	69%	100%	



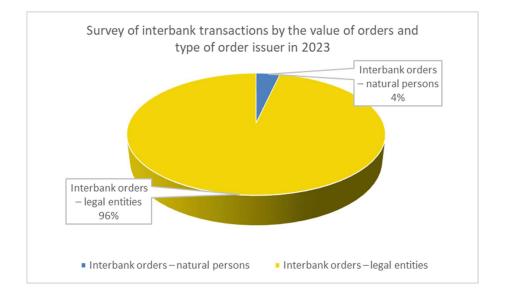
Survey of interbank transactions by the number of orders and type of order issuer in 2023			
Interbank orders – natural persons	Interbank orders- legal entities	Total	
15%	85%	100%	



Survey of intrabank transactions by the value of order and type of order issuer in 2023			
Intrabank orders – natural Intrabank orders – legal		Total	
persons	entities	Total	
9%	91%	100%	



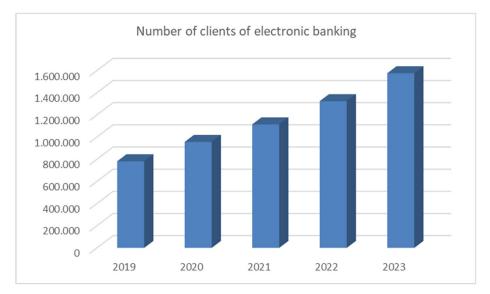
Survey of interbank transactions by the value of orders and type of order issuer in 2023					
Interbank orders – natural Interbank orders – leg		total			
4%	96%	100%			

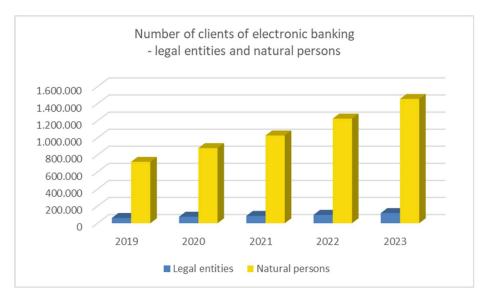


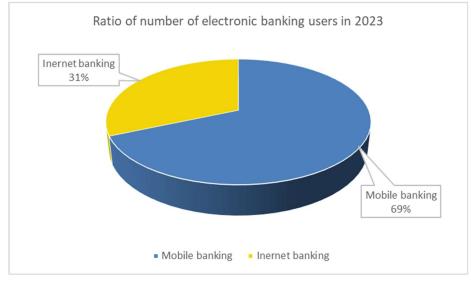
## 8 Bank channels

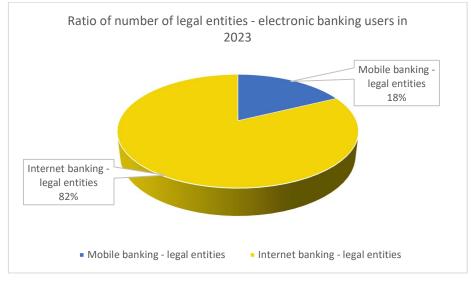
The electronic banking (mobile and/or internet banking) was offered by 22 banks in BH.

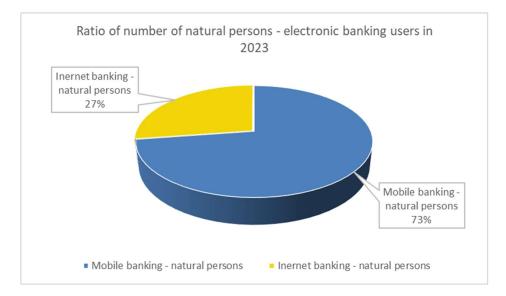
This kind of service covers in total 1.575.942 entities (during 2022 there were 1.324.202), more specifically 119.595 legal entities (during 2022 there were 98.704) and 1.456.347 natural persons (during 2022 there were 1.225.498). The trend of increase in number of the clients using these services is evident.







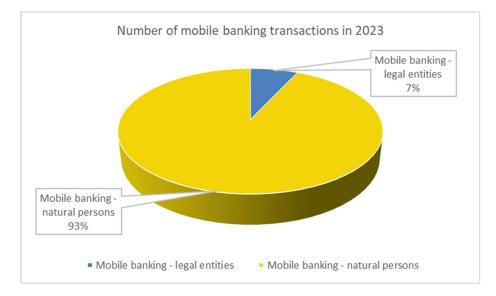


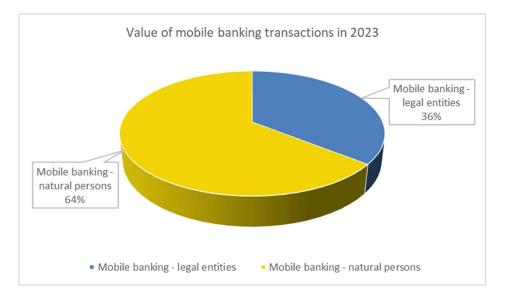


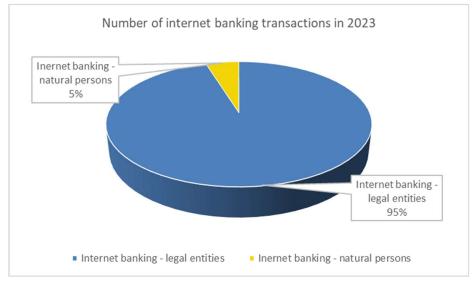
Number and value of transactions of the e-banking:

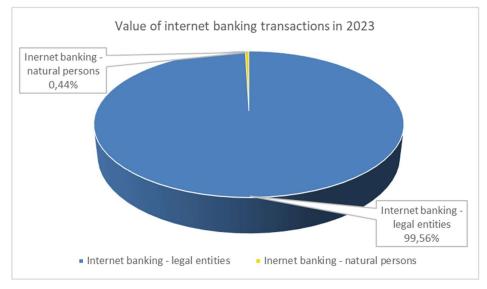
E-banking transaction number							
Year	Mobile banking - <i>legal entities</i>	Mobile banking - natural persons	Internet banking - <i>legal entities</i>	Internet banking - natural persons	Payment via ATM - <i>legal</i> entities	Payment via ATM - natural persons	Total
2023	855.229	11.500.095	27.856.220	1.409.264	0	3.887	41.624.695

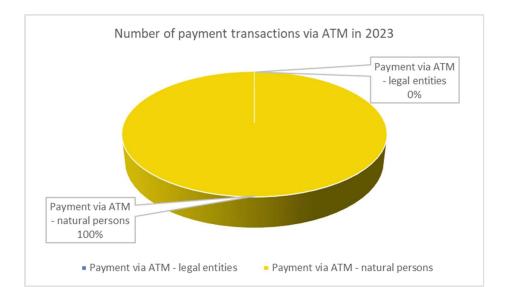
	E-banking transaction value						
Year	Mobile banking - legal entities	Mobile banking - natural persons	Internet banking - legal entities	Internet banking - natural persons	Payment via ATM - <i>legal</i> entities	Payment via ATM - natural persons	Total
2023	1.568.496.638	2.827.375.492	145.135.234.440	641.524.803	0	576.092	150.173.207.464

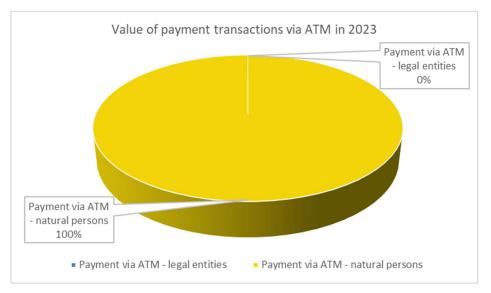










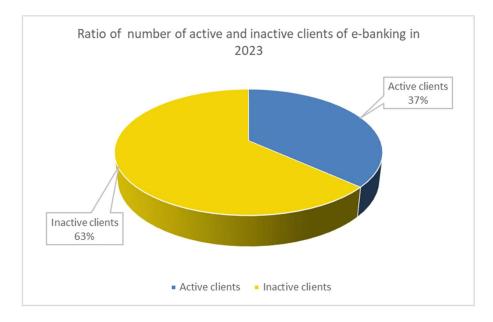






Survey of the number of active e-banking clients (those who had at least one transaction during the calendar year 2023) is presented below:

Godina	Mobilno bankarstvo - pravna lica	Mobilno bankarstvo - fizička lica	Mobilno bankarstvo	Internet bankarstvo - pravna lica	Internet bankarstvo - fizička lica	Internet bankarstvo	Ukupno
2023	12.445	449.261	461.706	71.211	44.965	116.176	577.882



Out of a total of 22 banks in BH, 5 banks processed interbank payment orders received at Post Offices.

The survey provides data of interbank payment transactions initiated at Post Offices in 2023, which were proceessed through RTGS and Gyro Clearing (hereinafter: GC) system:

Number of interbank payment transactions initiated at Post Offices					
Year Giro Clearing		RTGS	Total		
2023	9.232.005	6.813	9.238.818		

Value of interbank payment transactions initiated at Post Offices						
Year	Giro Clearing	RTGS	Total			
2023	951.833.757	126.101.122	1.077.934.879			

