



1	.....	1
2	.....	4
2.1	.....	4
2.1.1	.....	4
2.1.2	.....	6
2.1.3	.....	7
2.1.4	.....	8
	.....	11
2.2.1	.....	12
2.2.2	.....	13
2.3	.....	14
2.3.1	.....	15
2.3.2	.....	16
2.3.3	.....	17
2.3.4	.....	17
2.3.5	.....	18
2.3.6	.....	19
2.4	.....	20
2.4.1	.....	20
2.4.2	.....	21
2.4.3	.....	21
2.5	.....	22
2.5.1	.....	22
2.5.2	.....	23
2.5.3	.....	25

2.5.4	.....	26
2.5.5	.....	27
3	.....	28
3.1	.....	28
3.1.1	.....	28
3.1.2	.....	29
3.2	.....	29
3.2.1	.....	29
3.2.2	.....	29
3.3	.....	30
3.3.1	.....	30
3.3.2	.....	30

2016 3

2018

2018

17

2018

2018 18

**1**

1978

2005

2007

2011

1080

11000

30.53

7.27

76.9

1.55

			46						
								19	
				2				2	
	11				1				
1		4		7					
						607			372
				40.59%				83.06%	
				86.83%				3	
		1			2			6	333
		12						5	
			3						
21					2				
1									
	184				2			3	
	1					31		74	

2007

150

118

4

2

3G

30

2010 2020

(2010 2020 )

## 2

### 2.1

#### 2.1.1

---

2016 2017

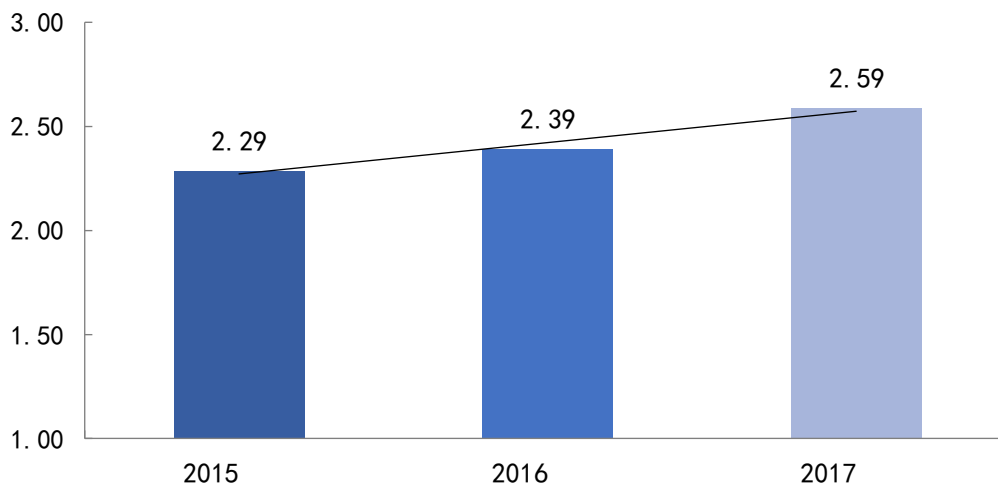
4.60% 8.20% 2017

1 1 2

1 2015-2017

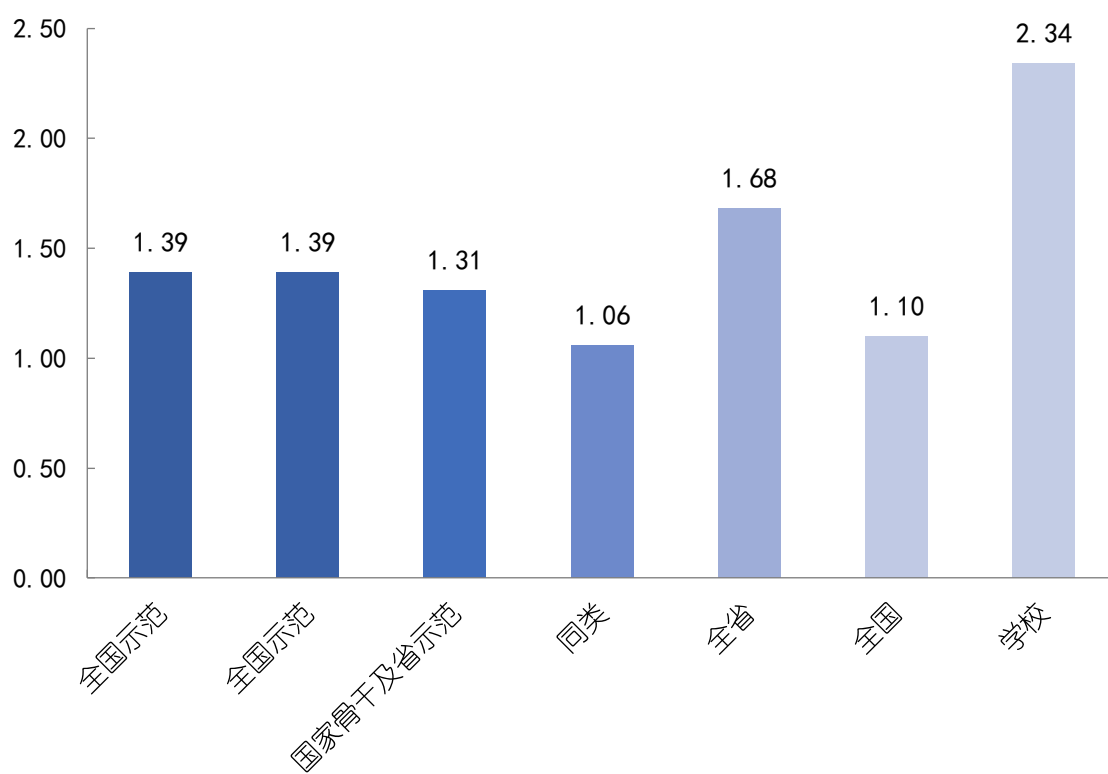
	2015	2016	2017
	15540.11	15952.99	17147.64

	2015	2016	2017
	28	49.33	102.85
	6714.19	7245.92	6276.17
	6600	6800	5740
	615.35	205.63	228.37
	22897.65	23453.87	23755.03



1 2015-2017





2 2017

2017

2016

### 2.1.2

2015-2017

1, 150. 31

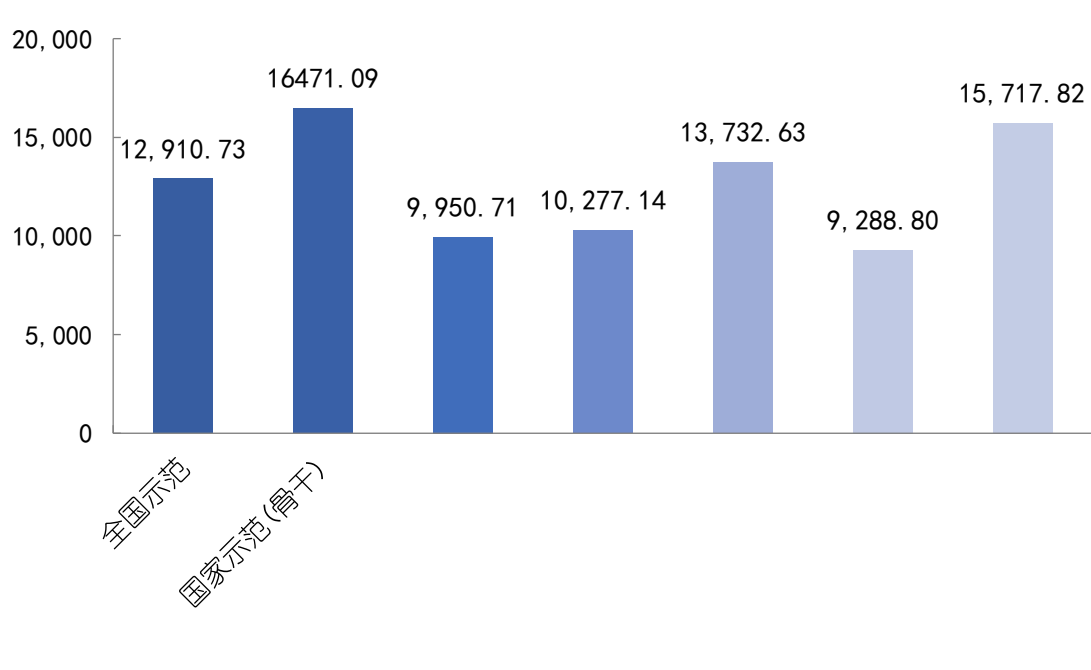
1, 301. 69

1, 444. 13

2017

2

3



3 2017

2017

2016

### 2.1.3

305,313.00      720000

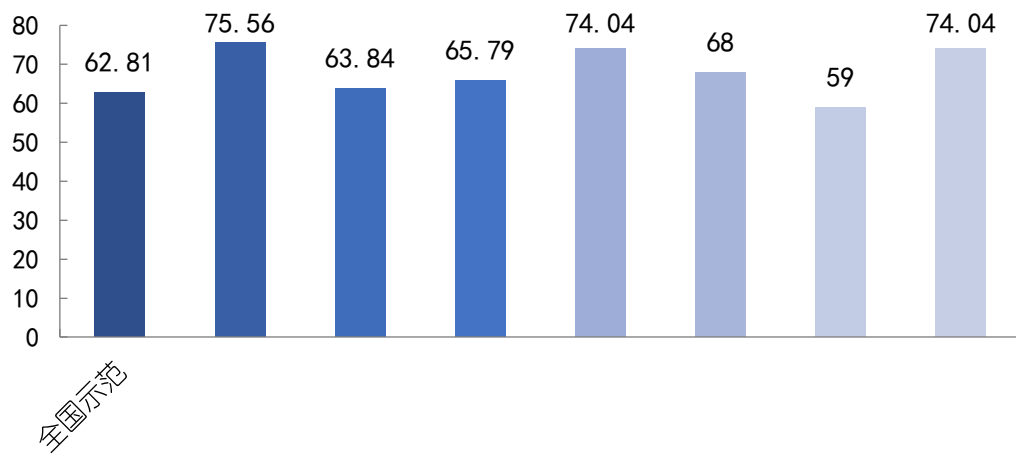
15750.39      175585.07

19.67      74.04      /

5      9      11790

2017

4



4 2017

—

/

5 2017

—

/

## 2.1.4

28

3 4

3

Mbps	4600
Mbps	10000
	5936

2017 9 1

4




## 2.2

333

2

1

3

5

	1
333	18
	6
	2
	23
	5
	55

2017 9 1

## 2.2.1

2016-2017

607

676

372

745

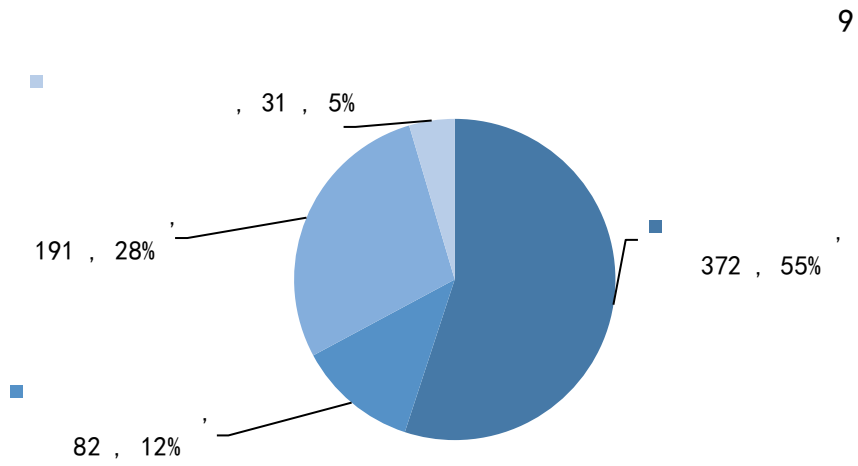
83.06%

13.24

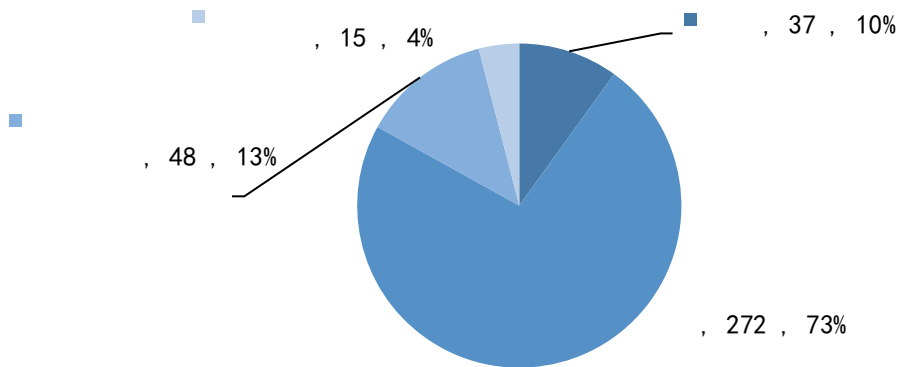
1

40.59%

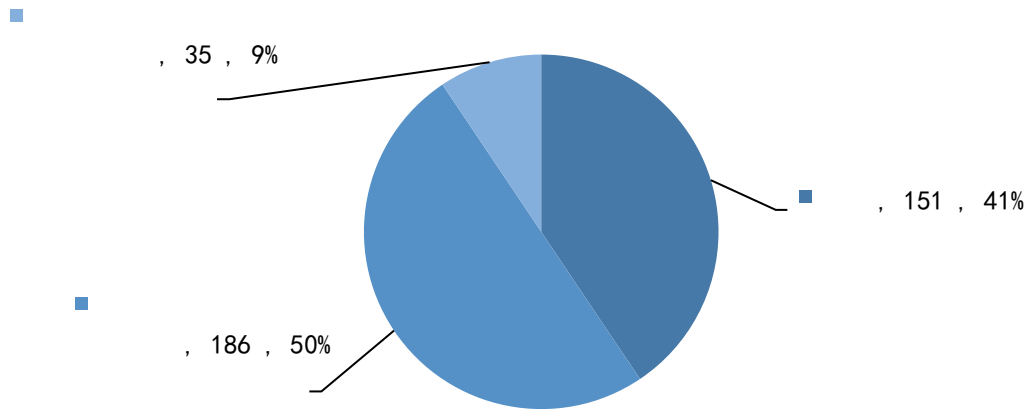
6 7 8 2017



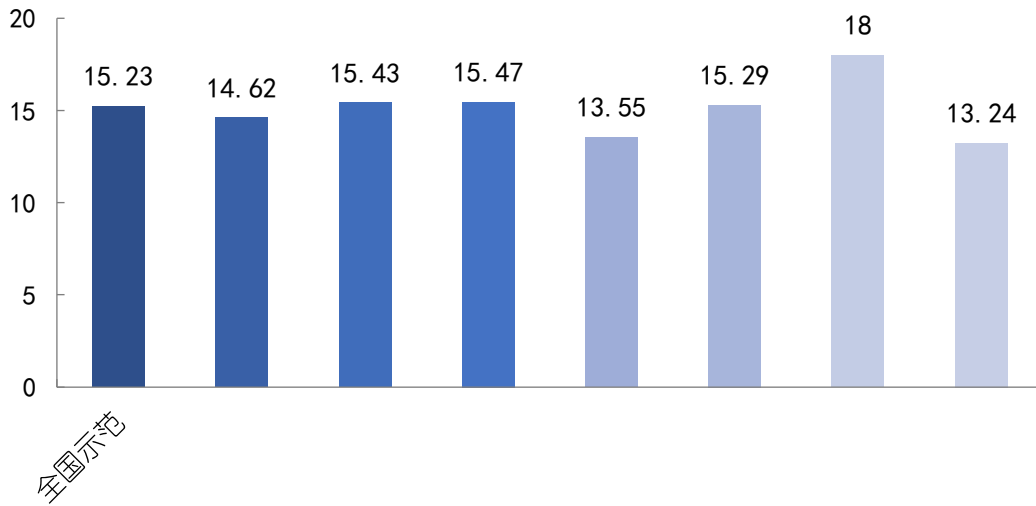
6 2016-2017



7 2016-2017



8 2016-2017

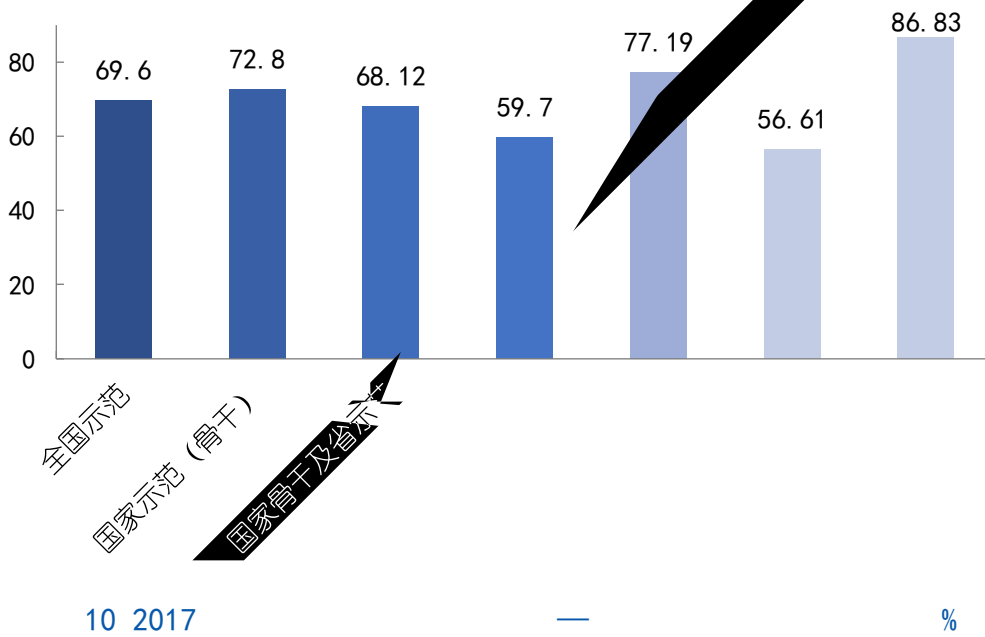


9 2017

## 2.2.2

2016-2017	292	289	323
86.83%			
99%	2017		





### 2.3

2

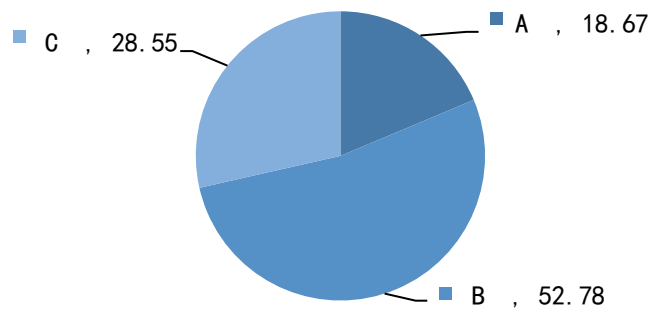
4                      4                      4                      2

2                                      5

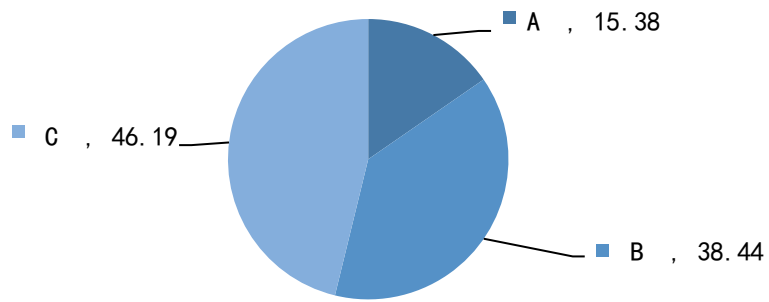
3+3                                      3+2

### 2.3.1

		9	6	145	2
2016-2017			648	A	121
+	B	342		C	185
		22659	56640	68061	ABC
19557			B C	81.33%	84.62%
			50%		
11	12				



11 2016-2017 %

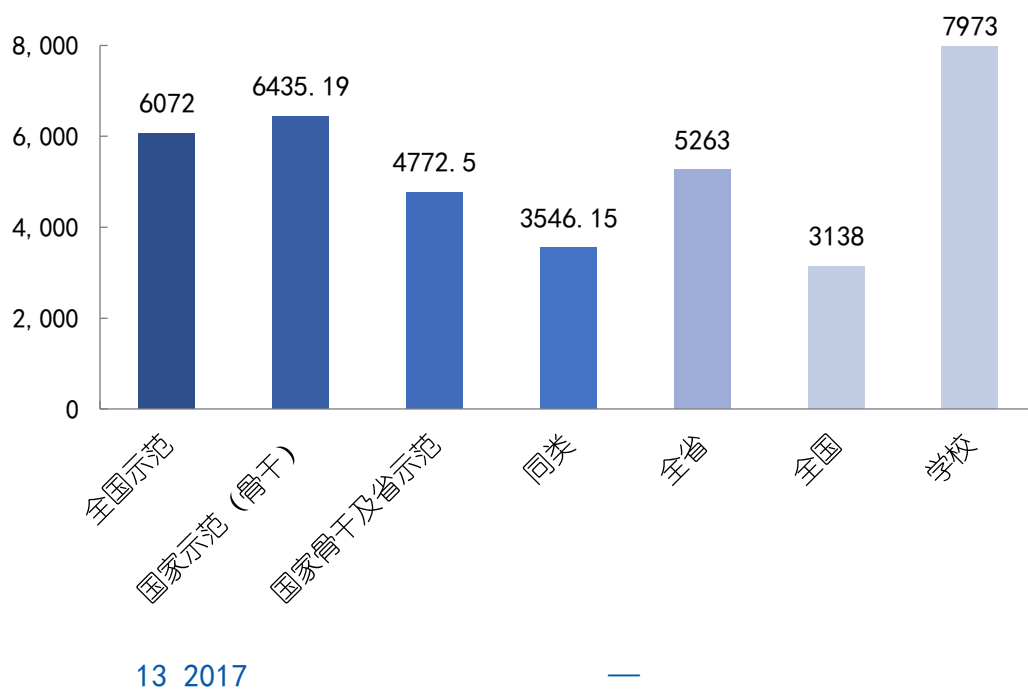


12 2016-2017 %

### 2.3.2

1.2  
1800 SMT  
6  
2  
2017 9  
2661  
7973  
147  
184  
11509.61  
0.82  
2017

13



### 2.3.3

APP

2017 9

7122

150

5662000

2016-2017

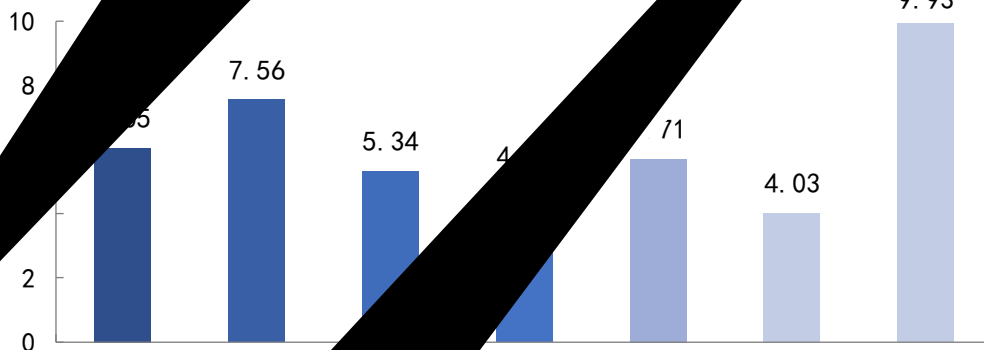
### 2.3.4

2016-2017

991

93%

2017



图示范

(骨干)

图家刃

2.5

1

—

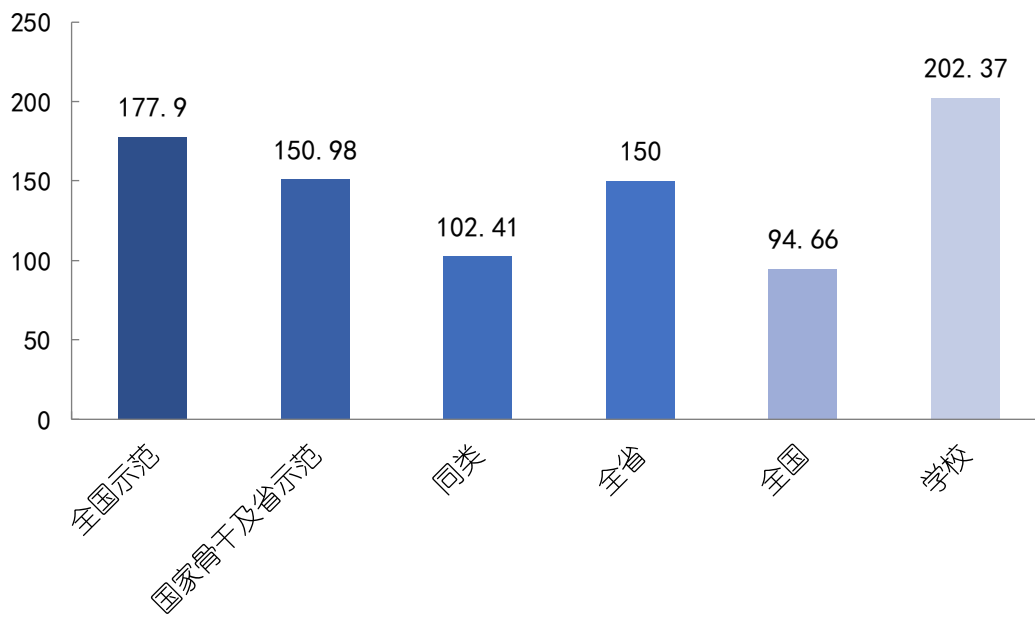
2017

2017

15

6 2015-2017

2015	209	130	161	170.97
2016	228	158	197	208.76
2017	191	98	188	202.37



15 2017

### 2.3.6

2017 9

5382.09

1000      2017  
4

## 2.4

### 2.4.1

74      31

ICT      A    HCNA   -P    HCNP   -E    HCIE

Altium      AHK      IPC

2015-2017      99%

7      97%

7      2015-2017

	2015	2016	2017
	3357	3354	3267
%	99.67	99.46	99.08

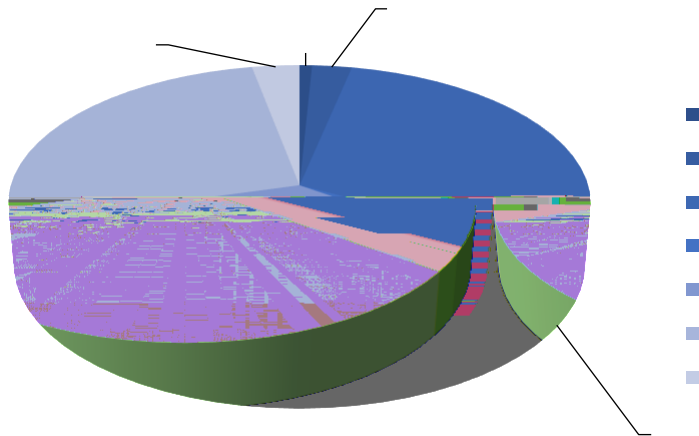
## 2.4.2

2015–2017

8







16 2017

### 2.5.2

46

29

6821

74.3%

10 11

10 2017



2			
3			
4			
5			
6			
7			
8			
9			
10			

11 2017

1			
2			
3			
4			

## 2.5.3

			2017			
4010		3058		2757		12 13 14
			2017			
	2017					17

12 2015–2017

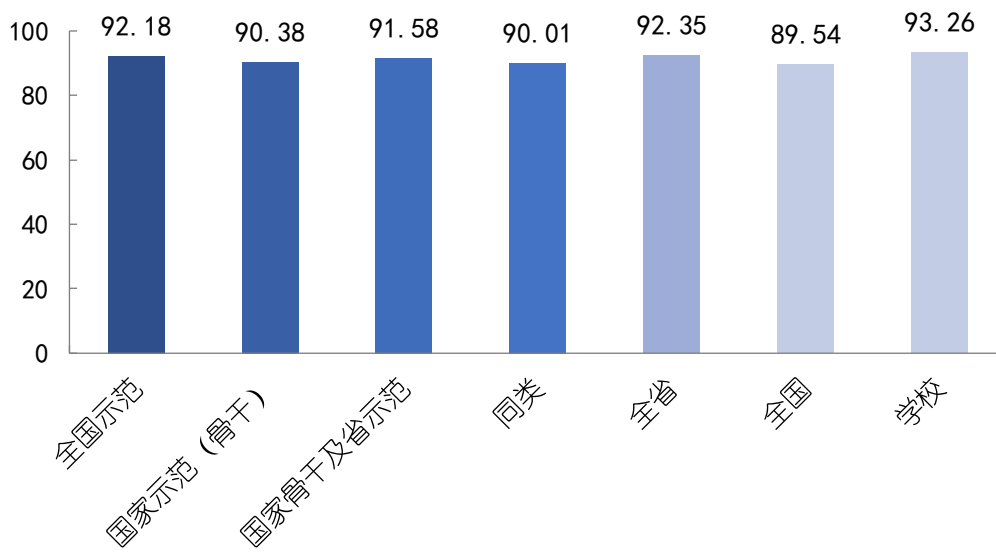
2015	3760	3618	3348
2016	4010	3548	3309
2017	4010	3058	2757

13 2015–2017

2015	1880	1738	1738
2016	2372	1910	1910
2017	3341	2389	2389

14 2015–2017

2015	3153	1880	1880
2016	2627	1638	1638
2017	1190	669	669



17 2017

%

## 2.5.4 单

2015-2017

1500

15

14000

15 2015-2017

2015	1533.01	10.72	4.9	0	0	1548.63
2016	1509.81	0	5.2	200.1	4	1719.11
2017	1584.05	70	62.3	274.8	5.5	1996.65

## 2.5.5

## 单

		10		10	
62					
25					
	4+2				
		20			
				174	
7		164	36		25
		83	1031		490.8
		1077			



### 3.1.2

1

+

2025

9

2

### 3.2

#### 3.2.1

#### 3.2.2

1



2

**3.3**

**3.3.1**

**3.3.2**

