



北京 2022 年冬奥会官方合作伙伴  
Official Partner of the Olympic Winter Games Beijing 2022

NEW BEGINNING NEW OPPORTUNITIES NEW JOURNEY

# ANNUAL RESULTS 2021

11 MARCH 2022

China Unicom (Hong Kong) Limited  
HKEx stock code: 762  
[www.chinaunicom.com.hk](http://www.chinaunicom.com.hk)

# Forward-looking Statements

Certain statements contained in this presentation may be viewed as “forward-looking statements”. Such forward-looking statements are subject to known and unknown risks, uncertainties and other factors, which may cause the actual performance, financial condition or results of operations of the Company to be materially different from any future performance, financial condition or results of operations implied by such forward looking statements. In addition, we do not intend to update these forward-looking statements. Neither the Company nor the directors, employees or agents of the Company assume any liabilities in the event that any of the forward-looking statements does not materialise or turns out to be incorrect.

## OVERALL RESULTS

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## FINANCIAL PERFORMANCE

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# New Beginning: Steady Growth in Revenue and Profit

(RMB Mil)	2020	2021	Change YoY
Operating Revenue	303,838	<b>327,854</b>	7.9%
Service Revenue <sup>1</sup>	275,814	<b>296,153</b>	7.4%
Net Profit <sup>2</sup>	12,493	<b>14,368</b>	15.0%
Basic EPS (RMB)	0.408	<b>0.470</b>	15.0%

Service revenue growth reached **eight-year high**

YoY growth rate exceeded **industry average<sup>3</sup>** in 4Q 2021

Profit growth **accelerated**

Note: Unless otherwise stated in this presentation,

1. Service revenue = operating revenue – sales of telecommunications products.
2. Net profit represented profit attributable to equity shareholders of the Company.
3. Industry data sourced from MIIT website.

# New Opportunities: Huge Potential in Digital Economy

## Serving national strategy

### New infrastructure

The Company resolutely fulfils its missions in the **Cyber Superpower, Digital China, Smart Society and technological innovation**. Leveraging 5G network, nationwide integrated IDC system and national industry Internet, accelerate the construction of comprehensive and intelligent digital information infrastructure which is **fast and ubiquitous, extends from sky to ground, features cloud-network integration, smart and agile, green and low-carbon, secure and controllable**, in order to build an unobstructed information channel for the economy and society.



Cyber Superpower Strategic Implementation Outline

Digital Economy Development Outline

“14th Five-year” New Infrastructure Development Planning

“Dual-gigabit” Network Development & “Eastern Data, Western Computing” Project

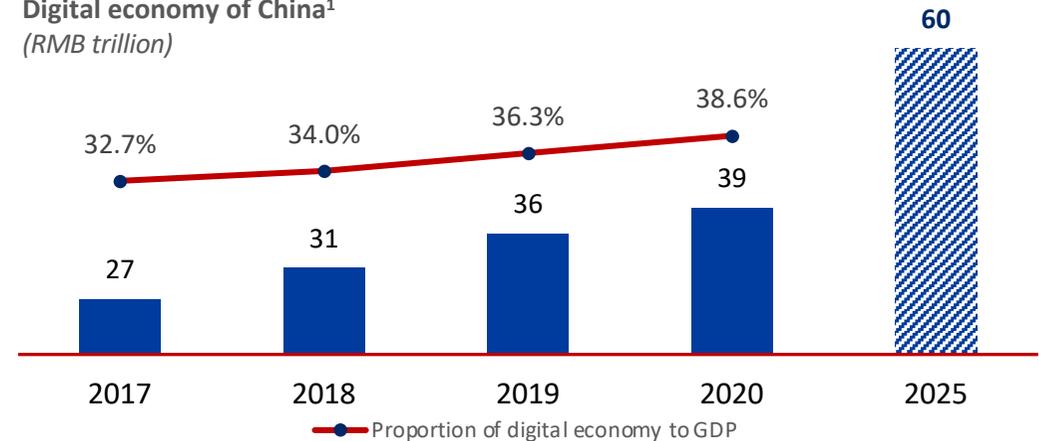


## Riding on industry development trends

### New economy

- Digital economy is becoming a **key force** in restructuring global resources, reshaping global economic structure and changing global competitive landscape.
- Industrialization of data and digitization of industry are **speeding up**, driving **faster integration** of digital and real economies.

Digital economy of China<sup>1</sup>  
(RMB trillion)



Notes:

1. Based on data from “Whitepaper on China Digital Economy Development 2021” by the China Academy of Information and Communications Technology

# New Journey: Total Strategy Upgrade

**New  
Racecourses**

**Big  
Connectivity**

**Big  
Computing**

**Big  
Data**

**Big  
Application**

**Big  
Security**

**New  
Strategy**

**Strengthen and solidify**

**Preserve and innovate**

**Integrate and open**

**New  
Positioning**

**National team**

in the operation and service of  
digital information infrastructure

**Key force**

in the establishment of Cyber Superpower,  
Digital China and Smart Society

**Frontline troop**

in the integration and innovation  
of digital technologies

**Tap into blue ocean in digital economy**

**Higher positioning**

**Broader landscape**

**Stronger responsibilities**

# Fully Implement New Strategy to Boost Growth Quality

## Firmly adhere to “1+8+2” strategic planning



# Resolutely Building Premium Networks: “Dual-gigabit” Network Development Reaching New Level

Riding on the “dual-gigabit” upgrade cycle, dedicated to building premium networks with quality customer experience, high degree of intelligence and low carbon emission

## 5G network

### Coverage

Downtown areas of cities, counties and major towns

### Speed

**2.7 Gbps**  
Highest downlink speed in the world

### Scale

**690K BTS**  
(↑ 310K vs 2020.12)

## Gigabit broadband network

Total leadership in broadband in the North

**92%**

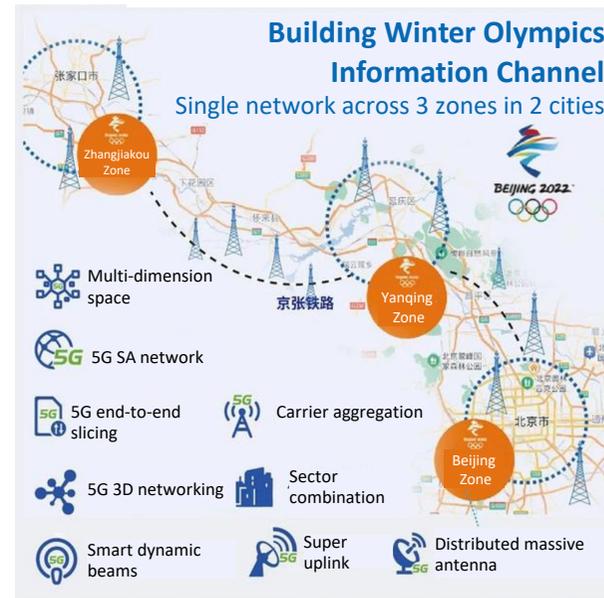
Coverage ratio of gigabit broadband in the North

Gaining good reputation

**No. 1 in industry**

Broadband satisfaction

## China Unicom’s premium networks serve as a robust digital base for a high-tech Winter Olympics



First-time full 5G coverage at Olympics venues

First 5G UHD live broadcast studio on high-speed rail

First-time “5G + 4K/8K” live broadcast throughout all matches

First IPv6+ “Winter Olympics private network”

First-time “5G + cloud + XR” match-watching at Olympics venues

First-time deployment of L4 autonomous driving at Olympics

“There are many breakthroughs in this Winter Olympics, especially the broadcasting and communication technology.”



Thomas Bach,  
President of  
International  
Olympic Committee

Yiannis Exarchos  
CEO of Olympic  
Broadcasting Services



“The quality of broadcasting infrastructure is the highest in the history of Winter Olympics, which is attributable to China’s global leadership in 5G technology”

# Resolutely Building Premium Networks: Enhancing Integrated Computing Network Infrastructure

Seizing new opportunities brought by “Eastern Data, Western Computing”, dedicated to offering integrated computing network services encompassing “connectivity + sensing + computing + intelligence”



Building green, centralized, secure and reliable computing infrastructure

“5+4+31+X” advanced IDCs



PUE of new-built large IDCs or above: <1.3

“5”



“Eastern Data” hubs (Beijing-Tianjin-Hebei, Yangtze River Delta, Greater Bay Area, Sichuan-Chongqing) and Shandong-Henan-Shaanxi central hub for communication cloud

“4”



“Western Computing” hubs: Inner Mongolia, Guizhou, Gansu, Ningxia

“31”



31 provincial core IDCs

“X”



Municipal and edge IDCs

Building a nationwide-integrated, agile and advanced computing network



Advanced architecture



Secure and reliable



Excellent services

Integrated at national, provincial and municipal levels  
“Multi-cloud connectivity, cloud deployment with single click”  
Coordination of multi-tier computing power

Unicom Cloud featuring cloud-network integration, security and reliability, tailored customisation and multi-cloud collaboration



Sensing IoT cloud



Data storage cloud



Smart video cloud



Smart chain collaboration cloud



5G edge cloud



Proprietary controllable cloud



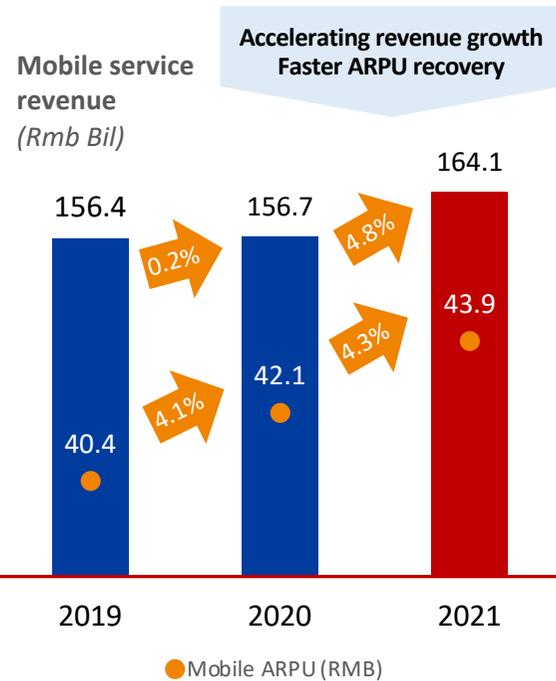
Hybrid cloud

Unified technical foundation  
Cloud services with integrated full-stack capabilities

# Strengthening Economy of Scale: Steady Growth in Basic Businesses



## Mobile business

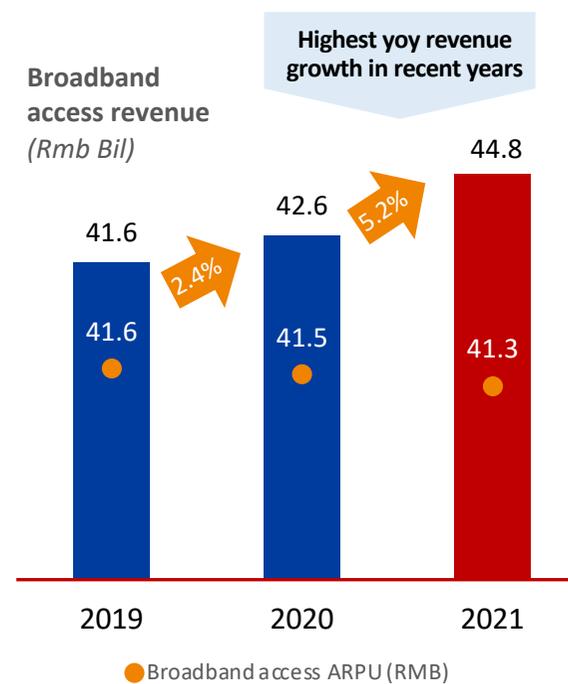


**317.12mil**  
( ↑ 11.30 mil )  
2021.12 mobile subscribers  
Net-add turned positive

**49%**  
( ↑ 26pp yoy )  
5G package subscriber  
penetration



## Broadband business



**95.05mil**  
( ↑ 8.95 mil )  
2021.12 broadband subscribers  
Record-high net-add

**72%**  
( ↑ 7pp yoy )  
Integration penetration

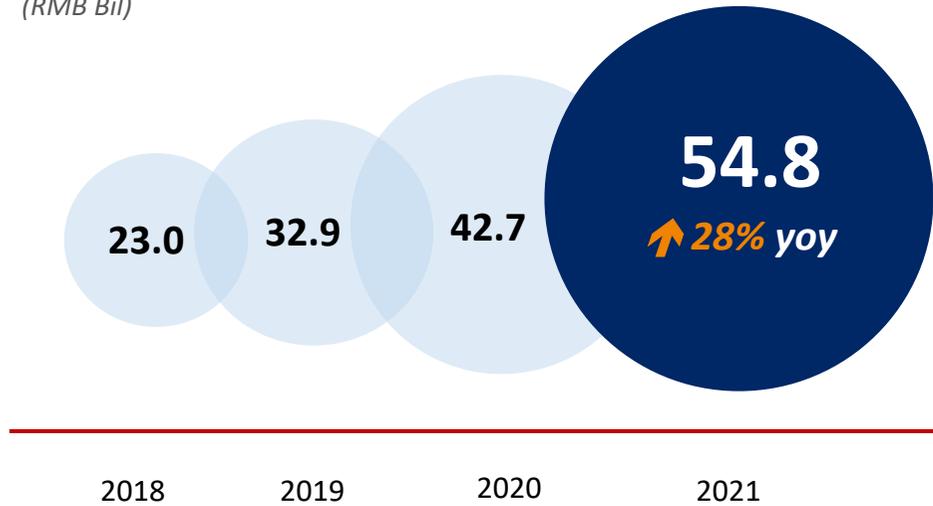
# Stepping up Innovation-driven Development: Rapid Growth in Innovative Businesses



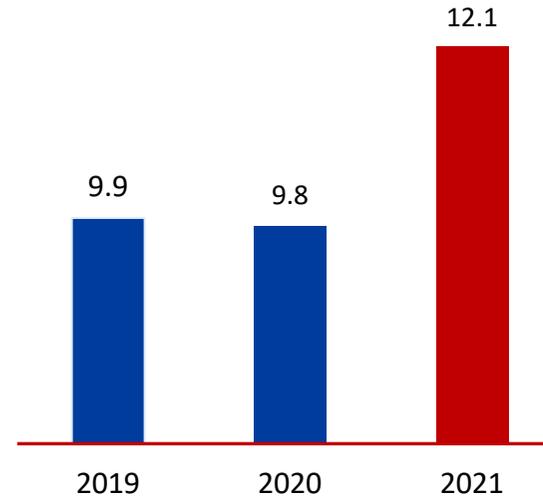
## Industry Internet Business

Industry Internet has become the **No. 1 driver** of the Company's revenue growth

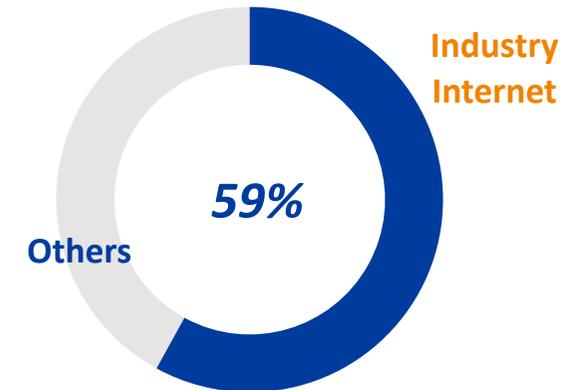
Industry Internet Business Revenue  
(RMB Bil)



Industry Internet Business  
Incremental Revenue  
(RMB Bil)



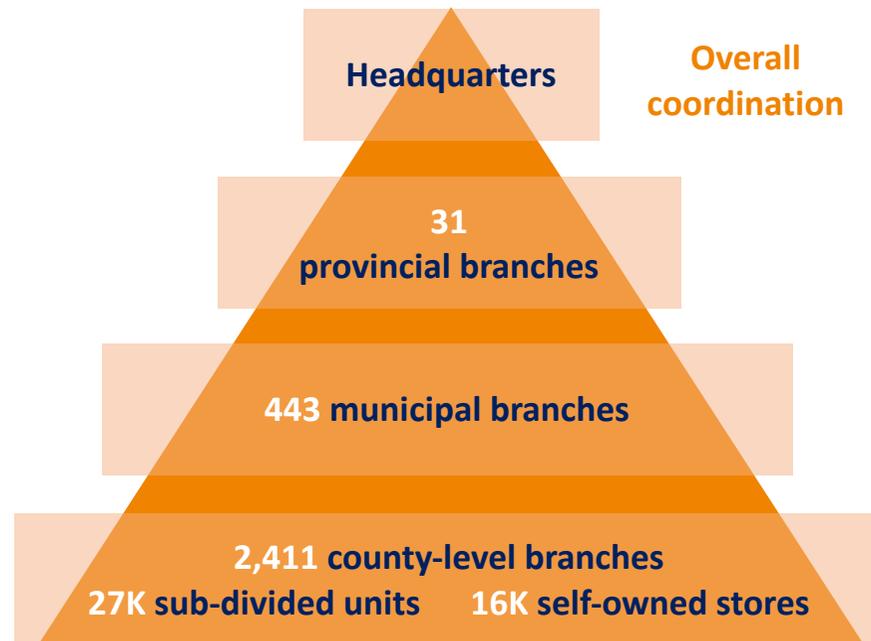
Contribution to the Company's service  
revenue growth in 2021



# Stepping up Innovation-driven Development : Rapid Enhancement in Innovative Capabilities

## Foster holistic development with resources integration and interoperable capabilities

Nationwide coverage extending into cities and towns



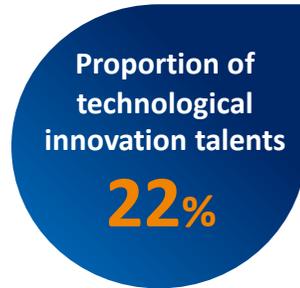
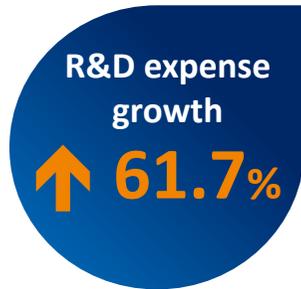
Integrated development, one China Unicom, operating as a single entity



# Stepping up Innovation-driven Development : Strengthening Technological Innovation



## Strengthened technological R&D capabilities



## Insisted on enhancing competitiveness in core technologies through innovation

### Advancement in core technologies



Led **first-time domestic substitution** of high-precision time-frequency synchronization chips

**Broke the monopoly** to provide 5G network with precise time standard

### Network innovation

Launched Cube-Net 3.0 innovative network offerings

Provided integrated terminal-edge-cloud services **combining connectivity, computing and data**



### Intelligent operation



Launched China Unicom Intelligence Brain. Core capabilities of the “Five Middle Platforms” basically established

**Iconic and industry-leading** brain-like intelligent middle platforms

# Bolstering Customer Service with More Measures: Building Quality Reputation

## Committed to offering excellent services and service quality continued to enhance

### More convenient

- China Unicom APP fully revamped, pioneering “full-range services with single click”. MAU >120 mil
- Smart Home engineers **connected** with 80 mil broadband **users via a single click** in APP, enabling swift response

### Smarter

- Offering personalized services that “**know customers better**” with Big Data + AI. Smart service ratio: **80%**
- 10010 customer hotline full centralized across 31 provinces

### More efficient

- Largest cBSS system among global operators, pioneering “**network-wide service enabled through a single access point**”
- Launched “cross-region sharing” service, enabling **cross-region integration** among mobile and broadband businesses

### More caring

- Caring for the underprivileged such as the disabled and the elderly by **adapting products and services to the needs of the elderly and the disabled**



### Touching moments of high-quality service



#### **Bing Dundun (Winter Olympics mascot) exclusive to China Unicom customers**

“Got a Bing Dundun badge from a blind box. My first SIM card is from China Unicom. I will continue to support China Unicom.”

—— **China Unicom customer**



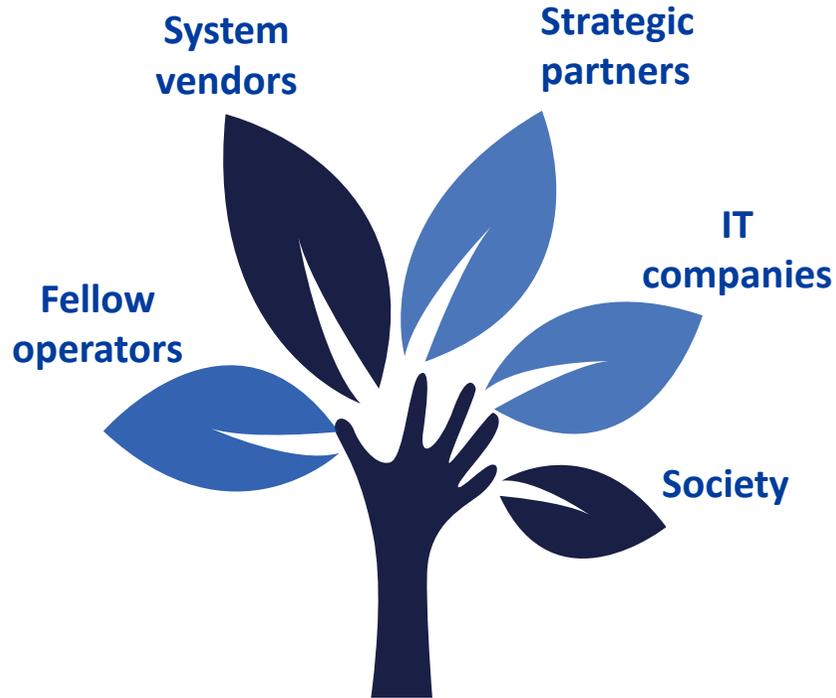
Built an **industry-leading** centralized command and service deployment system for the Beijing Winter Olympics, achieving **zero fault, zero mistake and zero complaint** in Olympics service support.



Wang Mengyun, staff of Jingmen, Hubei branch, learnt of the disabilities of customer Chen Gangyin during a visit in 2006. **She then attended to him for 16 years.**

# Broadly Deepening Integration and Open Cooperation: Factor Integration and Market Convergence

## Engage in team competition with partners to form a high-quality growth ecology



### Comprehensive open cooperation



#### Deepen cooperation in innovative chain



New digital information infrastructure



Integration of digital technologies



Regional development strategy of the country



#### Deepen cooperation in industry chain



Smart home



5G applications "sailing"



Terminal ecology



Network and information security



Modern supply chain



#### Deepen cooperation in value chain



Network co-build co-share



Deepen cooperation with strategic investors



Strengthen capital operation

# Broadly Deepening Integration and Open Cooperation: Expanding Co-build Co-share

## Efficiently enhancing competitiveness and value as well as building a green and low-carbon network



Deepening co-build co-share with China Telecom with marked achievements

Cumulative CAPEX savings for both combined  
**RMB 210 bil**

Annual electricity savings  
**>17.5 bil kWh**

Cumulative CO<sub>2</sub>e emission savings  
**>6 mil tonne**



### 5G co-build co-share

Built the **largest** “co-build co-share” 5G network in the world

**690K**  
Shared BTS



### 4G co-build co-share

Focused on **new-build, complementary coverage** and **co-location of existing BTS**

**660K**  
Shared BTS



### Full co-build co-share

Drove cooperation and sharing in **technological innovation, cloud-network integration such as IDC**. Actively advanced co-build co-share and co-maintenance of infrastructure and key business platforms such as **transmission lines, pipes and fibres, equipment rooms and antennae, DAS, etc.**



## To steer on the main course of digital economy, striving for a new future

To insist on the overall working principle of **making progress in a steady manner**, fully implement new development philosophies, contribute to the establishment of a new development landscape and promote high-quality development. With the goal of establishing “**Cyber Superpower, Digital China, and Smart Society**” and adhering to the Company’s “**1 + 8 + 2**” strategic planning, the Company will focus on its five main businesses of “Big Connectivity, Big Computing, Big Data, Big Application and Big Security”, **stabilise growth, optimise network, deepen reform, enhance capabilities, strengthen synergy and prevent risks**, in order to create greater value for shareholders, customers and society.

# OVERALL RESULTS

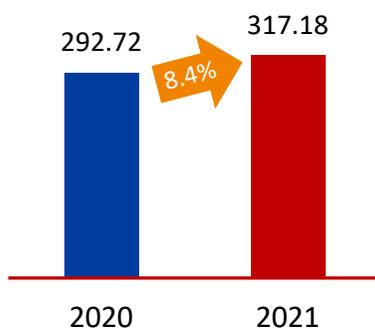
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# FINANCIAL PERFORMANCE

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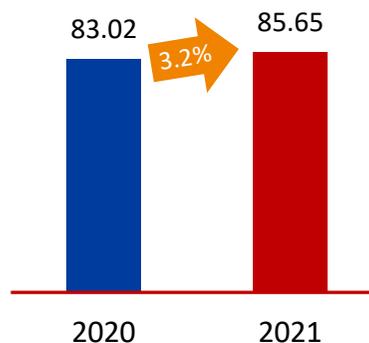
# Analysis of Key Cost Items

## Operating expenses (RMB bil)



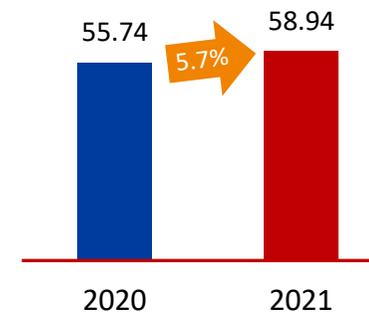
Slightly higher than the operating revenue growth, mainly due to the higher initiatives in resources & talents for 5G & innovative businesses, driving sustainable future growth

## Depreciation & amortisation (RMB bil)



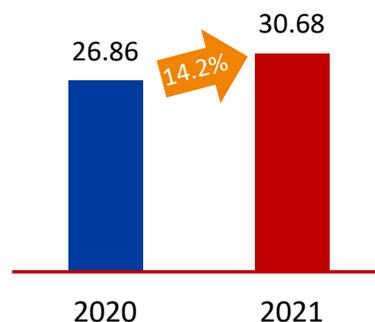
Mainly benefited from good control of CAPEX in recent years & network “co-build co-share”

## Employee benefit expenses (RMB bil)



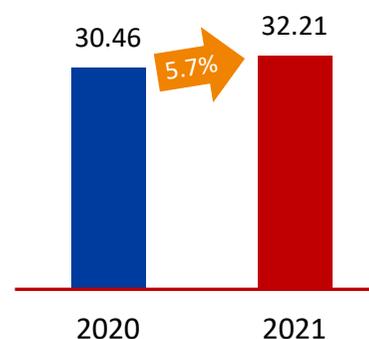
Mainly because the Company stepped up recruitment of innovative talents and continued to reform incentive systems to strengthen performance-linked incentives

## Costs of telecommunications products sold (RMB bil)



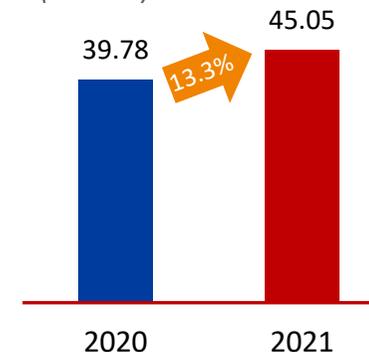
In line with 13.1% increase in sales of telecommunications products

## Selling & marketing expenses (RMB bil)



Appropriately increased selling & marketing expenses to enhance competitiveness while the growth is slower than service revenue growth

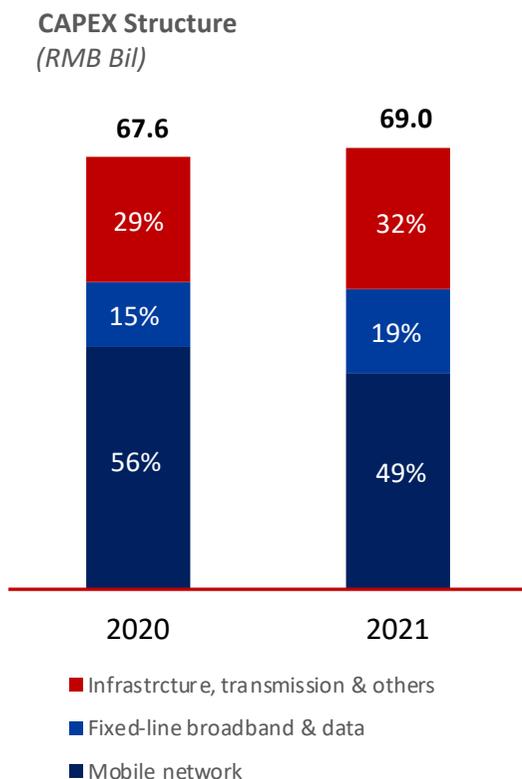
## G&A expenses (RMB bil)



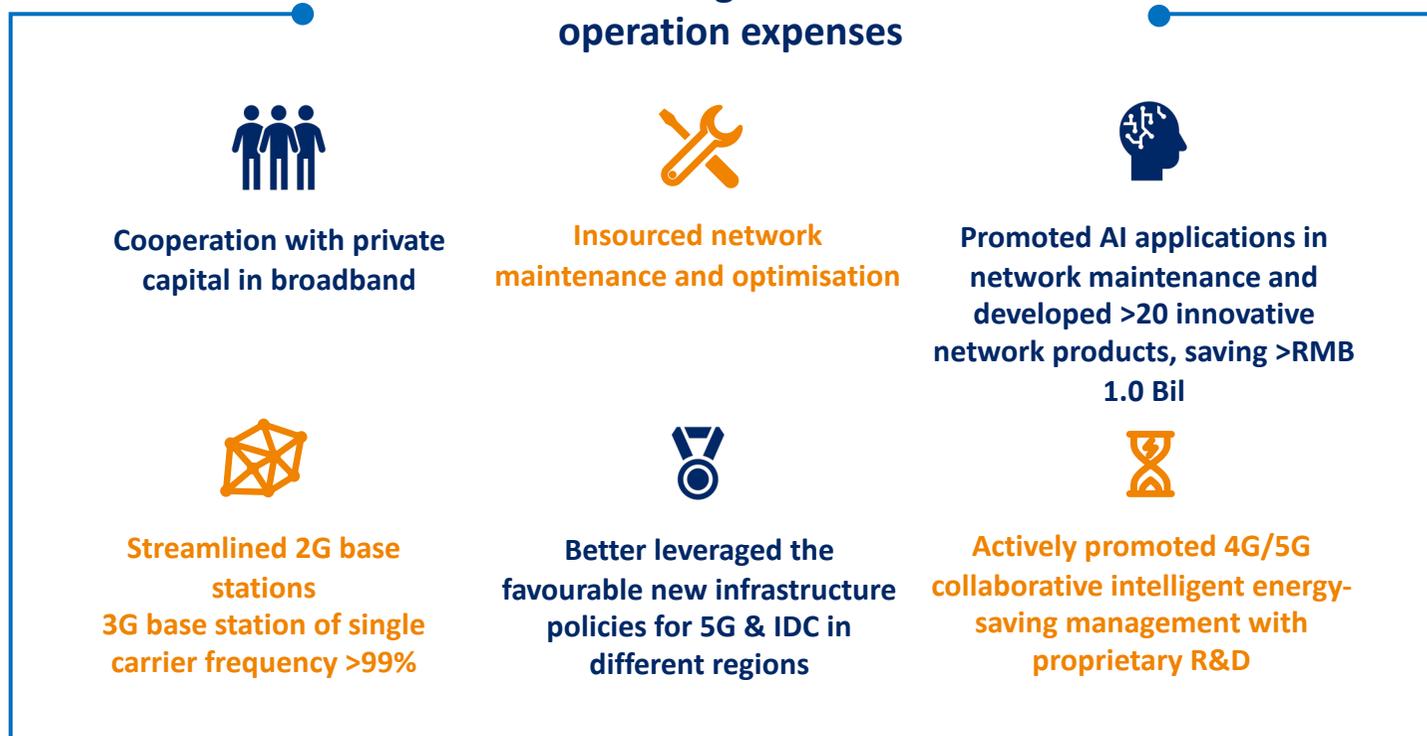
Appropriately stepped up initiatives to fuel rapid development of innovative businesses

# Strengthening Business-network Synergy and Supply-demand Alignment

## CAPEX & Network Operation Expenses

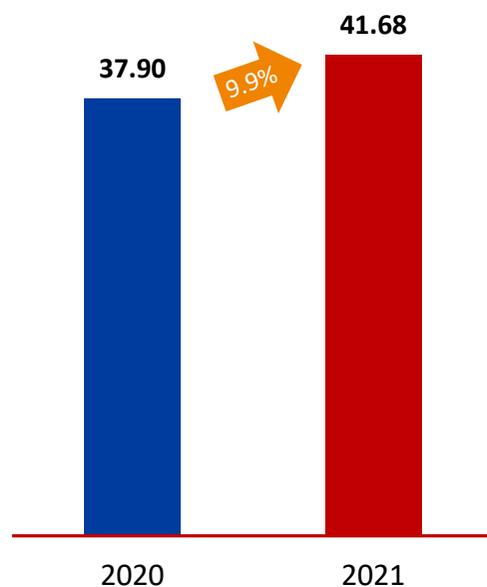


## Meticulous management of network operation expenses

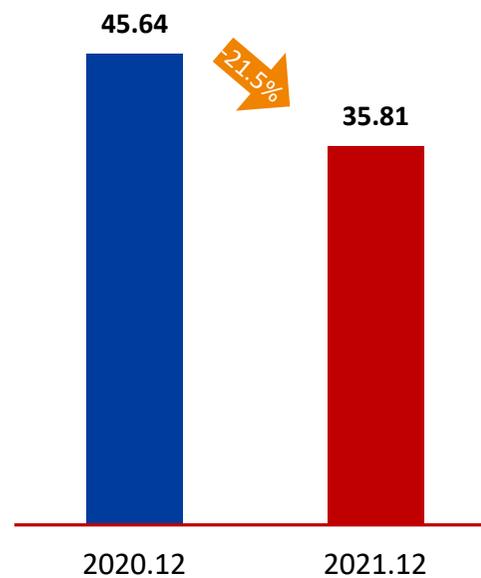


# Strong Cash Flow & Financial Position

Free cash flow<sup>1</sup>  
(RMB Bil)



Interest-bearing debts  
(RMB Bil)



Enhanced financial  
strength & ability to  
counter risks

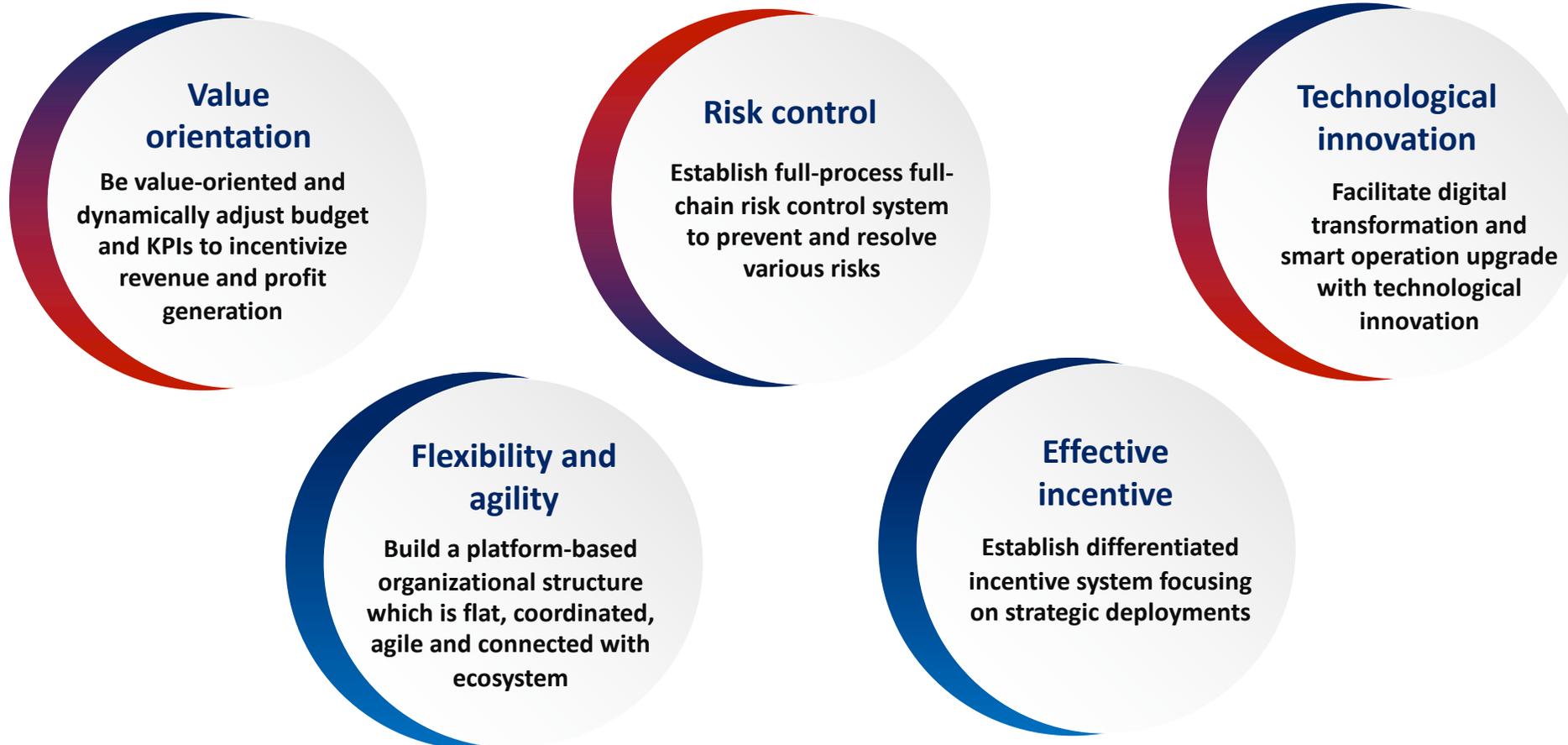
↓ 20.7%  
2021 finance costs

Note:

1. Free cash flow = operating cash flow – CAPEX

# Enhancing Shareholder Value through Quality and Efficiency Enhancement

## Fully implement new strategy, forge head and create greater value for shareholders



# Thank You !

For more, please visit



China Unicom 5G Industry Applications  
Digital Exhibitions (Chinese only)



China Unicom Innovation Experience  
Centre Cloud Exhibitions (Chinese only)



**Institutional  
Investor**  
**2021 ASIA  
EXECUTIVE TEAM**



# Appendix I: Extracts from Consolidated Statement of Financial Position

(RMB Mil)	2020.12.31	2021.12.31
Current Assets	108,636	126,228
Non-current Assets	471,980	464,848
<b>Total Assets</b>	<b>580,616</b>	<b>591,076</b>
Current Liabilities	222,028	236,185
Non-current Liabilities	31,068	21,458
<b>Total Liabilities</b>	<b>253,096</b>	<b>257,643</b>
<b>Total Equity</b>	<b>327,520</b>	<b>333,433</b>

# Appendix II: Key Operating Metrics

		Unit	2020	2021
<b>Mobile Business</b>	Billing Subscribers	Mil	305.811	<b>317.115</b>
	Billing Subscriber ARPU	RMB	42.1	<b>43.9</b>
	Total Handset Data Traffic	Bil MB	36,852.6	<b>48,716.4</b>
	Handset User DOU	GB	9.7	<b>12.7</b>
	Handset User MOU	Mins	157	<b>184</b>
	5G Package Subscribers	Mil	N/A	<b>154.928</b>
<b>Fixed-line Broadband Business</b>	Subscribers	Mil	86.095	<b>95.046</b>
	Access ARPU	RMB	41.5	<b>41.3</b>
<b>Fixed-line Local Access Business</b>	Subscribers	Mil	47.339	<b>47.193</b>
	ARPU	RMB	10.6	<b>10.3</b>