

LIVE WEBINAR

5G New Calling:

Revolutionising communication services

A GSMA Foundry webinar

Welcome

Wednesday 20 September 2023



Agenda

Keynote presentations

- GSMA
- CMCC | 3GPP
- Huawei

Panel discussion

- CMCC
- Huawei
- Itau Unibanco
- Zain Kuwait



Session moderator

David Pringle

Freelance analysts, writer and editor

Our speakers



Wayne Cutler
IMS Technical Director
GSMA



Song Yue
Department of Network and IT
Technology Research
CMCC | 3GPP



Huey Hu
Vice President of CS&IMS Domain,
Cloud Core Network Product Line,
Huawei

Our panel members



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Department of Network and IT
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Huey Hu
Vice President of CS&IMS Domain,
Cloud Core Network Product Line,
Huawei



Sérgio Nobrega
IT Engineering
Specialist
Itaú Unibanco



Javvad Abdulrahem
Mobile Networks Senior
Specialist
Zain Kuwait

GSMA Foundry & 5GNC whitepaper



Wayne Cutler
IMS Technical Director
GSMA



GSMA Foundry whitepaper – coming soon!

5G New Calling: Revolutionising the communication services landscape

GSMA Foundry whitepaper first look

Key insights:

- Use cases & examples
- Standardisation progress
- Product readiness
- POCs & trials

Key editors & contributors:



GSMA™



MEIZU

UNISOC™

MI



ZAIN



Pre-order now!



GSMA Foundry 5GNC case studies

Download the GSMA Foundry 5GNC case studies today.

Visualised voice-calling



Remote damage assessment



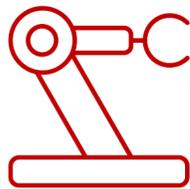
Delivering real-time translation



GSMA Foundry

The home of mobile innovation

Submit your ideas and candidate projects!



- Accelerate the exposure of key projects
- Collaborate across industries
- Turn ideas into impactful solutions in months, not years
- Bridge the gap between operators, ecosystem partners and innovators.

Learn more about the GSMA Foundry 



Developing new calling and heralding a new era for real-time communications



Song Yue

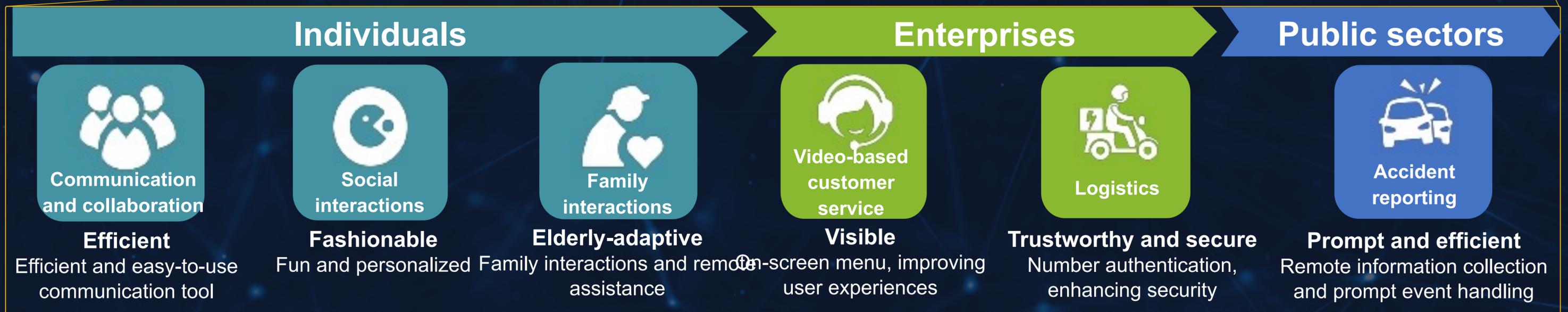
Department of Network and IT
Technology Research
CMCC | 3GPP

Scenario-based Calling Drives the Development of Real-Time Mobile Communications Networks

Communications networks

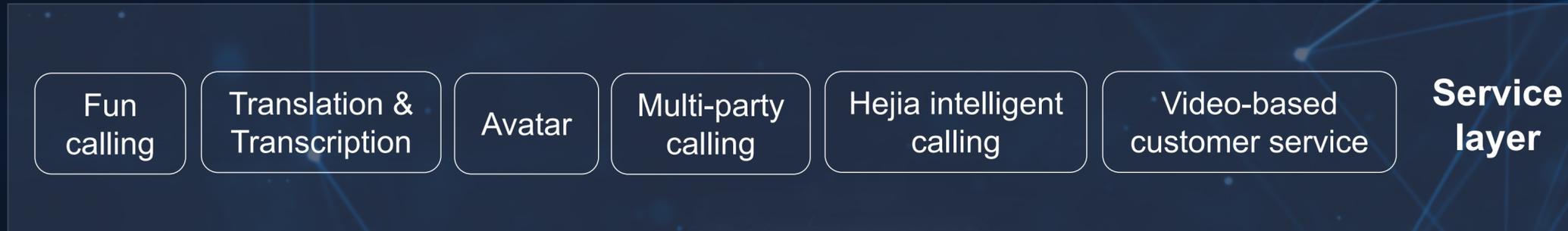


Calling needs



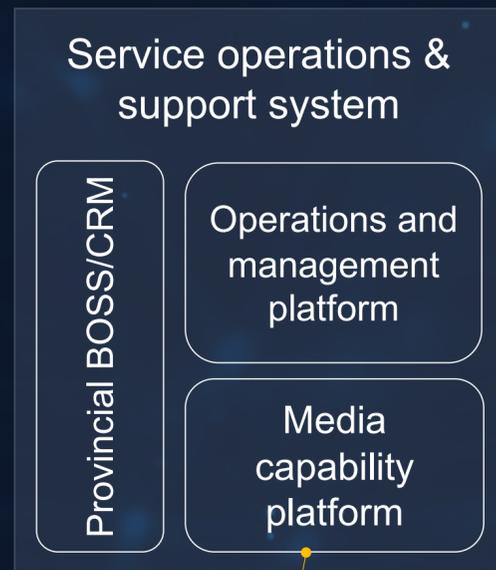
Four Key Technologies Empower the Open New Calling Network

Key technology 1: **VoNR+ capability platform**
Builds a base for communication services

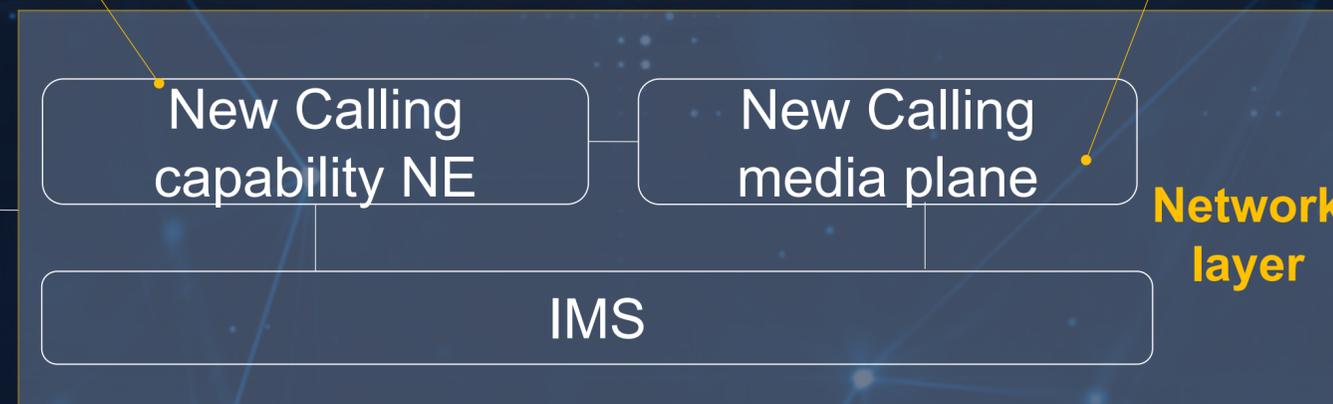


Key technology 2: **One IMS network with three channels**
Provides real-time interaction capabilities

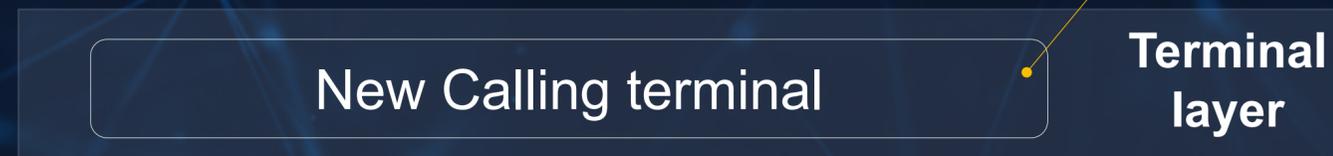
Key technology 3: **AI capability platform**
Provides rich media processing capabilities



Network Capability Openness Boosts Service Innovation



Key technology 4: **Container for applet**
Supports flexible service iteration



New Calling uses the IMS as the underlying network and integrates four key technologies to form the VoNR+ technical system.

China Mobile Promotes the Commercial Use of New Calling from Standards, Networks, and Terminals



Standards: Initiated 10+ standardization projects

- ✓ 3GPP NG_RTC
- ✓ CCSA interactive technology and terminal standards
- ✓ GSMA IMS data channel technology and terminal standards
- ✓ ITU-T IMS data channel standards

Networks: Completed technical verification, and deployments are in progress for commercial use

- ✓ Defined the VoNR+ target network architecture
- ✓ Completed technical verification
- ✓ Started commercial trials in Zhejiang, Jiangsu, and Guangdong provinces

Terminals: Connected the first call on the live network and will be released for commercial use this year

- ✓ Services have been tested on 200+ types of existing video calling-capable terminals.
- ✓ Interactive terminals have connected the first call.

Develop 5G New Calling and Promote Its Large-scale Commercial Use in 2023



Strategic positioning

Develop Calling-based **Platform Products** and New **5G Applications**



Yang Jie: Accelerating the Development of 5G New Calling

In 2023, China Mobile will accelerate the development of 5G New Calling and provide users with more fun during video calling.

Exclusive interview at China's 2023 Two Sessions



Gao Tongqing: Making Concerted Efforts to Create a New Future for Calling

- New experiences: Ultra-HD, intelligent, and interactive
- New capabilities: Media and data convergence
- New ecosystem: Building an open 5G New Calling ecosystem

MWC23

Commercial plan

Jun. 2023

Beta-test in Jiangsu, Zhejiang, and Guangdong provinces

Q4 2023

Large-scale commercial use in China

Future

More applications will emerge

Service development

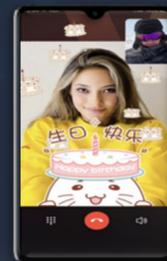
Fun calling

Interesting and enjoyable communication



Background replacement

Replacement of the real background



Voice-controlled emoji

Sending emojis by issuing voice commands

Speech-to-text conversion

Boundless communication



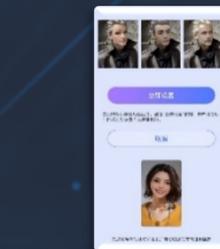
Converts speech into text and displays the text in subtitles in real time.

Chinese-English translation

Cross-culture communication



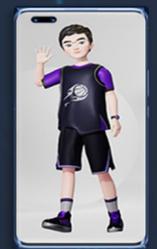
Translates what the other side is saying and displays the translated content in subtitles.



Visualized voice calling



Rapid recording



Avatar-based calling



Content sharing (images, files, and locations)



Screen sharing /AR annotation



Multi-party video calling



Jointly Promote the Development and Prosperity of New Calling

With bold dreams and aspirations,
we are ready to embark on a new journey.



New Calling

New Calling, New Opportunities, New Future

China Mobile hopes to work with industry partners to create a brighter future for the voice industry!



**From voice to video, then to
content; New Calling opens up a
new horizon for communication**



Huey Hu

Vice President of CS&IMS Domain,
Cloud Core Network Product Line
Huawei

Voice Industry Moves from Satisfying Needs to Differentiation and Personalization

Voice call

- Voice
- Message



Bandwidth 56kbps
Delay 1s

Video call

- Video call
- Video RBT



Bandwidth 4Mbps
Delay 500 ms

Intelligent and interactive calls

- Ultra-HD call
- Intelligent call
- Interactive call



Bandwidth 100Mbps
Delay 30 ms

1st Wave
Build a solid network and user base

2nd Wave
Explore content operations and greater value

3rd Wave
AI + Computility + XR,
From minute operation to content operation

Call + Ultra-HD Video Channel, Redefine Phone Screen

From minute operation to content operation



Voice Call



Visualized Voice Call

During voice calling, screen is on.

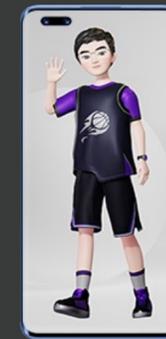
Video Channel



Voice Channel

VoLTE/VoNR Voice and Video Fundamental Network

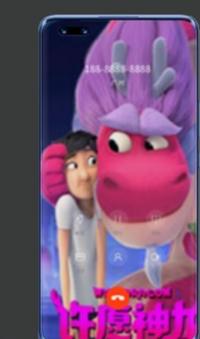
Content Transfer and Personality Showcase



Showcasing personal style through self-defined avatar

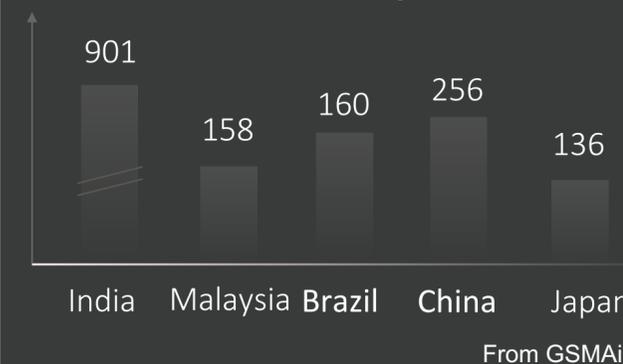


Media Publicity Platform



Broad market for content monetization

MOU of some Operators



Enriching the Content Ecosystem

UGC

PGC

- Content is the key to service success
- Multi source content supported

Jiangsu Mobile: Light up the screen with content, upgrade the voice calling experience, and develop visualized voice calling into a basic service

Call + Intelligent, Improve user experience and enrich services

AI Enables Differentiated Call Experience



Cross-Language Translation



Big font Display



Virtual background Replacement

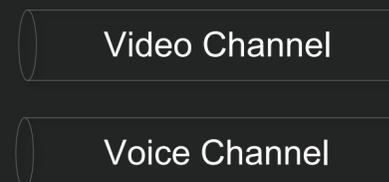
AI driven digital human for everyone



AIGC Avatar



Voice Drive Digital Human

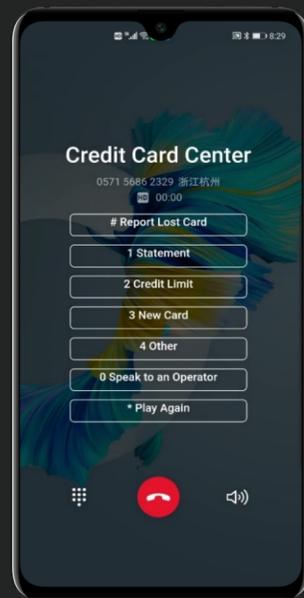


Terminal-independent services

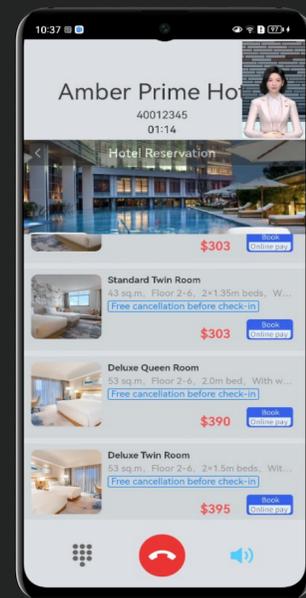
Call + **Interactive**, Enriches Industry Ecos. and Unleash the Market Potential



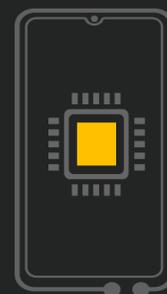
Closed-loop services during calls



Enterprise Hotline Menu



Remote assistance



- Data Channel
- +
- Video Channel
- Voice Channel

Remote damage assessment achieve win-win goal

Vehicle insurance reporting orders **70M** orders/year in China

Traditional method (On-site)



pain points

Cost **\$50** / order
more than **2 hours**

APP/Applet method



pain points

< 10%
Online rate

Complicated procedure
Privacy concerns

New Calling method



Assessor guide shooting and screenshots through AR markings by video calling

Customers Value

car owner

5 -10 minutes
Time of assessment

insurance company

60%+
Online rate

50%+
Reducing costs

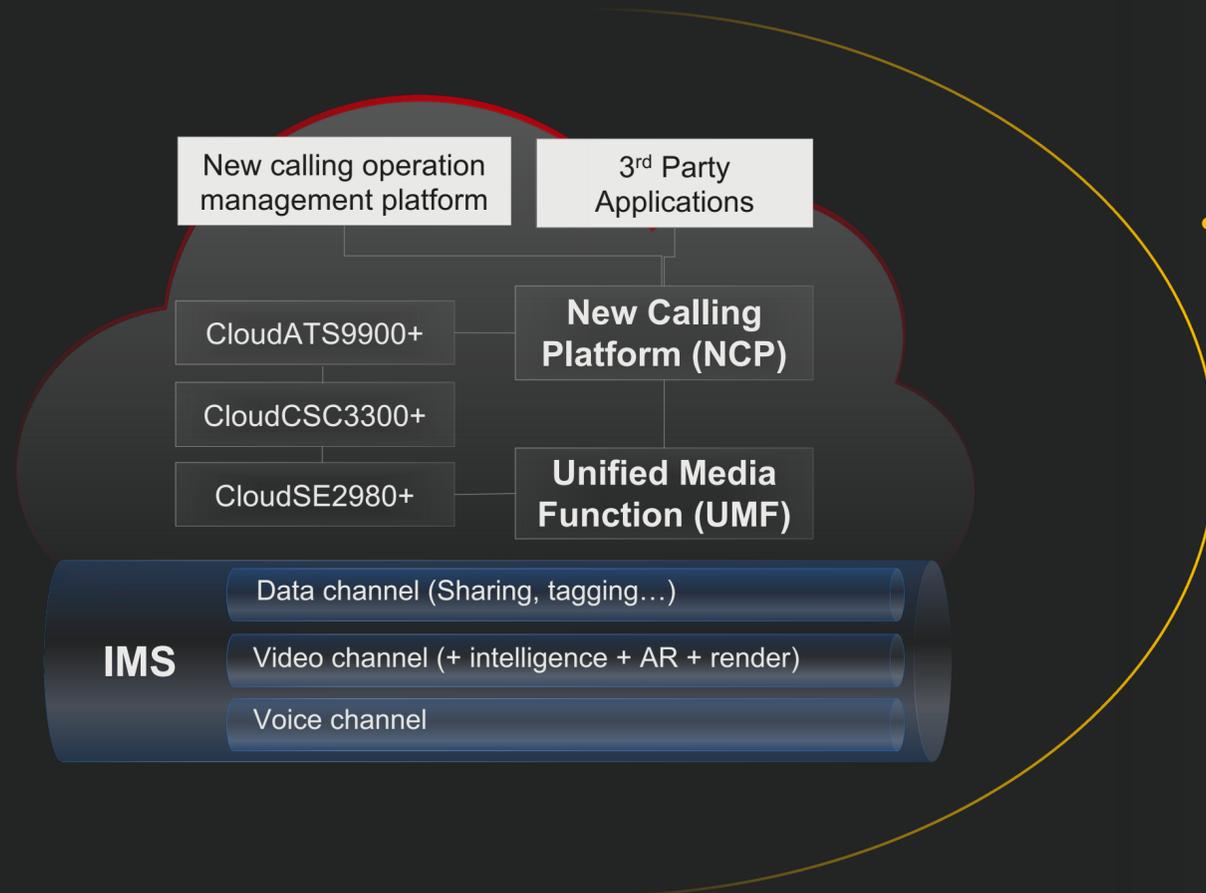
Carrier

\$ 0.01 -> 1 / order

1+3+N Redefines Calling Services

1 network

Delivering extraordinary communication experience with a solid audio and video network



Phase 1

3 capabilities

Empowering calling services with UHD, intelligent, and interactive calling capabilities

- 
 - 1080p, 4k/8K
 - Virtual image and business card
 - Video synthesis and rendering

• Ultra HD
- 
 - Face cutout and video processing
 - Face/gesture recognition
 - Real-time translation
 - AIGC Digital human

• Intelligent
- 
 - Forms, signatures, payments
 - Sharing screens, documents, locations
 - AR tagging

• Interactive

Phase 2

N innovative services

Enabling new services and increasing user base

2C

139X 189X 186X 192X



One Number, One Personality

12306 Train 95555 Bank 10086 Carrier 95583 Airlines

2B



One Number, One Application

Phase 3

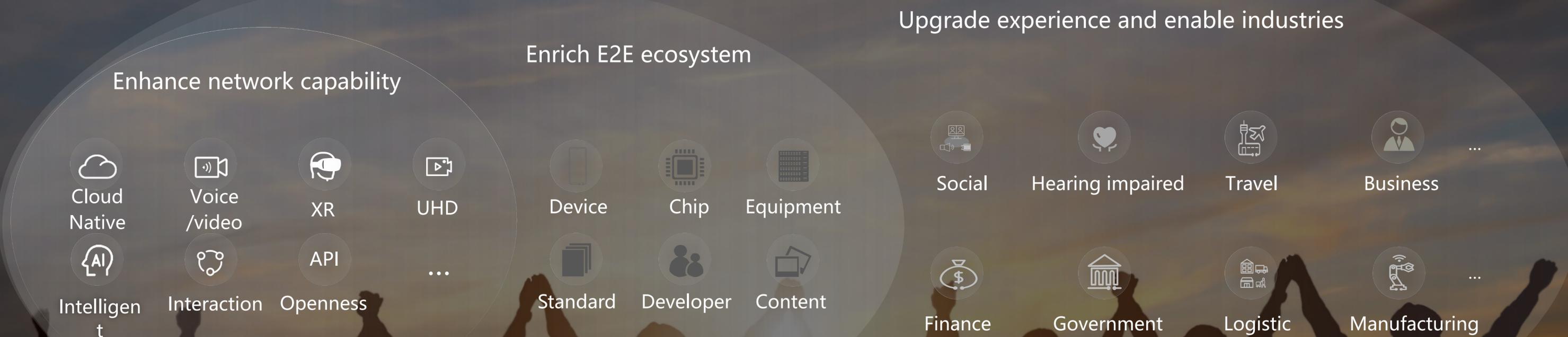
VoLTE/VoNR Voice and Video Fundamental Network

5.5G Intelligence Core

Multimodal Communication

Industry Partners Work Together for a Better Future of New Calling

New Calling, New Future



Though the road ahead is long and winding,
we will reach our destination with perseverance and dedication

Our panel members



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Zain Kuwait

Upcoming GSMA webinars & in-person events

MWC23 Las Vegas 5G Futures Summit



 Tuesday 26 September 2023

 14:00 – 17:30 PDT

 Las Vegas Convention Center

 [Register here](#)



MWC23 Las Vegas GSMA Foundry Networking



 Wednesday 27 September 2023

 08:30 – 10:00 PDT

 Las Vegas Convention Center

 [Register here](#)



MWL Unwrapped Webinar The 5G Evolution



 14 – 16 November 2023

 All Online webinar

 [Register here](#)



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