



with a mystery shopping exercise. A total of 42 mystery shopping exercises were conducted during the year, 20 of which also included the conclusion of a financial service agreement.

In 2015 NBS received 1,645 submissions from financial consumers, i.e. 167 more than in 2014 (an increase of 10%). Almost one fifth of these submissions were justified, i.e. they concerned cases where the right of a consumer had actually been violated by a financial institution. The exercise of supervision over consumer loans provided by non-bank creditors was also reflected in the number of submissions received. During 2015 NBS received 209 such submissions. This indicates that consumer loans were the second most

frequent subject-matter of complaints, next to comprehensive motor insurance. In the area of banking, the complaints of financial consumers concerned mainly mortgage loans, housing loans and consumer loans provided by banks. The number of submissions regarding financial intermediation remained virtually unchanged during 2010-2014. These submissions concerned the method, range and quality of the information financial consumers had received before the financial service was actually provided. In 2015 submissions received from the customers of entities subject to supervision remained the main source of information that NBS used in conducting on-site inspections or off-site supervision in specific companies.

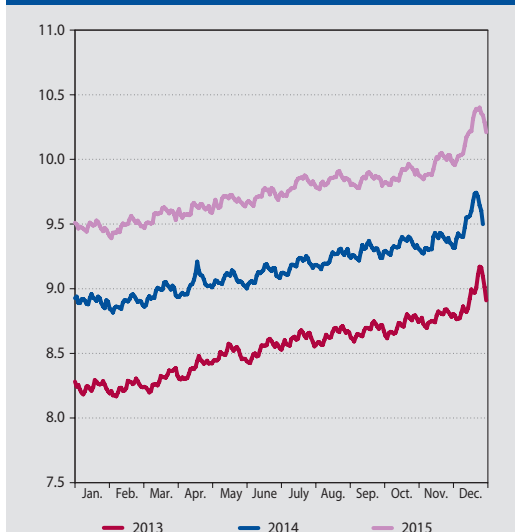
## 3 ISSUING ACTIVITY AND CURRENCY CIRCULATION

### 3.1 CUMULATIVE NET ISSUANCE

The cumulative net issuance (CNI)<sup>34</sup> of euro banknotes and coins in Slovakia had a total value of €10.2 billion as at 31 December 2015, with euro banknotes accounting for €10.1 billion of that amount. The CNI increased in 2015 by 7.5% year-on-year (by €711.5 million), with its growth rate

accelerating after several years on a downward trend<sup>35</sup>. The value of the item *currency in circulation*, corresponding to Národná banka Slovenska's allocated share in the Eurosystem's production of euro banknotes (Banknote Allocation Key), amounted to around €10.9 billion as at 31 December 2015<sup>36</sup>. The difference in value between the euro banknotes issued in Slovakia and the *currency in circulation* item was €879 million.

Chart 19 Cumulative net issuance of euro cash on a daily basis (EUR billions)



Source: NBS.

The CNI's daily trend in 2015 remained the same as in previous years, with the year-on-year difference ranging approximately between €0.4 billion and €0.8 billion. The daily CNI is usually highest in the pre-Christmas period, and in 2015 it peaked on 23 December (at €10.4 billion).

Euro banknotes accounted for almost the entire value of the CNI (98.5%), but only for 20% of the CNI in terms of volume. Euro coins (including euro collector coins) made up the remaining 80%.

The cumulative net issuance as at 31 December 2015 comprised almost 149 million euro banknotes and approximately 604 million euro coins (including collector coins). The €50 denomination had the largest share of the total number of banknotes included in the CNI, at almost 24%. The coins issued in the highest volumes are the

<sup>34</sup> Since euro banknotes and euro coins in circulation in Slovakia include banknotes and coins issued in other euro area countries, Národná banka Slovenska does not record the actual value and volume of currency in circulation, but only the euro banknotes and euro coins that NBS itself has put into and withdrawn from circulation. The cumulative net issuance as at 31 December 2015 refers to the difference between the value (volume) of euro banknotes and coins put into and withdrawn from circulation between 1 January 2009, when Slovakia joined the euro area, and 31 December 2015.

<sup>35</sup> The CNI increased by 6.6% in 2014, 7.5% in 2013, 12.7% in 2012, 21.6% in 2011 and 30.8% in 2010.

<sup>36</sup> The value of currency in circulation throughout the euro area as at 31 December 2015 was €1,083 billion, and the share of that currency issued in Slovakia according to the banknote allocation key was 1.0095%, or around €10.9 billion.

**Table 6 Composition of the cumulative net issuance of euro banknotes and coins**

	Cumulative net issuance				Share in %	
	CNI as at 31 December 2015		Difference vis-à-vis 31 December 2014		Share as at 31 December 2015	
	number	value (€)	number	value (€)	number	value (€)
€500	8,331,659	4,165,829,500.00	964,650	482,325,000.00	1.11	40.80
€200	337,555	67,511,000.00	-92,572	-18,514,400.00	0.04	0.66
€100	30,180,407	3,018,040,700.00	3,478,647	347,864,700.00	4.01	29.56
€50	35,666,851	1,783,342,550.00	-2,975,957	-148,797,850.00	4.74	17.47
€20 <sup>1)</sup>	32,526,836	650,536,720.00	-146,931	-2,938,620.00	4.32	6.37
€10 <sup>1)</sup>	32,599,485	325,994,850.00	4,138,697	41,386,970.00	4.33	3.19
€5 <sup>1)</sup>	9,344,031	46,720,155.00	-124,887	-624,435.00	1.24	0.46
<b>Total banknotes</b>	<b>148,986,824</b>	<b>10,057,975,475.00</b>	<b>5,241,647</b>	<b>700,701,365.00</b>	<b>19.79</b>	<b>98.51</b>
€2	45,435,741	90,871,482.00	4,427,390	8,854,780.00	6.04	0.89
€1	20,975,299	20,975,299.00	72,444	72,444.00	2.79	0.20
50 cent	26,241,693	13,120,846.50	336,103	168,051.50	3.49	0.13
20 cent	33,214,433	6,642,886.60	121,384	24,276.80	4.41	0.07
10 cent	53,326,380	5,332,638.00	3,347,230	334,723.00	7.09	0.05
5 cent	69,825,618	3,491,280.90	5,100,634	255,031.70	9.28	0.03
2 cent	151,994,293	3,039,885.86	12,193,301	243,866.02	20.19	0.03
1 cent	202,314,461	2,023,144.61	23,528,345	235,283.45	26.88	0.02
<b>Total coins</b>	<b>603,327,918</b>	<b>145,497,463.47</b>	<b>49,126,831</b>	<b>10,188,456.47</b>	<b>80.17</b>	<b>1.42</b>
<b>Collector coins</b>	<b>335,950</b>	<b>6,880,390.00</b>	<b>22,488</b>	<b>562,000.00</b>	<b>0.04</b>	<b>0.07</b>
<b>Total banknotes and coins</b>	<b>752,650,692</b>	<b>10,210,353,328.47</b>	<b>54,390,966</b>	<b>711,451,821.47</b>	<b>100.00</b>	<b>100.00</b>

Source: NBS.

1) Combined value of both series of euro banknotes (ES1 + ES2).

two lowest denominations (1 and 2 cent). They made up more than half (59%) of all the coins in the CNI and their share is increasing year by year. In value terms, however, the combined share of these two denominations is only 3.5%.

As an average per capita<sup>37</sup>, the number of euro banknotes in circulation in Slovakia in 2015 stood at 27 and their value at around €1,772. As for coins (including collector coins) the corresponding figures were 106 and €26. The average per capita value of the CNI was €1,798.

The most common euro banknotes and coins in circulation in Slovakia in 2015 were the €50 banknote (around seven per capita), the 1 cent coin (35) and the 2 cent coin (27).

#### ISSUANCE OF THE SECOND SERIES OF EURO BANKNOTES

In accordance with an ECB decision, a new €20 banknote began circulating on 25 November

2015. This was the third banknote of the second (Europa) series of euro banknotes (ES2) to be launched. From 25 November to 31 December 2015 a total of 4 million of the ES2 €20 banknotes were included in the CNI.

#### SLOVAK KORUNA BANKNOTES AND COINS

By 31 December 2015, unredeemed Slovak koruna banknotes and commemorative coins totalled, respectively, 18.9 million (including 10.1 million 20 koruna banknotes) and approximately 933,000. Their combined face value was around SKK 2.96 billion (€98.3 million), or around 1.5% of the total value of banknotes issued (by 31 December 2007).

In per capita terms, koruna banknotes unredeemed by the end of 2015 numbered around four and had a face value of SKK 417. The per capita value of commemorative koruna coins was SKK 129, and that of koruna banknotes

<sup>37</sup> The population of Slovakia was 5,424,058 as at 30 September 2015 (source: SO SR). The average values are based on the average CNI, which in 2015 was €9.75 billion.



and coins combined was SKK 546. The number of outstanding 20 koruna banknotes, the commonest denomination, was almost two per capita.

### 3.2 PRODUCTION OF EURO BANKNOTES AND COINS

In 2015 NBS commissioned for the Eurosystem the production of 45.82 million E2 €10 banknotes. The banknotes were produced by the Dutch printing company Royal Joh. Enschedé. In accordance with its banknote allocation for 2015, NBS also commissioned the production of 23.48 million E2 €50 banknotes, but their printing, by the French company Oberthur Technologies, was postponed until the first half of 2016.

In addition to euro banknotes, NBS ensured the production of 23.111 million 1 cent euro coins, 12.564 million 2 cent euro coins, 7.350 million €2 coins, as well as one million €2 commemorative coins featuring the 30th anniversary of the Flag of Europe (issued on 24 September 2015) and one million €2 commemorative coins featuring the 200th anniversary of the birth of Ľudovít Štúr (issued on 23 October 2015).

All the euro coins commissioned by NBS are produced by the state-owned mint Mincovňa Kremnica ('the Kremnica Mint'). The coins minted in 2015 included 25,000 euro coins of each denomination that were used in the four annual collector sets of Slovak euro coins.

In accordance with its issue plan for commemorative and collector euro coins, NBS also

issued three collector coins in 2015, including two silver coins and one gold coin. In October 2015 a number of collector coins due to be issued in 2016 were frontloaded to NBS from the Kremnica Mint. They comprised 8,800 €10 silver coins commemorating the 150th anniversary of the birth of Ladislav Nádaši-Jégé (issued on 19 January 2016) and 8,300 €20 silver coins featuring the Historical Preservation Area of Banská Bystrica (issued on 30 March 2016). NBS arranges the sale of commemorative and collector euro coins through contractual partners in Slovakia and abroad.

### 3.3 PROCESSING OF EURO BANKNOTES AND COINS

In 2015 more than 351.7 million euro banknotes were put into circulation by Národná banka Slovenska (via banks, and partly to the public directly), while €346.4 million were returned to NBS from circulation.

During the year NBS processed over 347.2 million euro banknotes (368 million in 2014) in accordance with the common procedures laid down by the ECB for all national central banks in the euro area. The total number of euro banknotes returned to NBS was approximately 2.4 times higher than the average number of euro banknotes issued by NBS. Therefore each euro banknote issued by NBS was returned to it once every five months on average. The authenticity and fitness for circulation of returned banknotes are checked by NBS, with the aim of maintaining the integrity of the currency and public confidence in euro banknotes. The high

Table 7 Collector coins issued by Národná banka Slovenska in 2015

Denomination	Theme	Issuing (volume)		NBS notification of coin issuance
		Total	of which proof	
€10 <sup>1)</sup>	World Natural Heritage – Primeval Beech Forests of the Carpathians	9,500	6,200	No 369/2014 Z. z.
€10 <sup>1)</sup>	200th anniversary of the birth of Ľudovít Štúr	9,200	6,100	No 195/2015 Z. z.
€100 <sup>2)</sup>	World Natural Heritage – Primeval Beech Forests of the Carpathians	4,100	4,100	No 258/2015 Z. z.

Source: NBS.

1) Silver collector coin.

2) Gold collector coin.



level of public satisfaction with the quality of euro banknotes circulating in Slovakia is confirmed by a survey conducted each year in euro area countries. In the latest survey, around 93% of respondents expressed satisfaction with the quality of euro banknotes.

The €50 banknote was the most frequently processed denomination in 2015 (Chart 20), being the most common euro banknote in circulation and the most frequently issued via cash dispensers.

In the processing of euro banknotes during 2015, 43.8 million banknotes were identified as being unfit for circulation and subsequently destroyed. The number of unfit banknotes destroyed by NBS was around 15% lower in 2015 than in 2014<sup>38</sup>. The lower volume of banknotes sorted as unfit was reflected in the average unfit rate for euro banknotes, which decreased year-on-year by 1.4 percentage points, to 12.6%. The average unfit rate reported by euro area national central banks in 2015 was 15.8%.

In 2015 more than 338 million euro coins were put into circulation by NBS, and more than 289 million euro coins were returned to NBS from circulation. The coins were processed in

automated coin processing machines, which checked the coins for both authenticity and fitness for circulation. Since coins have a longer lifespan than banknotes, only around 454,000 of the 289.4 million processed were sorted as unfit. The number of euro coins that NBS processed did not vary significantly between denominations.

The processing and recirculation of euro banknotes and coins is performed not only by NBS, but also by commercial banks and other cash handlers which have received approval from NBS to process euro cash. The activities of these cash handlers are subject to regular supervision of NBS.

### 3.4 COUNTERFEIT BANKNOTES AND COINS RECOVERED IN SLOVAKIA

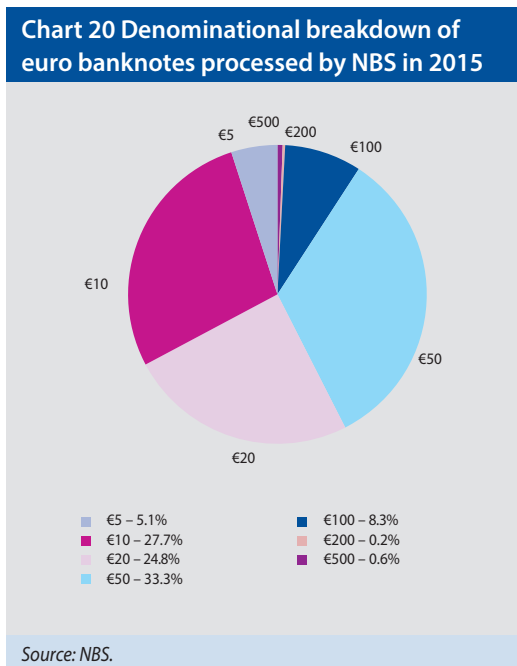
A total of 4,854 counterfeit banknotes and coins were recovered in Slovakia in 2015, approximately one-quarter fewer than were recovered in 2014 (Table 8). The vast majority (98%) of these counterfeits were euro counterfeits.

Of the total number of counterfeits recovered, banknotes made up 3,029 and coins 1,825. Fully 82.3% of the counterfeits were recovered from circulation by banks, branches of foreign banks, non-bank entities and security services (the corresponding figure for 2014 was 76.3%). In one widely reported case in June 2015, law enforcement authorities in Nitra Region seized 666 counterfeit €50 banknotes before they entered circulation.

The regions in which most of the counterfeits were recovered were Bratislava Region (31.1%) and Nitra Region (23.4%), while the lowest share was recorded by Trenčín Region (2.8%). Of the total counterfeits withdrawn from circulation, commercial banks recovered 41.3%, security services 16.5%, NBS 18.3%, and the police also 18.3%. The rest were removed by non-bank entities.

A moderate improvement in the quality of counterfeits was observed in 2015, especially in counterfeits of euro banknotes and coins. Nevertheless, neither the number of counter-

<sup>38</sup> The year-on-year change in the number of euro banknotes sorted and destroyed is directly related to the introduction of the second series of euro banknotes into circulation.



**Table 8 Number of counterfeit banknotes and coins recovered in Slovakia**

	EUR	SKK	Other	Total
<b>2011</b>	7,888	15	64	<b>7,967</b>
<b>2012</b>	4,451	22	65	<b>4,538</b>
<b>2013</b>	35,202 <sup>1)</sup>	19	67	<b>35,288</b>
<b>2014</b>	6,190	21	214	<b>6,425</b>
<b>2015</b>	4,749	11	94	<b>4,854</b>

Source: NBS.

1) Including 26,735 counterfeit €2 coins seized in one operation by law enforcement authorities, before the coins entered circulation.

feits recovered, nor the technical level of their production posed a serious risk to the integrity and smooth operation of cash circulation in Slovakia.

**EURO COUNTERFEITS**

The number of counterfeit euro banknotes and coins recovered in Slovakia in 2015 was 4,749 and they had total face value of €171,939.50.

The number of euro banknote counterfeits recovered in Slovakia has remained steady over a long period, with the figures tending to reflect the impact of particular cases (one or two a year) in which sizeable quantities of counterfeit banknotes are seized by police before entering circulation. The number of euro coin counterfeits recovered has been falling gradually in recent years.

Out of all euro counterfeits recovered across the euro area, the proportion recovered in Slovakia has long been below 1% and in 2015 it was only 0.25%.

Euro banknotes made up 2,924 of all the counterfeit banknotes and coins recovered in Slovakia in 2015, and that number was around 15% lower in

year-on-year terms. Although euro counterfeits are mostly of high quality, they can be detected without technical equipment, so long as sufficient attention is paid to euro cash when receiving it.

The denominational breakdown of euro counterfeits has remained similar in recent years. The most common counterfeits in 2015 were €50 and €20 banknote counterfeits, which accounted for 60.6% and 18.9% of total euro counterfeits respectively. A similar trend is observed throughout the euro area.

Counterfeits of the three medium-denomination banknotes, the €20, €50 and €100 notes, constituted 91.9% of all the euro banknotes recovered in Slovakia in 2015 (the share of these denominations in the total issuance of euro banknotes in Slovakia was 66%), while in 2014 they accounted for only 59%. Across the euro area, the share of these three denominations in the total number of counterfeits recovered has been above 90% over an extended period.

A total of 1,825 euro coin counterfeits were removed from circulation in Slovakia in 2015, down

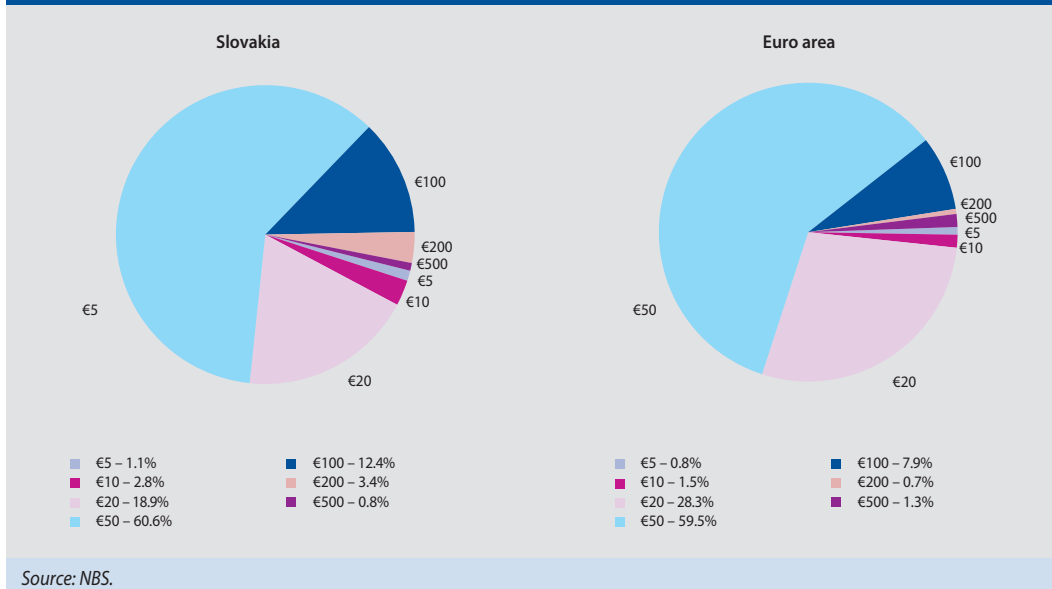
**Table 9 Number of euro counterfeits recovered in Slovakia**

	Denomination										Total
	50 cent	€1	€2	€5	€10	€20	€50	€100	€200	€500	
<b>2011</b>	348	239	1,041	29	31	425	495	4,103	91	1,086	7,888
<b>2012</b>	476	245	2,286	16	28	400	359	289	254	98	4,451
<b>2013</b>	580	247	31,660	9	59	412	481	1,341	123	290	35,202
<b>2014</b>	463	224	2,037	22	39	405	1,037	604	73	1,286	6,190
<b>2015</b>	411	189	1,225	31	83	553	1,771	362	99	25	4,749

Source: NBS.



**Chart 21 Denominational breakdown of counterfeit euro banknotes recovered in Slovakia and the euro area**

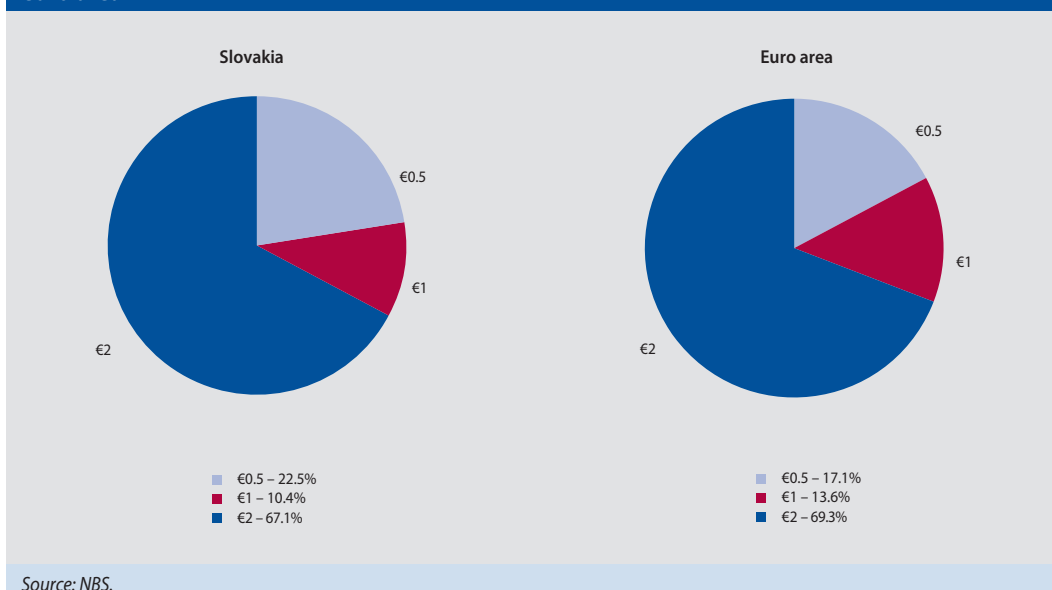


by one-third from the previous year. The technical quality of euro coin counterfeits is generally very high. Almost half of those recovered in Slovakia were detected by NBS. More than two-thirds of all the counterfeit coins were €2 coins. Recent years have seen counterfeit 50 cent coins recovered in greater numbers than counterfeit €1 coins.

#### SLOVAK KORUNA COUNTERFEITS

Following the introduction of the euro into cash circulation, the number of Slovak koruna counterfeits fell sharply. Only 11 Slovak koruna counterfeits were recovered in 2015 (the figure for 2014 was 21). Although the period in which Slovak koruna banknotes may be exchanged for euro at NBS is indefinite, further incidence of

**Chart 22 Denominational breakdown of counterfeit euro coins recovered in Slovakia and the euro area**





koruna counterfeits is expected to be only sporadic.

#### COUNTERFEITS OF OTHER FOREIGN CURRENCY

The total number of counterfeits of other foreign currencies recovered in Slovakia was lower in 2015 than in 2014. The majority of them were US

dollar counterfeits, 43 of which were recovered. As in previous years, the \$100 dollar banknote was the most counterfeited denomination, accounting for 91% of US dollar counterfeits. The other counterfeits recovered included 41 Swiss franc, 4 British pound, 4 Hungarian forint and 2 Polish zloty counterfeits.

## 4 PAYMENT SERVICES AND PAYMENT SYSTEMS

### 4.1 PAYMENT SERVICES

The principal legal regulation governing payment services and payment systems in Slovakia is Act No 492/2009 on payment services and amending certain laws (hereinafter 'the Payment Services Act'), which transposes into Slovak law Directive 2007/64/EC of the European Parliament and of the Council on payment services in the internal market.

Slovak law in the area of payment services also includes the following directly applicable EU Regulations:

- Regulation (EC) No 924/2009 on cross-border payments in the Community and repealing Regulation (EC) No 2560/2001;
- Regulation (EU) No 260/2012 establishing technical and business requirements for credit transfers and direct debits in euro and amending Regulation (EC) No 924/2009;
- Regulation (EU) No 2015/847 on information accompanying transfers of funds and repealing Regulation (EC) No 1781/2006; and
- Regulation (EU) No 2015/751 on interchange fees for card-based transactions.

A further component of the legal framework is Decree No 8/2009 of Národná banka Slovenska laying down the structure of domestic and international bank account numbers and details about the issuance of an identifier code converter.

In 2015 Národná banka Slovenska approved a proposal of the Slovak Banking Association

(SBA) that the SBA should not pay any contribution for that year to the operation of the SBA's Permanent Court of Arbitration (established under the Payment Services Act for the out-of-court settlement of disputes), in view of the Court's financial results and the sufficiency of existing funding for the activities of the Court's Chamber for the Arbitration of Disputes Related to Payment Services.

### 4.2 PAYMENT SYSTEMS IN SLOVAKIA

#### 4.2.1 TARGET2 AND TARGET2-SK

Since Slovakia joined the euro area in 2009, Národná banka Slovenska has operated the TARGET2 component system known as TARGET2-SK (T2-SK). T2-SK functioned smoothly in 2015, free of any incident that might have disrupted the processing of payments or operation of the system, or negatively affect its participants.

Národná banka Slovenska ensures the day-to-day operation of T2-SK, provides advice and support to the system's participants, and performs regular testing of recovery procedures. It is also involved in coordinating the development, modification, testing, and implementation of software releases for the Single Shared Platform (SSP) that forms the technical infrastructure of TARGET2. New software releases, approved by the Eurosystem in response to the requirements of the system's users, bring enhanced functionalities and modifications to the SSP and also rectify any deficiencies identified in the previous version.