# **APPENDICES**

### **(1)** KEY PERFORMANCE

Type	Indicator	Unit	2016	2017	2018
	Total assets	RMB billion	614.15	571.98	540.32
	Operating income	RMB billion	274.20	274.829	290.88
	Service revenue	RMB billion	238.033	249.015	263.7
	Profit before income tax	RMB billion	0.784	2.593	13.081
	Mobile billing subscribers	Million	263.822	284.163	315.03
erations and evelopment	of which: 4G subscribers	Million	104.551	174.876	219.92
evelopilient	Fixed-line local access subscribers	Million	66.649	59.997	55.899
	Fixed-line broadband subscribers	Million	75.236	76.539	80.880
	F-Commerce turnover	RMB billion	40.84	66.42	71.26
	Productivity	RMB Thousand/ Person • Year	883.5	923.9	1,007.9
······································	Number of 4G base stations	Thousand	740	852	987
	Number of fixed network broadband access ports	Million	189	202	215
	Broadband coverage rate in administrative villages in ten northern provinces	%	95	95	96
	Urban 20M or above broadband network coverage rate	%	89	93	97
	Rural 4M or above broadband network coverage rate	%	99	100	100
Network		% %		100	
capability	Coverage rate of mobile network in township		100		100
	Coverage rate of mobile network in administrative villages	%	87	89	89
	International interconnection bandwidth	G	1,711	2,072	2,427
	4G network access rate	%	99.69	99.72	99.77
	4G network call drop rate	%	0.1	0.1	0.09
	Number of channels in rural and remote poverty-stricken area	Thousand	260	200	200
Commitment in Major	Total times of emergency communication guarantee	Time	393	361	407
	Emergency communication vehicles called out	Thousand vehicle-times	124	137	133
Assurance Initiatives	Emergency communication equipment inputted	Thousand set-times	115	109	94
mitiatives	Personnel used	Thousand person-times	413	471	482
	Technological innovation input	RMB billion	4.82	5.81	11.5
	Number of personnel in technical activities	Person	4,508	4,195	7,703
dependent	International standards documents	Article	614	649	545
nnovation	Industry standards	Item	226	228	285
	Number of patents applied	Item	621	648	1,121
	Number of patents granted	Item	232	346	441
****	Monthly average complaint rate in the year	Person-time/million users	3.61	2.73	2.96
	Overall satisfaction rate	Point	77.5	77.99	80.42
Customer	Including: Fixed line user satisfaction rate	Point	80.4	82.45	85.73
service	Mobile phone user satisfaction rate	Point	78.8	79.13	81.94
	Fixed broadband user satisfaction rate	Point	72.5	74.62	76.17
	Mobile Internet user satisfaction rate	Point	75.9	75.05	77.83
••••	Gender proportion of employees	Male:female	1.49:1	1.48:1	1.50:1
	Proportion of ethnic minority employees	%	6.81	6.89	6.77
	Proportion of female in senior management	%	11.7	10.6	11
	Input in employee training	RMB million	302.64	321.57	422.99
	Per capita training time	Hours	60	62	66
	Network college online learning person-time	Thousand person-times	4,585	15,333	11,250
People-	Network college total online learning hours	Thousand credit hours	3,750	13,096	7,040
oriented	Number of safety production training	Time	32	37	40
		%		100	
	Coverage rate of safety production training	%	100	100	100
	Proportion of contracted employees in labor union				
	Input to help and support employees suffered from difficulties	RMB million	9.67	9.37	30.22
	Input in condolence fund	RMB million	35.71	28.38	28.53

Type	Indicator	Unit	2016	2017	2018
	Special investment in energy conservation and emission reduction	RMB million	200	100	100
	Energy consumption per unit of information flow	kg ce/TB	6.47	7.5	3.14
	Petrol consumption	Thousand tons	45.6	29.1	28.6
	Diesel consumption	Thousand tons	12.8	24.5	8.1
	Natural gas consumption	Thousand m <sup>3</sup>	10,995.6	7,081	10,145.2
	Electricity consumption	Billion KWH	13.893	13.986	14.19
Low-carbon	Water consumption	Million tons	22.8925	22.2106	18.5731
development	Water consumption/operating income	Tons/RMB million	83.49	80.82	63.85
development	Coal consumption	Thousand tons	110.6	72.7	58
	Energy conservation	Thousand tce	156.5	169.2	163.2
	Greenhouse gas emission	Thousand tons	5,098.9	5,188	5,296
	Greenhouse gas emission/operating income	Tons/RMB million	18.60	18.88	18.21
	Sulphur dioxide emission	Thousand tons	6.6	8.9	2.4
	Chemical oxygen demand (COD)	Thousand tons	18.3	25.4	21.1
	Recycling upon scrappage and disposal	RMB million	2,711	1,242	621
Compliance	Number of compliance training	Time	1,591	1,576	1,920
management	Number of participant attending the compliance training	Person	254,628	253,530	248,193
	Number of registered volunteers	Person	17,042	23,998	43,873
	Participants in volunteer activities	Person-time	25,386	39,966	50,412
Community	Credit rating <sup>(1)</sup>	Grade	AAA	AAA	AAA
responsibility	Total tax paid	RMB billion	11.261	8.156	7.889
	Employment creation	Person	29,817	10,458	10,869
	Total donation	RMB million	9.347	12.651	11.04

- Note: 1. This is rated by China Chengxin International Credit Rating Co., Ltd. to our wholly-owned subsidiary, China United Network Communications Corporation Limited.
  - 2. Data in the report: The data and information disclosed in this report mainly sourced from relevant data collection systems and relevant statistical statements inside our company and cases about corporate social responsibility practice submitted by provincial subsidiaries. There is no material change in relation to the methods used for prepping the disclosure. The 2018 data quoted in this report are final statistical data. In case of any discrepancy between the financial data herein and those in annual report, the annual report shall prevail. The monetary unit adopted in this report is RMR
  - 3. Reference: Guiding Opinions on Better Fulfilling Social Responsibilities of State-owned Enterprises, The State-owned Assets Supervision and Administration Commission of the State Council (SASAC); Guidelines for preparation of Report on Performance of Corporate Social Responsibility, Shanghai Stock Exchange; Environmental, Social and Governance Reporting Guide, HKEX; Guidelines for Preparation of Social Responsibility Report (CASS-CSR 4.0), Chinese Academy of Social Sciences; Sustainability Reporting Guidelines (G4 Edition), Global Reporting Initiative (GRI); Social Responsibility Management System of China Information and Communication Industry Enterprises, China Association of Communications Enterprises.
  - 4. Quality assurance: The Board of Directors and all directors undertake that the information disclosed in the report is authentic, complete and correct, with no false record or misleading statement.

#### **COMPANY HONOURS**

- China Unicom was voted "Asia's No.1 Most Honored Telecom Company" by fund managers and analysts for three years in a row in "2018 All-Asia Executive Team" ranking organised by Institutional Investor. The Company was also honored with the awards of "Asia's Best CEO (Telecoms) 1st", "Asia's Best CFO (Telecoms) 1st", "Asia's Best Investor Relations (Telecoms) 1st" and "Asia's Best Corporate Governance (Telecoms) 1st".
- •The Company was voted "Asia's No.1 Best Managed Telecommunications Company" by professional investors in "Asia's Best Managed Companies Poll 2018" by FinanceAsia. Meanwhile, the Company was also honored with "Best CEO in China 1st", "Best CFO in China 1st", "Best Managed Company in China 1st", "Best Investors Relations in China 1st", "Best CSR in China 1st" and "Best Corporate Governance in China 1st".
- The Company was accredited with "Platinum Award for Excellence in Environmental, Social and Corporate Governance" and "Highly Commended Investor Relations Team" in "The Asset Corporate Awards 2018". Meanwhile, Mr. Wang Xiaochu, Chairman and CEO of the Company was accredited again with "Best Chief Executive Officer".
- China Unicom was voted "Best Company in the Communications Industry", "Best Company in Hong Kong" and "Best Overall Investor Relations (Large-Cap)" by investors, analysts and investing professionals at "IR Magazine Awards Greater China 2018".
- China Unicom was awarded "The Best of Asia Icon on Corporate Governance" in the Asian Excellence Award 2018 hosted by Corporate Governance Asia. Mr. Wang Xiaochu, Chairman and CEO of the Company was named for the "Best Asian Corporate Director Award" in the "Asian Corporate Director Recognition Award 2018".
- •The printed version and online version (ar2017.chinaunicom.com.hk) of China Unicom's annual report "Unicom in a New Era" won various top accolades at international competition: 5 gold awards at International ARC Award 2018; 7 gold awards in "Vision Awards" and "Inspire Awards" by the League of American Communications Professionals LLC (LACP) in 2018, 2 grand awards and 3 gold

- awards in the internationally renowned Galaxy Award 2018 and 1 gold award at "International W3 Award".
- in "iNova Awards" for three years in a row.

   China Unicom rapked 273rd in terms of revenue among "Fortune Global"
- China Unicom ranked 273rd in terms of revenue among "Fortune Global 500" for 2018.

• The Company's website (www.chinaunicom.com.hk) won a gold award

- China Unicom ranked 27th among "2018 PRC Top 300 CSR Development Index" published by Chinese Academy of Social Sciences, moving 10 places up compared to 2017.
- China Unicom was included in "China ESG 50 Index Constituents" for 2018 and received the "Golden Bee 2018 Outstanding CSR Report Leadership Enterprise Award" for its CSR report.
- China Unicom ranked the sixth among 500 outstanding IoT enterprises on "2018 World IoT Ranking List" announced by 2018 World IoT Convention, becoming one of the three PRC enterprises among the top ten companies on the list.
- "2018 Outstanding Cases in Targeted Poverty Alleviation by PRC Listed Companies" named by JRJ.com.
- China Unicom Pay Limited Company garnered "2018 Outstanding Enterprises in Mobile Payment in China Award", "Star Platform for Mobile Payment in China" and "2018 Technology League Annual Carrier's Innovative Product Award" and "Top 20 of PRC FinTech Unicorns".
- China Unicom Cloud Data Co. Limited received "2018 PRC IDC Industry Digitalised Transformation Cornerstone Award", "Trustworthy Cloud Technological Innovation Award" and "Product and Solution Excellence Award for Cloud Computing and Big Data Service".
- The "Smart River Management Platform" designed by China Unicom Systems Integration Limited Co. received 2018 Pan Gu Award for Innovative Achievements (Innovative Products) in the PRC Electronic Information Industry.

### **(1)** INSTITUTIONS AND ORGANISATIONS

Major organisations newly joined by China Unicom in 2018

No.	Name of Organisation	Post
1	Trustworthy Blockchain Alliance	General member
2		Deputy council chairman
3	"Internet+ Energy Conservation" Industry Alliance	Deputy council chairman
4	China Cybersecurity Industry Alliance	Member
5	Big Data Technology and Application Alliance	Deputy council chairman
6	Big Data Industrial Ecology Alliance	Member
7	China Tourism Association – Tourism Marketing Chapter	Founding member
8	Tourism Big Data Industrial and Academic Research Alliance	Member
9	National Smart City Standardisation General Group	Committee member
10	China Tourism Big Data Institute	Founding unit

# **©** DESCRIPTION TO THE REPORT

Reporting period	From January 1, 2018 to December 31, 2018, with some sections exceeding aforesaid period.
Release frequency	The social responsibility report of China Unicom (Hong Kong) Limited is an annual report.
Organisational coverage	The report covers China Unicom (Hong Kong) Limited and its subsidiaries. For the convenience of expression, "China Unicom", "the Group", "the Company" and "We" are used respectively in this report.
References	Guiding Opinions on Better Fulfilling Social Responsibilities of State-owned Enterprises, The State-owned Assets Supervision and Administration Commission of the State Council (SASAC); Guidelines for preparation of Report on Performance of Corporate Social Responsibility, Shanghai Stock Exchange; Environmental, Social and Governance Reporting Guide, HKEX; Guidelines for Preparation of Social Responsibility Report, AQSIQ and SAC; Guidelines for Preparation of China Enterprise Social Responsibility Report (CASS-CSR 4.0), Chinese Academy of Social Sciences; Sustainability Reporting Guidelines (G4 Edition), Global Reporting Initiative (GRI); Social Responsibility Management System of China Information and Communication Industry Enterprises, China Association of Communications Enterprises.
Clarification about the data	The 2018 data quoted in this report are final statistical data. In case of any discrepancy between the financial data herein and those in annual report, the annual report shall prevail.
Quality assurance	The Board of Directors and all directors undertake that the information disclosed in the report is authentic, complete and correct, with no false record or misleading statement.
Language versions and availability	The Social Responsibility Report of the Company is issued in both Chinese and English and in electronic copy. Website: https://www.chinaunicom.com.hk.
Contact information	Address: China Unicom Corporate Development Department/Legal Department, No. 21 Jinrong Street, Xicheng District, Beijing Zip Code: 100033 Fax: 86-10-66258674 Email: yangwei3@chinaunicom.cn

## **(1)** INDEXES



No.	Page Disclosed	No.	Page Disclosed	No.	Page Disclosed	No.	Page Disclosed
Strategy a	nd analysis	G4-8	P6, 73	G4-16	P4-8, 75	G4-23	_
G4-1	P4-5	G4-9	P6	Identified material aspects and boundaries		Stakeholder engagement	
Organisati	onal profile	G4-10	P15, 25, 73	G4-17	_	G4-24	P71-72
G4-3	P6	G4-11	_	G4-18	P75	G4-25	P71-72
G4-4	P6, P34-38	G4-12	P42	G4-19	P68-70, 75	G4-26	P71-72
G4-5	P75	G4-13	P6, 18-20, 63	G4-20	P75	G4-27	P71-72
G4-6	P6, 13, 14	G4-14	P37, 63	G4-21	P75	Report	profile
G4-7	P20	G4-15	P45, 49	G4-22	_	G4-28	P75

No.	Page Disclosed	No.	Page Disclosed	No.	Page Disclosed	No.	Page Disclosed
G4-29	P75	Bio-di	versity	Labor/Manag	ement Relations	G4-HR10	_
G4-30	P75	G4-EN11	_	G4-LA4	P27	G4-HR11	_
G4-31	P75	G4-EN12	P45	Occupational	health and safety	Human right grie	evance mechanisms
G4-32	P75	G4-EN13	—	G4-LA5	_	G4-HR12	P26
G4-33	P75	G4-EN14	—	G4-LA6	_	Sc	ociety
Gove	ernance	Emi	ssion	G4-LA7	P26, 29	Local co	mmunities
G4-34	P18-20	G4-EN15	P74	G4-LA8	P26, 29	G4-SO1	P14-15
Ethics ar	nd integrity	G4-EN16	P74	Training ar	nd education	G4-SO2	_
G4-56	P18-21	G4-EN17	—	G4-LA9	P26-27, 73	Anti-c	orruption
Disclosures on ma	nagement approach	G4-EN18	—	G4-LA10	P26-27	G4-SO3	P21
G4-DMA	_	G4-EN19	<u> </u>	G4-LA11	P25	G4-SO4	P21
Ecor	nomics	G4-EN20	<u> </u>	Diversity and e	qual opportunity	G4-SO5	P21
Economic	performance	G4-EN21	P74	G4-LA12	P25	Publ	ic policy
G4-EC1	P8, 73	Effluents	and waste	Equal remuneratior	n for women and men	G4-S06	<u> </u>
G4-EC2	<u> </u>	G4-EN22	<u> </u>	G4-LA13	P26	Anti-compe	tition behavior
G4-EC3	<u> </u>	G4-EN23	<u> </u>	Supplier assessme	nt for labor practices	G4-S07	P20
G4-EC4	<u> </u>	G4-EN24	<u> </u>	G4-LA14	<u> </u>	Com	pliance
Market	presence	G4-EN25	_	G4-LA15	<u> </u>	G4-SO8 P20	
G4-EC5	_	G4-EN26	_	Labor grievan	ice mechanisms	Supplier assessmen	t for impacts on society
G4-EC6	<u> </u>	Product a	nd services	G4-LA16	P26	G4-SO9	_
Indirect ecc	onomic impact	G4-EN27	P43-44	Hum	an right	G4-SO10	P43, P63
G4-EC7	P8-9, P32-33	G4-EN28	P44, P74	Inve	stment	Grievance mechanisi	n for impacts on society
G4-EC8	P8-10, 43	Comp	bliance	G4-HR1	_	G4-SO11	_
Procurem	ent practices	G4-EN29	_	G4-HR2	P73	Product r	esponsibility
G4-EC9	P15, 62	Transp	ortation	Non-disc	crimination	Customer h	ealth and safety
Enviro	onmental	G4-EN30	_	G4-HR3	P26	G4-PR1	P63, 64
Ma	aterial	Ov	erall	Freedom of association	and collective bargaining	G4-PR2	_
G4-EN1	_	G4-EN31	P42	G4-HR4	_	Product and	service labeling
G4-EN2	P45	Supplier environr	nental assessment	Chile	d labor	G4-PR3	P34-35
Er	nergy	G4-EN32	P63	G4-HR5	P14, 26	G4-PR4	_
G4-EN3	P74	G4-EN33	P63	Forced and co	ompulsory labor	G4-PR5	P33, 35, 37
G4-EN4	—	Environmental grie	evance mechanism	G4-HR6	P14, 26	Marketing c	ommunications
G4-EN5	P74	G4-EN34	—	Security	/ practices	G4-PR6	_
G4-EN6	P42-45	So	cial	G4-HR7	—	G4-PR7	—
G4-EN7	P42-45	Labor practices	and decent work	Indigen	ous rights	Custon	ner privacy
V	Vater	Emplo	yment	G4-HR8	P14	G4-PR8	—
G4-EN8	P74	G4-LA1	P25, 73	Asse	ssment	Com	pliance
G4-EN9	—	G4-LA2	P26	G4-HR9	—	G4-PR9	—
G4-EN10	_	G4-LA3	P26	Supplier humar	n right assessment		

#### (a) Chinese Academy of Social Sciences CASS4.0

Name of Index	Page Disclosed	Name of Index	Page Disclosed	Name of Index	Page Disclosed	Name of Index	Page Disclosed
	I. Preface (P series)		P15	G2.3	P70	G5.2	P70-71
(P1) Specification	on of the report	P4.2	P19	G2.4	P71-72	(G6) Part	icipation
P1.1	P68-72	P4.3	P6, P34-36	(60) 0	anisation	G6.1	P72
P1.2	P68, P75	P4.4	P6, P73	G3.1	P4-5, P69	G6.2	P71-72
P1.3	P75	P4.5	P7, P18-19	G3.2	P69-70	G6.3	P42, P71
(P2) Message from s	2) Message from senior management				P69	III. Market performance (M series) )	
P2.1	P4-5	(G1) Vision		(G4) System		(M1) Responsibili	ty to shareholders
P2.2	P4-5	G1.1	P15, P68	G4.1	P70	M1.1	P18
(P3) Focus of	responsibility	G1.2	P41, P68	G4.2	P68-70	M1.2	P5, P18-19
P3.1	P68-69, P72	(G2) St			P71	M1.3	P21
P3.2	P6-14, P69-70	G2.1	P68-70	(G5) C	iulture	M1.4	P18, P75
(P4) Corpo	rate profile	G2.2	P68	G5.1	P71	M1.5	P18

Name of Index	Page Disclosed	Name of Index	Page Disclosed	Name of Index	Page Disclosed	Name of Index	Page Disclosed
M1.6	P8, P73	M3.15	P63	S3.6	_	E2.6	P74
M1.7	P8, P73	M3.16	P63	S3.7	_	E2.7	P74
M1.8	P8	IV. Social perfor	mance (S series)	(S4) Responsibilit	ty to community	E2.8	P42
(M2) Responsibil	(M2) Responsibility to customers (S1) Responsibility to governme		ty to government	S4.1	P40, P41	E2.9	P74
M2.1	P6, P8, P32	S1.1	P20	S4.2	P14-15	E2.10	P74
M2.2	P36, P42	S1.2	P74	S4.3	P15	E2.11	P42-43
M2.3	—	S1.3	P74	S4.4	P15	E2.12	P74
M2.4	P54	S1.4	P7-8	S4.5	P15	E2.13	P42
M2.5	P73	S1.5	P25-26, P74	S4.6	P46-51	E2.14	P42
M2.6	P59, P73	S1.6	P25, P74	S4.7	P51	E2.15	P44-45
M2.7	P59	(S2) Responsibil	ity to employees	S4.8	P47, P74	E2.16	P44-45
M2.8	P20	S2.1	P25, P73	S4.9	P50	E2.17	P44-45
M2.9	P38, P44	S2.2	P26	S4.10	P50-51	E2.18	P44-45
M2.10	P20	S2.3	P26	S4.11	P74	E2.19	P44-45
M2.11	P20	S2.4	P27-28	S4.12	P8-11	E2.20	<u>—</u>
M2.12	P45	S2.5	P73	S4.13	P9, P11	E2.21	P45
M2.13	P40	S2.6	P26	S4.14	P8, P10	E2.22	P45
M2.14	P36-38	S2.7	P26	V. Environmental pe	rformance (E series)	E2.23	P42-45
M2.15	P37-38	S2.8	P26, P73	(E1) Green m	nanagement	E2.24	P42-45
M2.16	P73	S2.9	P26	E1.1	P41	E2.25	P74
M2.17	—	S2.10	P25	E1.2	P43-44, P46	(E3) Green	operation
M2.18	P38, P73	S2.11	P26, P28	E1.3	P42-46	E3.1	P44
(M3) Responsibility t	o business partners	S2.12	P26, P28-29	E1.4	P42, P74	E3.2	P42, P44
M3.1	P62-63	S2.13	P29	E1.5	P42, P44	E3.3	P45
M3.2	P20	S2.14	P26-27	E1.6	P42	E3.4	P45
M3.3	P62-63	S2.15	P26-27, P73	E1.7	P45-46	E3.5	P45
M3.4	P62-65	S2.16	P25	E1.8	P42	E3.6	P45
M3.5	P20, P63	S2.17	P28-29	E1.9	P42-45	VI. Report app	endix (A series)
M3.6	P20, P62-65	S2.18	P29	E1.10	P74	(A1)	P68
M3.7	P20, P62	S2.19	P26	E1.11	P74	(A2)	P73-74
M3.8	P62-65	S2.20	P73	E1.12	P45	(A3)	P74
M3.9	P63	(S3) Safe p	production	(E2) Green <sub>I</sub>	production	(A4)	P72
M3.10	P62-65	S3.1	P26	E2.1	P45	(A5)	P75-77
M3.11	P42, P62-65	S3.2	P26	E2.2	P42, P62	(A6)	P78
M3.12	P63	S3.3	P26	E2.3	P42-43		
M3.13	P63	S3.4	P26, P73	E2.4	P41, P74		
M3.14	P62-65	S3.5	P26	E2.5	P74		

#### SEHK ESG Reporting Guide

Name of Index	Page Disclosed	Name of Index	Page Disclosed	Name of Index	Page Disclosed	Name of Index	Page Disclosed
A1	P41, 74	A2.4	P41-42, 74	В3	P26-27, 73	B6.2	P37-38
A1.1	P41, 74	A2.5	Note 1	B3.1	P26-27, 73	B6.3	P20, 59, 63, 73
A1.2	P41, 74	A3	P42-46	B3.2	P26-27, 73	B6.4	P32-33
A1.3	Note 2	A3.1	P42-46	B4	P14, 26	B6.5	P39-40
A1.4	Note 2	B1	P25-26, 73	B4.1	P14, 26	B7	P21
A1.5	P41, 74	B1.1	P25, 73	B4.2	P14, 26	B7.1	P21
A1.6	P44	B1.2	P25, 73	B5	P42, 62-64	B7.2	P21
A2	P41-46, 74	B2	P26, 29, 73	B5.1	63	B8	P46-51, 74
A2.1	P42-43, 74	B2.1	_	B5.2	P42, 62-64	B8.1	P46-51, 74
A2.2	P42-43, 74	B2.2	_	B6	P20, 32-40, 59-63, 73	B8.2	P46-51, 74
A2.3	P42-43, 74	B2.3	P26, 29, 73	B6.1	N/A		

Note 1: As the Company mainly engages in the provision of telecommunication services, packaging material used for the finished products is not applicable to the Company's business practice.

Note 2: As China Unicom is a massive entity and its business covers a wide geographical region, currently the Company is not able yet to produce full statistics regarding its waste production. The Company will establish related data collection system as soon as possible.