



CHINA UNICOM COMMIT TO MAKE CONNECTED LIVING EASIER

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Connected Living is becoming true in China



Total connections in China-2013

Connected living growing fast in scale



Connected

Things



China Internet subscribers: 618M

Internet penetration: 45.8%

Mobile Internet subscriber: 500M

Mobile Internet percentage: 81.0%

woone internet percentage. or.o/

M2M wireless connection: 50M

Annual growth rate: over 40%

M2M industrial scale: ¥ 500B

Annual growth rate: 30%

Source: MIIT

Source: CNNIC

Connected Living is becoming true in China



Comprehensive connected living solutions in line with global trend



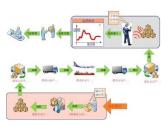
Smart manufacturing



Wearable devices



Food tracing



Smart logistics





Smart city



Smart Home









Intelligent government



E-education



Smart healthcare



Smart Grid



Internet finance



Mobile payment

Interaction through multi-screen is getting popular



Interaction through multi-screen - make it true of anywhere and anytime





With the popularity of smart devices and the forming of relevant standards, interaction through multi-screen has been successfully and widely adopted in daily life.



China government actively promote Connected Living



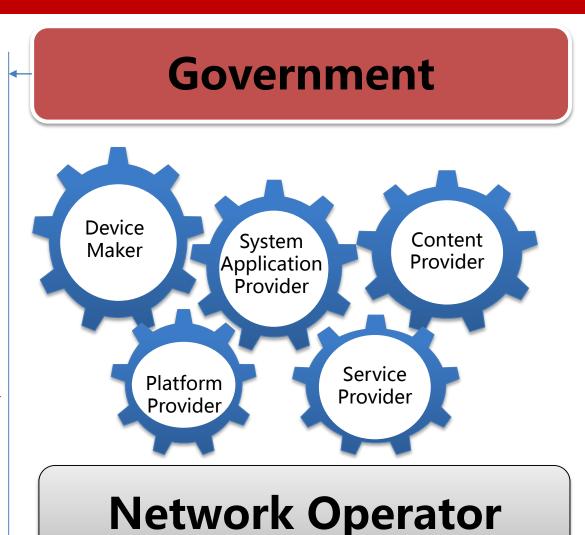
Improving the Connected Living Ecosystem

M2M becoming National Strategic Focus

- 2013/03, State Council has issued 《Guidance of promoting M2M development in healthy and orderly principles》
- 47 National M2M standard plans released by National Standard Committee
- 10 M2M special action plan issued by several Ministries
- 193 smart cities announced
- 'National M2M identity management public service platform' project starts by National Development and Reform Commission

Few other considerations in China

- Policy Control
- Regulation
- Information Security



Telecom Operators actively participate in Connected living



Telecom Operator is major player and driver

Government

Telecom Operator will take a leading role in Connected Living development with its extensive advantages in network, talents, organization, operation as well as customers.

Device System application provider

Content & service provider

Network Operator

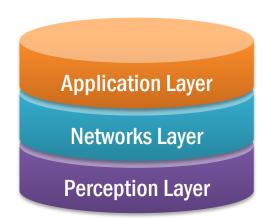
Treat M2M as Corporate Strategic Business Area

- Continue network development, evolving from 3G to 4G
- · Accelerate industry application mobilization
- Build dedicated network infrastructure as important foundation to support connected living
- Build industry user friendly management platform
- Aggregate the strengths of ecosystem for smart city
- Bring corporate advantage into connected living longterm operation

China Unicom regard Connected Services as one of the major strategic direction for future



Connected services is one of the most important strategy sector



For China Unicom, connected service development is very well in line with its corporate strategy, aiming to provide customer perfect information service.

It shares the same vision of the company, continue to enhance marketing leading solutions offering along with the network capability development.

China Unicom shall leverage the advantages of principle

Telecommunication Service Provider, innovate proactively, drive the connected living development at all aspects of technologies and



Professional organization & team



Ubiquitous supporting network



Application Platform on Cloud



Total solutions in key areas

1. Professional customer support team





Professional Subsidiary

CU System Integration

CU Info. Navigation

CU Broadband Online

Cloud & IDC operation

CU Mobile Payment

XINGYE Communication

HUASHENG

'Wo' online Store, Music, Reading

Implementation Capability

"HQ - Province - City" 3-tier of sales teams, engaging in 13 top segments, e.g. government, finance and corporate.

Mobile Internet/M2M Institute of R&D CUSI

Mobile Internet/M2M Industry Application Planning Team

M2M Office

National Industry M2M Platform
Application Platform Operation Center
Operation Center

Marketing

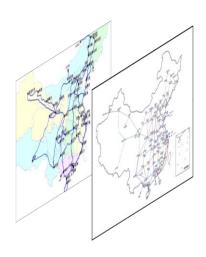
Technical support

Technical planning

Platform operation

2. Ubiquitous supporting network





Guarantee the telecom service reliability by dynamic routing over completely different physical networks.



Leverage the advantage of smooth transition from GSM

→ WCDMA → FDD LTE;

To build ubiquitous mobile broadband network

Technology & Network Leadership

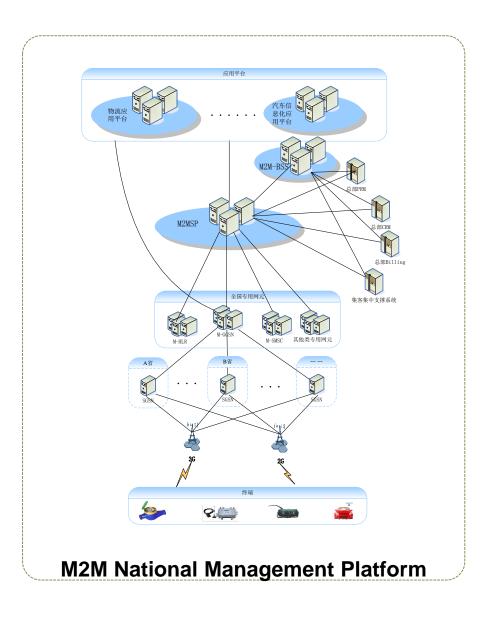
- Leading NetworkStandards
- Leading Global Roaming
- Leading Convergence

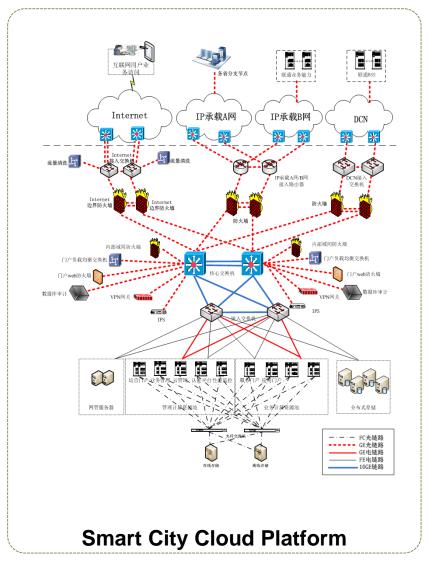
4G & 3G Integration

- Network Convergence
- Unified tariff
- Devices ecosystem
- Brand sharing

3. Dedicated core platform







4. Total solution practices in major area



Collaborate with business partners, to provide total solutions in Mobile Office, M2M, Mobile Monitor and e-Commerce areas.

Mobile OA

Mobile administration

Mobile Editing

Mobile Office

Mobile Sale Management

Mobile Express

Mobile Survey

Service & Operation

Nationwide

centralized
Commercial & Billin
service, to provide
consistent user
experience

One-stop shopping services for all partners

Intelligent transportation

Smart Grid

M₂M

Remote Control

Environmental Monitoring

Telematics

Smart City

City Surveillance

Remote loss Evaluation

Emergency Command

Real time Video

Security monitoring

Real time media broadcast



Mohile

Video





mBank

mFlight

mStock

mFutures

mPayment

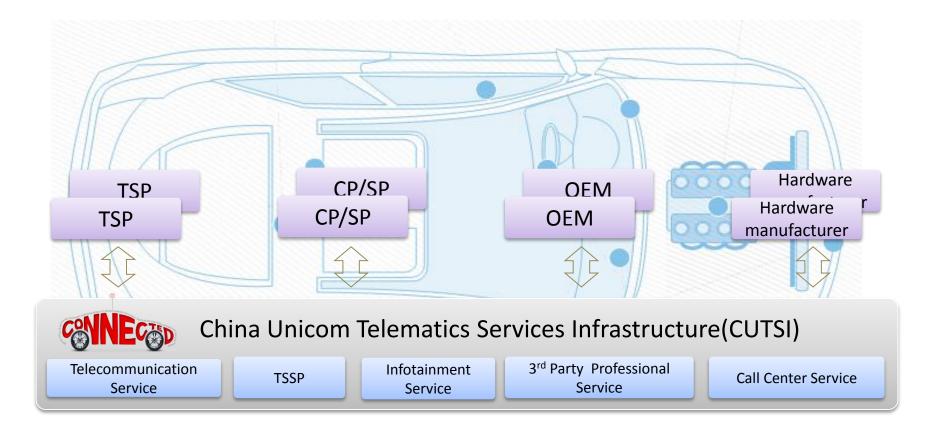
Online Payment

By April 2014, 3G industry applications users has exceeded 39 million.

5.1 Telematics practices – Fully engagement



China Unicom regards telematics as one of the strategic important area of IoT/M2M, committed to closely collaborate with OEMs in deploying Telematics service.



5.1 Telematics practices – Fully engagement (Cont.')



Premier service offering combing the capabilities from MNO, Call center, VAS and TSSP/TSP

MNO Services



- High reliability of network access solution for T service
- Dedicated management platform for optimized process
- Independent network units for SLA control
- Promotion of support capacity for OEM innovation

Call Center Services



- A dedicated telematics call center infrastructure
- Competence of nationwide call centers support
- As a traditional information service provider, closely cooperate with partners in the ecosystem to provide competitive services and products.
- Consistent investment in M2M, including platform, call center, value added services etc.
- Devoted to provide persistent, stable management and operation.

- Telematics as one of China Unicom's main directions in M2M services.
- China Unicom, as a leading telecommunication service provider, will cooperate closely with OEMs to provide differentiated and localized services based on its own advantages in China.

Information Integration Service



Internal and external professional resources for integrated Infotainment services

TSSP/TSP Services



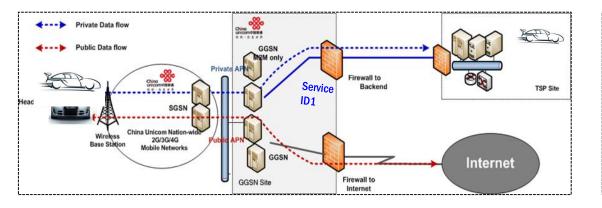
- Integrated TSSP with distribution ability open to Apps and prompt deployment of services
- Total ICT solution, including system integration, hosting, maintenance and operation
- Monitoring function for MNO performance, TSP system and Call Centers

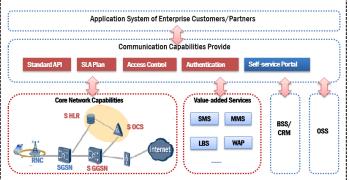
5.2 Key capabilities deployment & consistent development



- ✓ Embedded-SIM
- ✓ OTA Capacity
- ✓ SIMs management platform
- ✓ Flexible business & service deployment
- ✓ Split billing
- ✓ Consistent & stable operation support
- High standards information security assurance







Consistent Development

As one of major partners, China Unicom proactively involves into GSMA eUICC works to accelerate the technology evolution.

5.3 Broader collaboration



Existing Partnership with **20** OEMs



















































































We Are Well Prepared to Make Connected Living Easier, Comfortable and Enjoyable

Thank You

