..... 1

1 2

1.1 2

1.2 2

2 2

2.1 2

2.1.1 2

2.1.2 3

2.1.3 4

2.1.4 5

2.2 6

2.2.1 6

2.2.2 8

2.2.3 8

2.3 10

2.3.1 10

2.3.2 11

2.3.3 12

2.3.4 13

2.3.5 13

2.4 14

2.4.1 14

2.4.2 16

2.4.3 17

2.5 18

2.5.1 18
2.5.2 19
2.5.3 20
2.5.4 21
2.5.5 21
3 23
3.1 23
3.1.1 23
3.1.2 23
3.2 23
3.2.1 23
3.2.2 24

2016 3

2020 2020 25

2020

2020 4

20

2020

2017-2019

1 1 12 31

2018-2019 2018 9 1 2019 8 31

9 1 2017 2015-

2017 2018 2016-2018 2019 2017-2019

9180 8936 12088

2019

2019

2018 9 1 2019 8 31 2019

2019 8 31 2016-2018

1.1

1978

2001 , ;2005

2007

2019 , 20

2020 5 ,

11 10

3+3 6

3 3+2

1 4+0

1.2

:

- 50
- 50
- 50 13

- 12
- 6
- 2019

2. 1

2. 1. 1

2.55

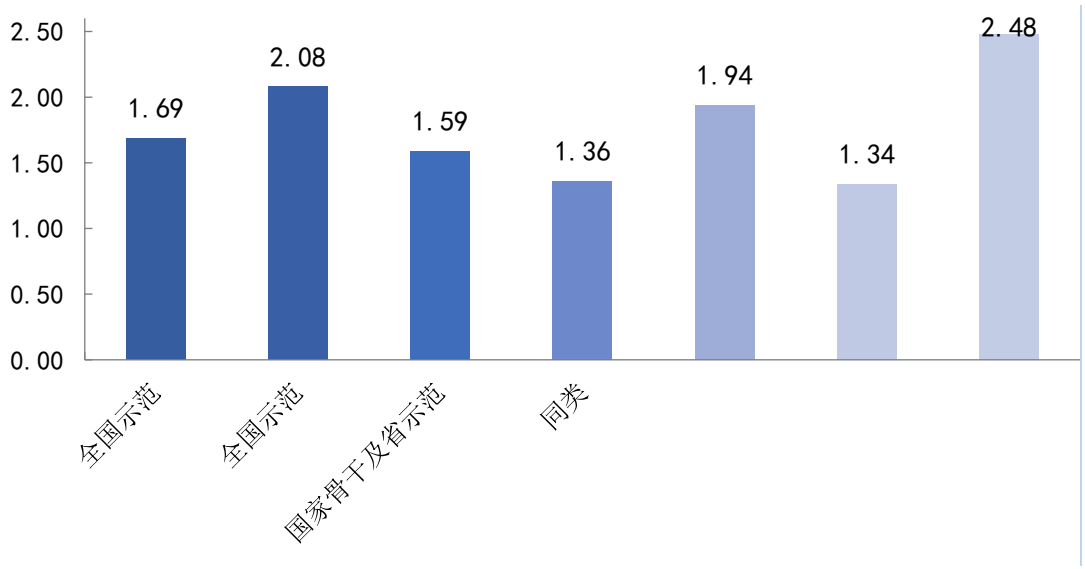
1 2019

1

1 2017-2019

	2017	2018	2019
	17147.64	17096.17	17304.56
	102.85	24.43	231.25
	6276.17	5815.9	6323.19
	5740.00	3700.00	3700.00
	228.37	660.08	567.91
	23755.03	23596.58	24426.91
/	2.59	2.64	2.55

1 1 12 31



1 2019 /

2019 2018 1 1 2018 12 31

2019 8 31

2

2.1.2

2019 2015-2018

2 2

1444.13 1592.18 1710.95 2

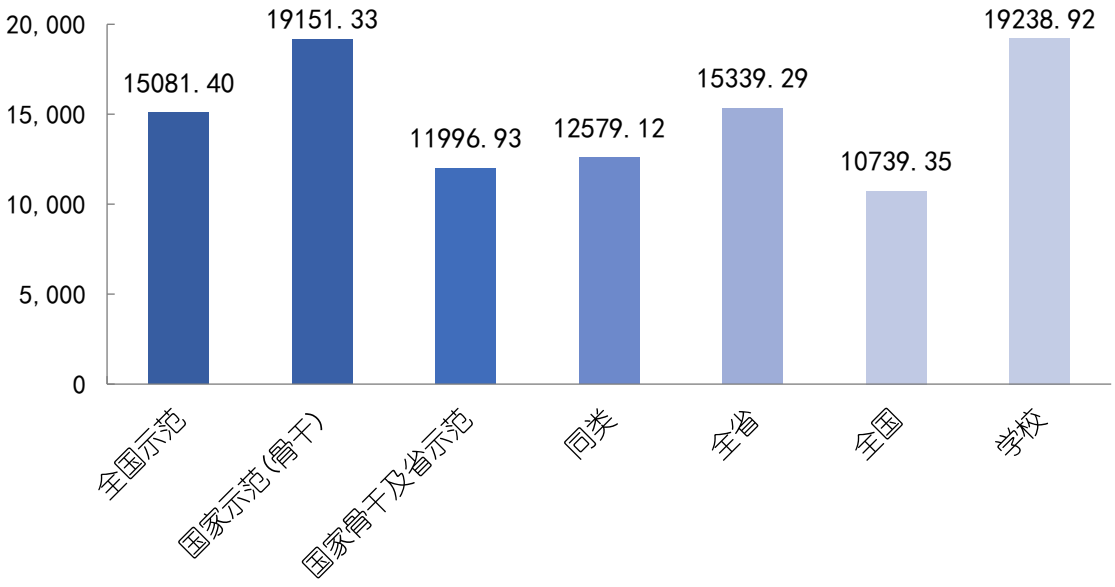
2019

2

2 2017-2019

	2017	2018	2019
	15510.19	16687.79	17922.59
	5382.09	5963.38	6603.14
/	1.69	1.87	1.48

9 1



2 2019 /

2019 2019 8 31

2. 1. 3

2019

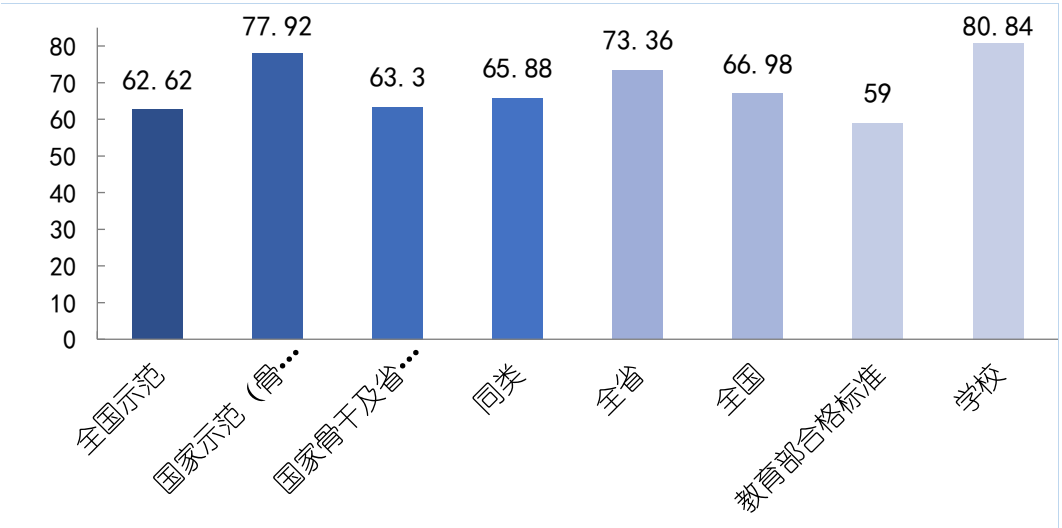
20.70 / 3

2019

3 4

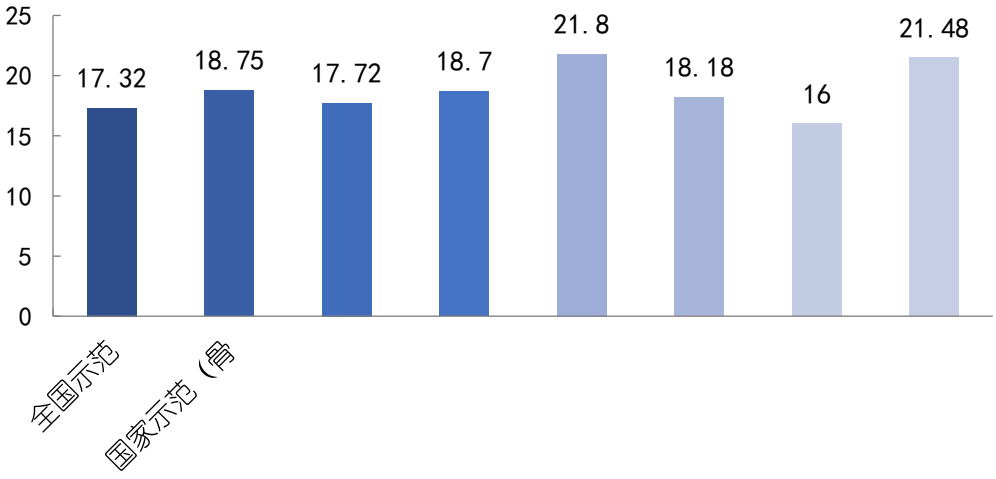
3

2019 9 1



3 2019 /

2019 2019 8 31



4 2019 /

2019 2019 8 31

2. 1. 4

B 716

VR

1 1

1+1+X

2019 9 4

48 2019

5

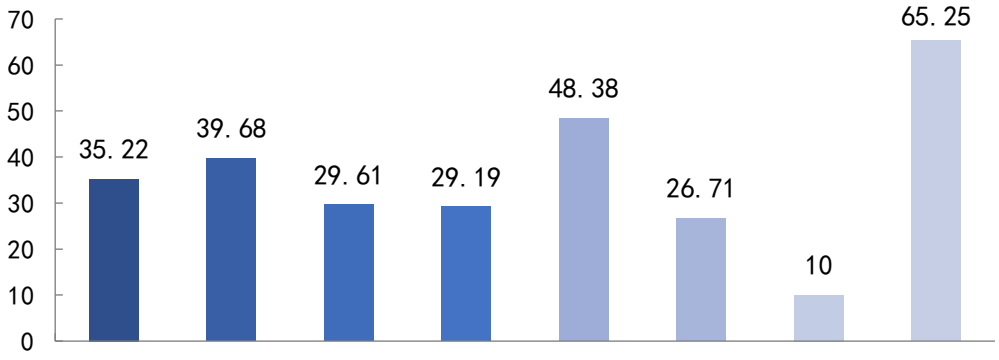
4

Mbps	12600
	5812

	48
	8766
GB	15481
	683

2019 9 1

5 2019



2019 2019 8 31

2. 2

2. 2. 1

123

12

1 6 65 35

10 5

5

6

333	21
	8
	8
	28
	1
	3
	5
	3
	2
	3
	1
	3
	35

2019 9 1

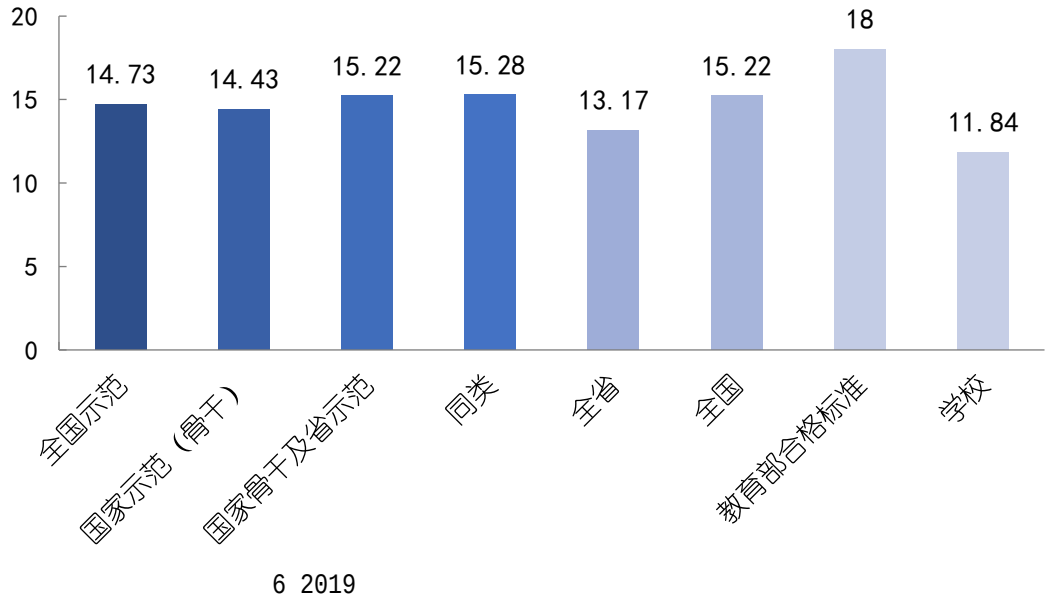
2018-2019 601

725 786 11.84 1

478 81.59%

40.45% 2019

6



6 2019

2019 2019 8 31

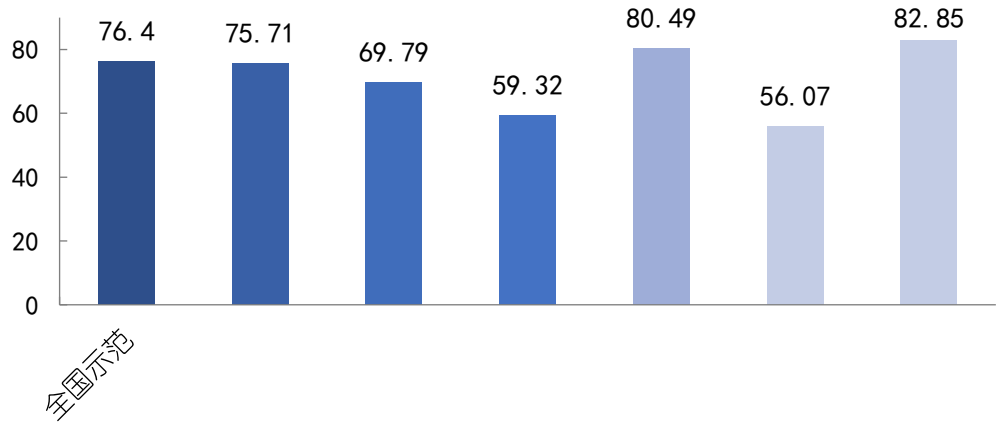
2.2.2

2018-2019 396

82.85% 360

90.56% 2019

7



7 2019 %

2019 2019 8 31

2.2.3

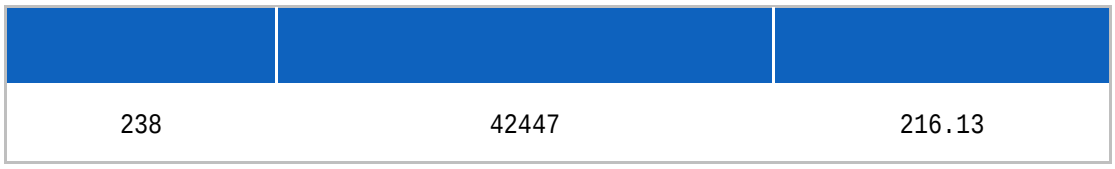
2017-2019

202.37 195.42 216.13

2018-2019 6 2019

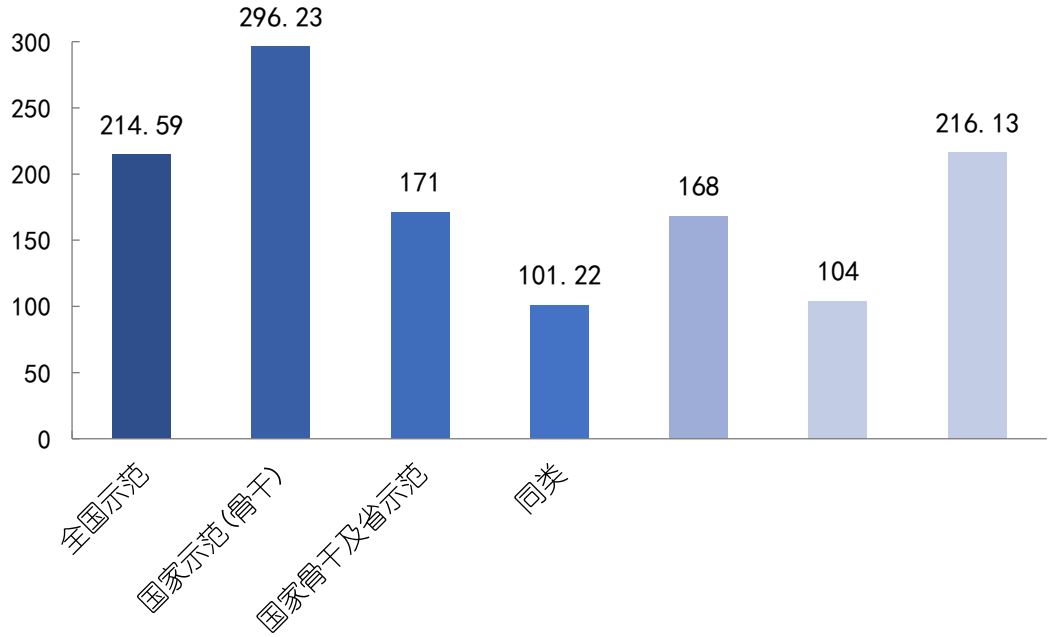
8

6 2018-2019



2018 9 1 2019 8 31 2018

1 1 2018 12 31



8 2019

2019 2018 1 1 2018 12 31

2.3

2.3.1

2 2

3 11 19

1

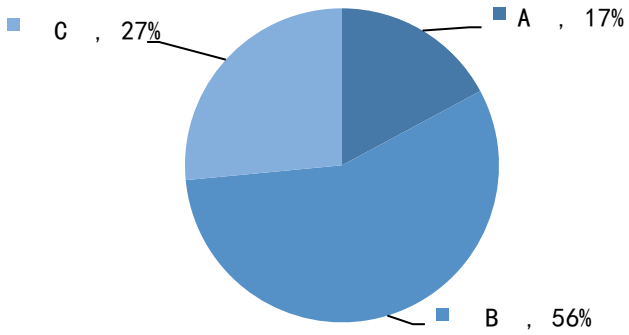
2018-2019 781 A 134

+ B 444 C 207 ABC

25943 74660 80157 B C

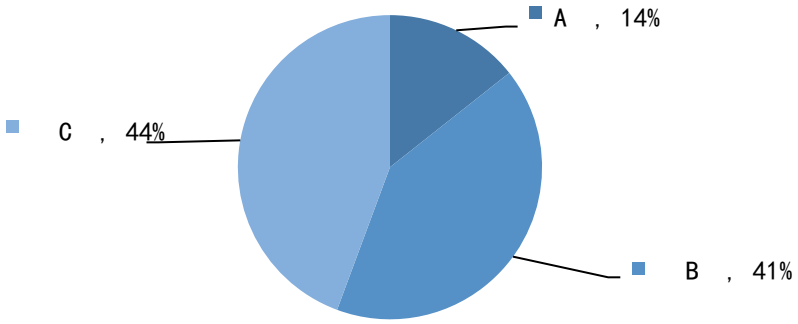
83% 9 86% 10 2560

7



9 2018-2019

2018 9 1 2019 8 31



10 2018-2019

2018 9 1 2019 8 31

7

	%	
	-	2500
	31.5	25%
	5.9	4 + 3 + 1
	3.4	36 + 2-3
	1.3	32-36
	4.5	108
	67.9	-
	59	50%
	18.9	10%

2019

2. 3. 2

3 3

1 2

1

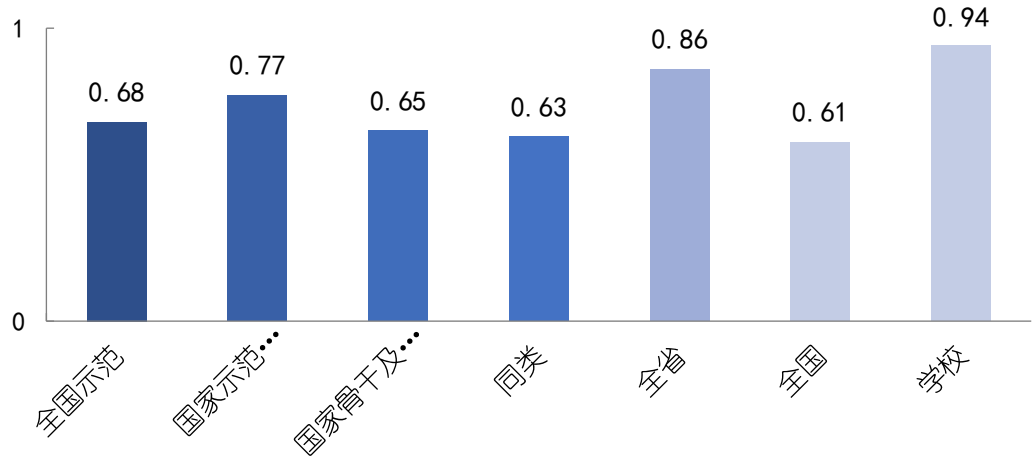
7 2018

154 2669

13347.18 8359 2019

0.94

11



11 2019

2019 2019 8 31

2.3.3

218

191 4

1 160

2018-2019 8

8 2018-2019

	784009
	89

2018 9 1 2019 8 31

2.3.4

45

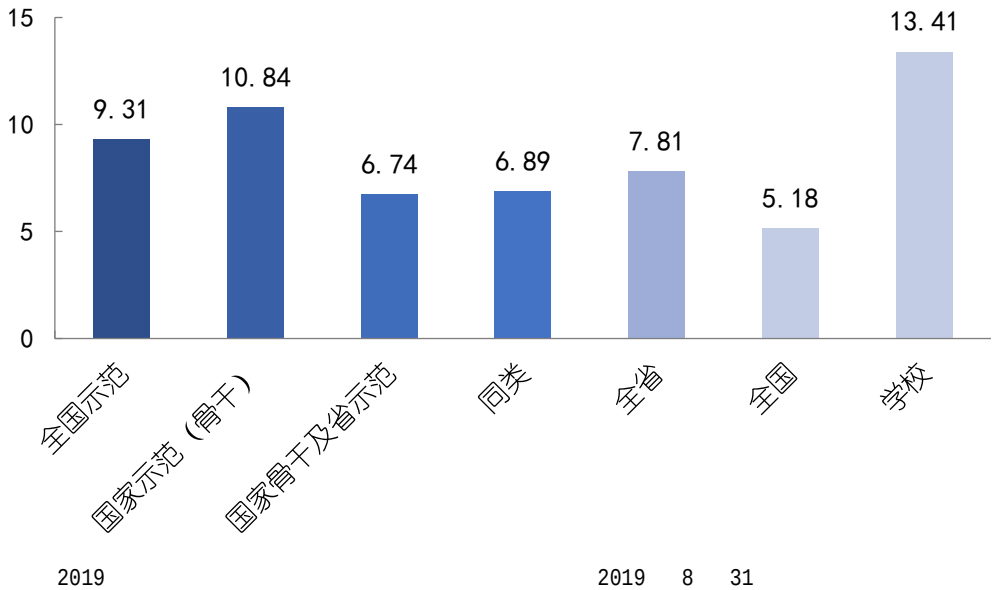
6

2019 9 27

1259 10.42% 2019

12

12 2019 %



2019 2019 8 31

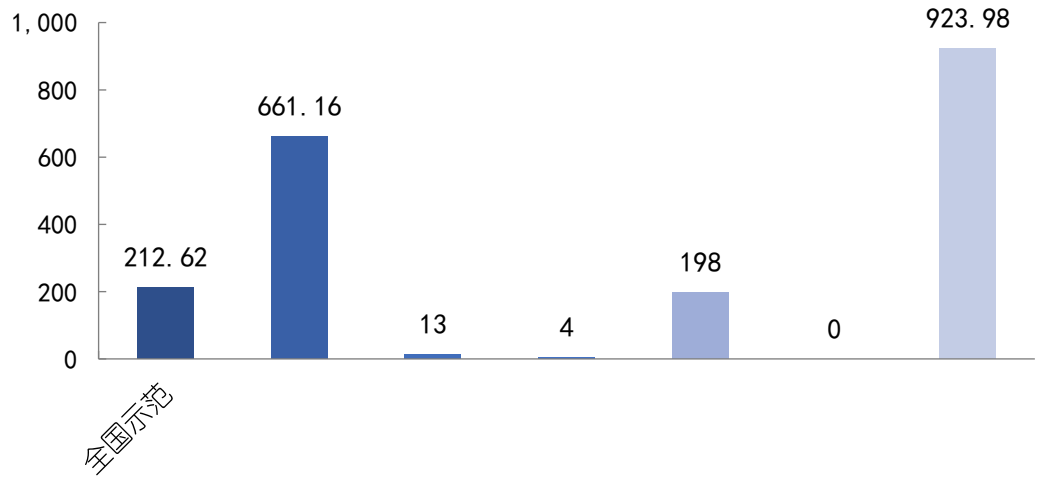
2.3.5

2019

9 6603.14

236 128 217 2019

13



13 2019

2019 2018 9 1 2019 8 31

2.4

2.4.1

+

1+X 1+X 5

CCIE Server+ AHK

2018-2019 89

31 74 220

39322

2017-2019 99%

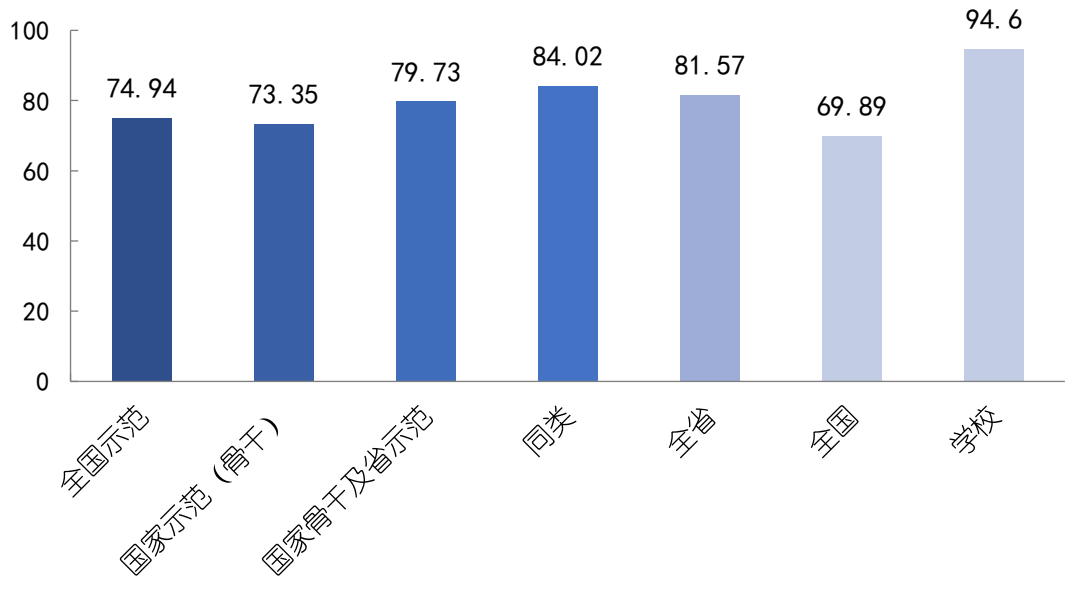
94% 9 2019

14 15

9 2017-2019

	2017	2018	2019
	3267	3234	3118
%	99.08	99.13	99.78
/ %	98.35	96.12	94.60
	1676	2277	2142
	1867	1652	1608

8 31



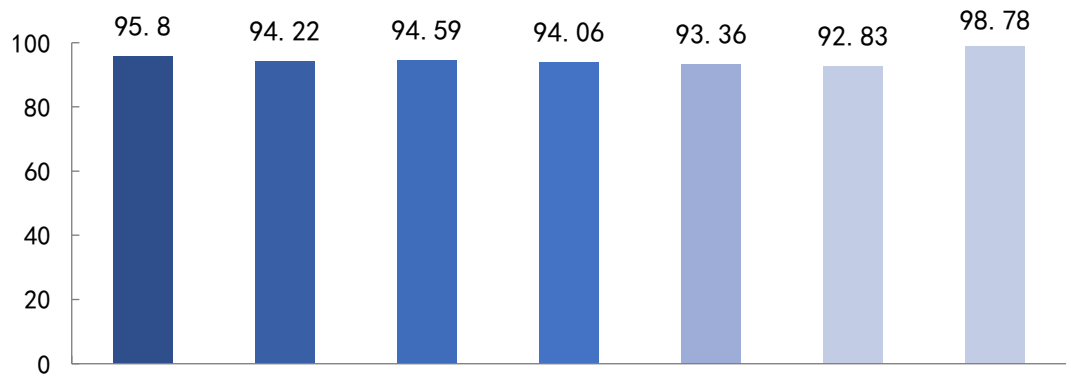
14 2019 %

2019 2019 8 31

15 2019 / %

2019 2019 8 31

2. 4. 2



16 2019 %

2019 2019 8 31

2. 4. 3

500 100

2017-2019

2017-2019 11

11 2017-2019

	2017	2018	2019
	2595	2607	2584
/ %	70/2.70	118/4.53	115/4.45
/ %	1678/65.32	1981/75.99	1814/70.2
500 / %	370/14.26	406/15.57	462/17.88

8 31

2.5

2.5.1

49

9 2 4

3 4 2

5 2

2019 12088

7

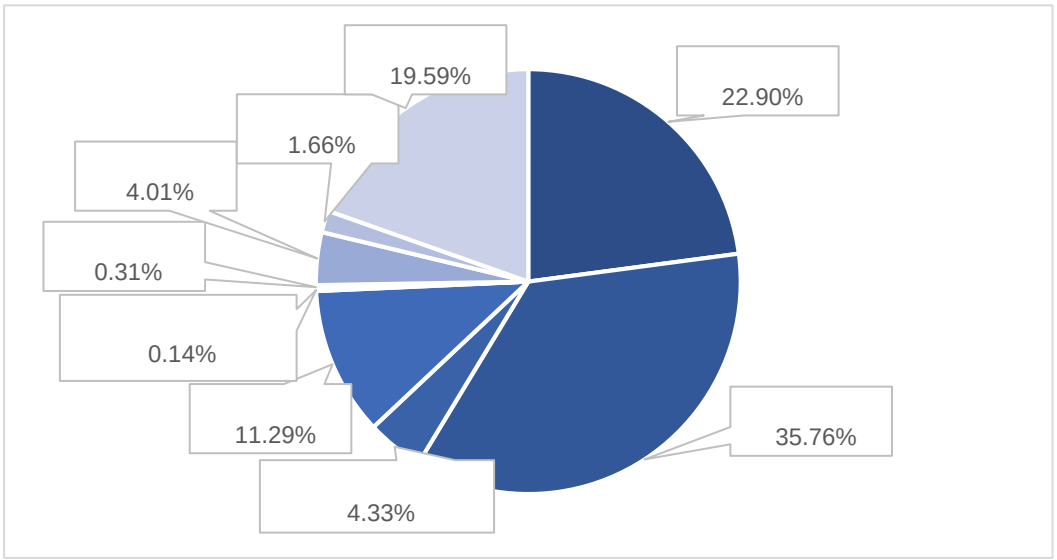
2497 2017-2019 12 2019

17

12 2017-2019

	2017	2018	2019
	9180	8936	12088
	-	-	2497

2019



17 2019

2019

2. 5. 2

13

2019

5 49 22

6384 52.81% 19

4473 37% 83.67%

2019

13

13 2019

1			
2			
3			
4			
5			
6			
7			
8			

15 2019

	2509	1273	206	230	113	687
%	-	50.74	8.21	9.17	4.50	27.38

2.5.4

2017-2019

2000

1500

2017-2019 16

16 2017-2019

2017	1584.05	70	62.3	274.8	5.5	1996.65
2018	1537.29	65.94	96.62	270.80	22.10	1992.75
2019	1454.34	100.23	106.41	406.40	28.00	2095.38

1 1 12 31

2.5.5

11

11 2

2

2019 19 183

9 7

2018-

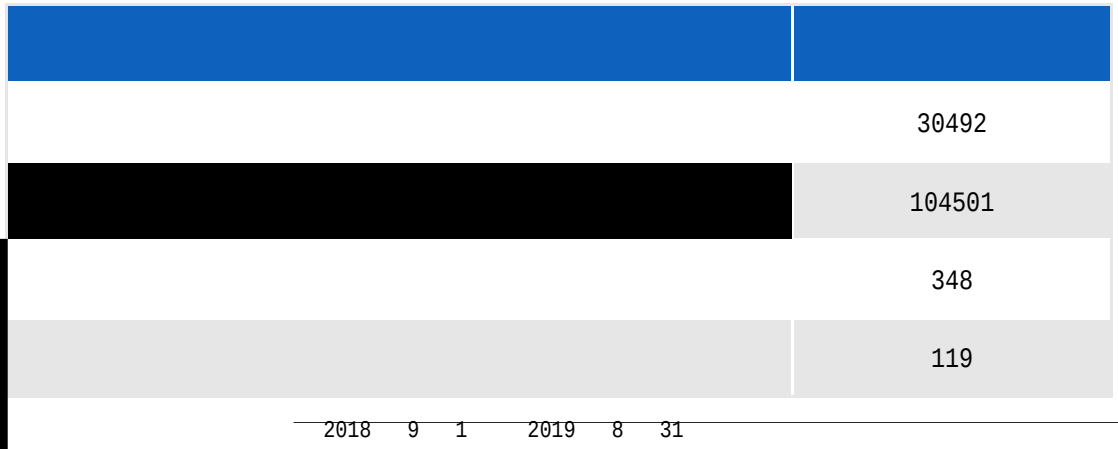
2019 30492 104501 348 119

17 2018 2019

2017-

2019 18

17 2018-2019



2018 9 1 2019 8 31

18 2017-2019

2017	1077.00	1031.00	502.97	490.8	3101.77

3.1

3.1.1

2019 20

2509

3.1.2

3.2

3.2.1

3. 2. 2