NGMN'S ROAD TOWARDS 6G

FEIFEI LOU

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Next Generation Mobile Networks
www.ngmn.org

WE MAKE BETTER CONNECTIONS

INTRODUCTION

The **Next Generation Mobile Networks Alliance** was **founded by leading international mobile network operators in 2006** with the **objective to ensure that functionality and performance of next generation mobile network infrastructure, service platforms and devices** will **meet the requirements of operators** and, **ultimately, will satisfy end user demand and expectations**

- **NGMN actively drives global alignment and convergence of technology standards and industry initiatives** with the objective **to avoid fragmentation** and **to support industry scale**
- A **global presence** has been established that comprises a **leadership network of ~ 80 partners: operators, vendors, software- and consultancy companies, academia and other** interested parties
- In addition, **several cooperation partners support** the NGMN **Alliance in projects and by two-way liaison**

GLOBAL PARTNERSHIP

~ 80 Companies

NGMN

MEMBERS

NGMN leading Operators with global presence

CONTRIBUTORS

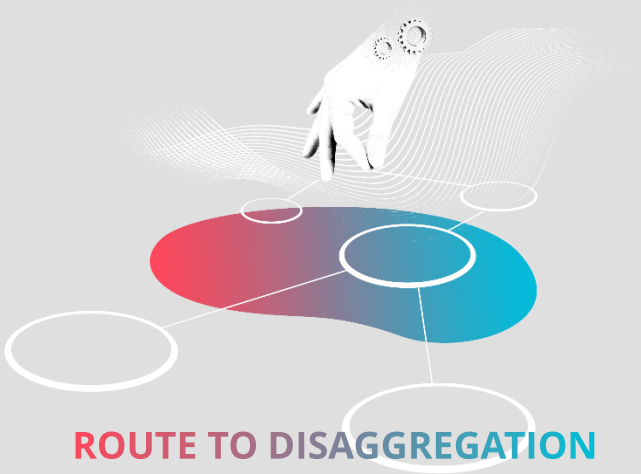
NGMN Telco Vendors, Software Companies and many other leading industry players contributing and driving the advancement of future mobile network technologies

ADVISORS

NGMN Research Institutes contributing substantially to mid- to long-term innovation

STRATEGY

Three equally important pillars

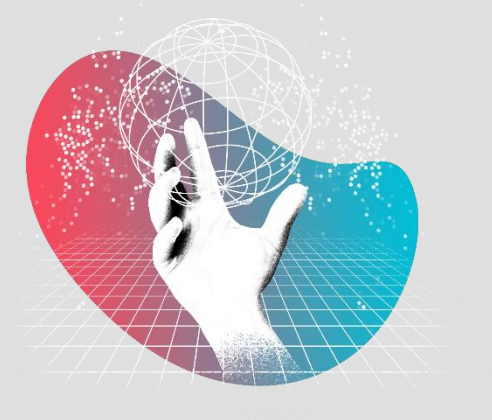


ROUTE TO DISAGGREGATION

Leading in the development of open, disaggregated, virtualised and cloud native solutions with a **focus on the E2E Operating Model**

GREEN FUTURE NETWORKS

Building sustainable & environmentally conscious **solutions**



6G

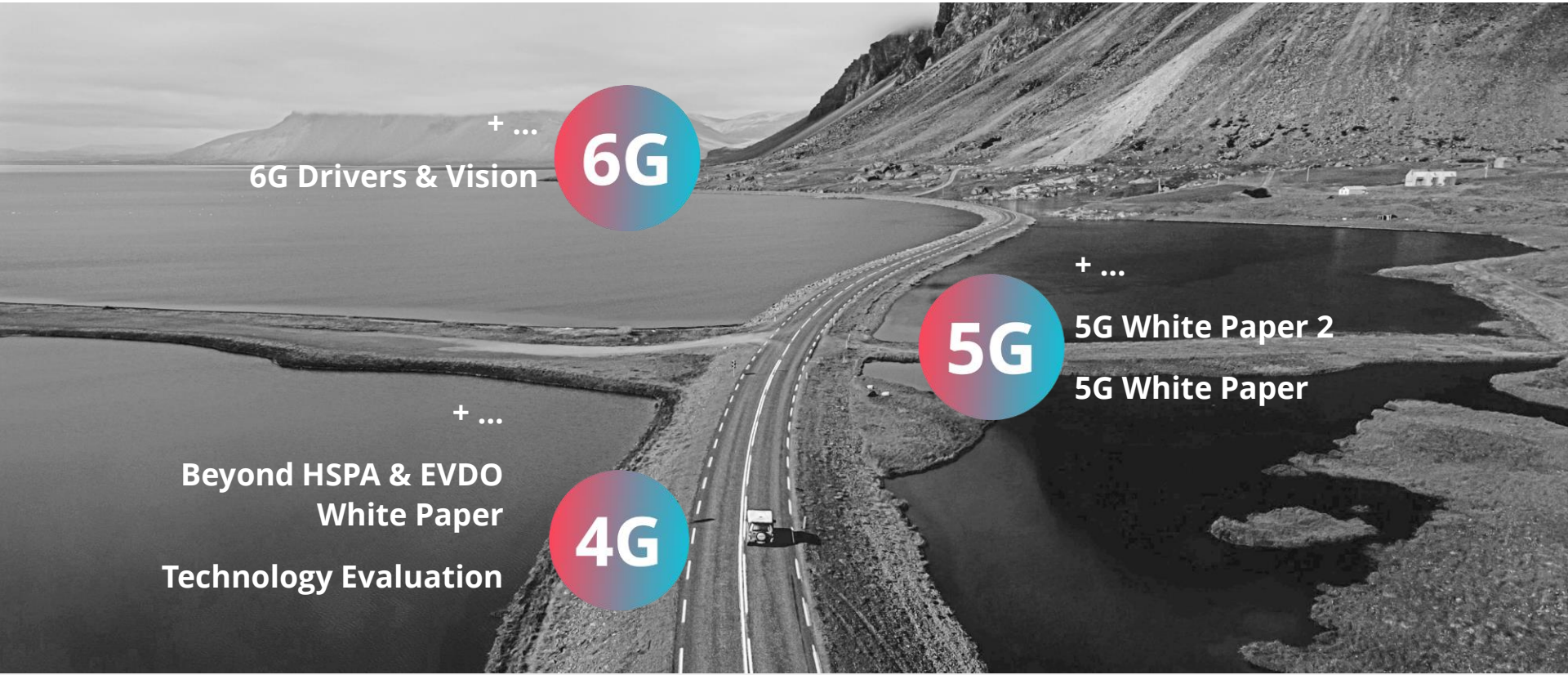
Emergence of 6G highlighting **key drivers, analysing use cases and developing E2E requirements** to impact the next generation

CURRENT WORK PROGRAMME OVERVIEW

NGMN

STRATEGIC FOCUS	REALISATION				ACCOMPANYING & SUPPORTING ACTIVITIES		
THE ROUTE TO DISAGGREGATION (Digital Transformation)	NETWORK DISAGGREGATION E2E OPERATING MODEL	NETWORK AUTOMATION	FUTURE NETWORKS CLOUD NATIVE			SECURITY COMPETENCE TEAM	SPECTRUM GROUP
SUSTAINABILITY/ GREEN FUTURE NETWORKS	GREEN FUTURE NETWORKS 1. E2E sustainability 2. Eco-design of products 3. Network efficiency 4. On-board metering	GREEN FUTURE NETWORKS PHASE 2					
6G	6G DRIVERS & VISION	6G USE CASES	6G REQUIREMENTS				
SUPPORTING 5G'S FULL POTENTIAL	RAN Functional Split and X-haul	5G Architecture Option 4 as a 5G SA complement	5G TDD Uplink	BASTA Active Antenna	IPR		
	5G Trial & Testing	Slicing for Device OS	Devices and Chipsets for 5G	BASTA Passive Antenna			
				RF Cluster Connector			

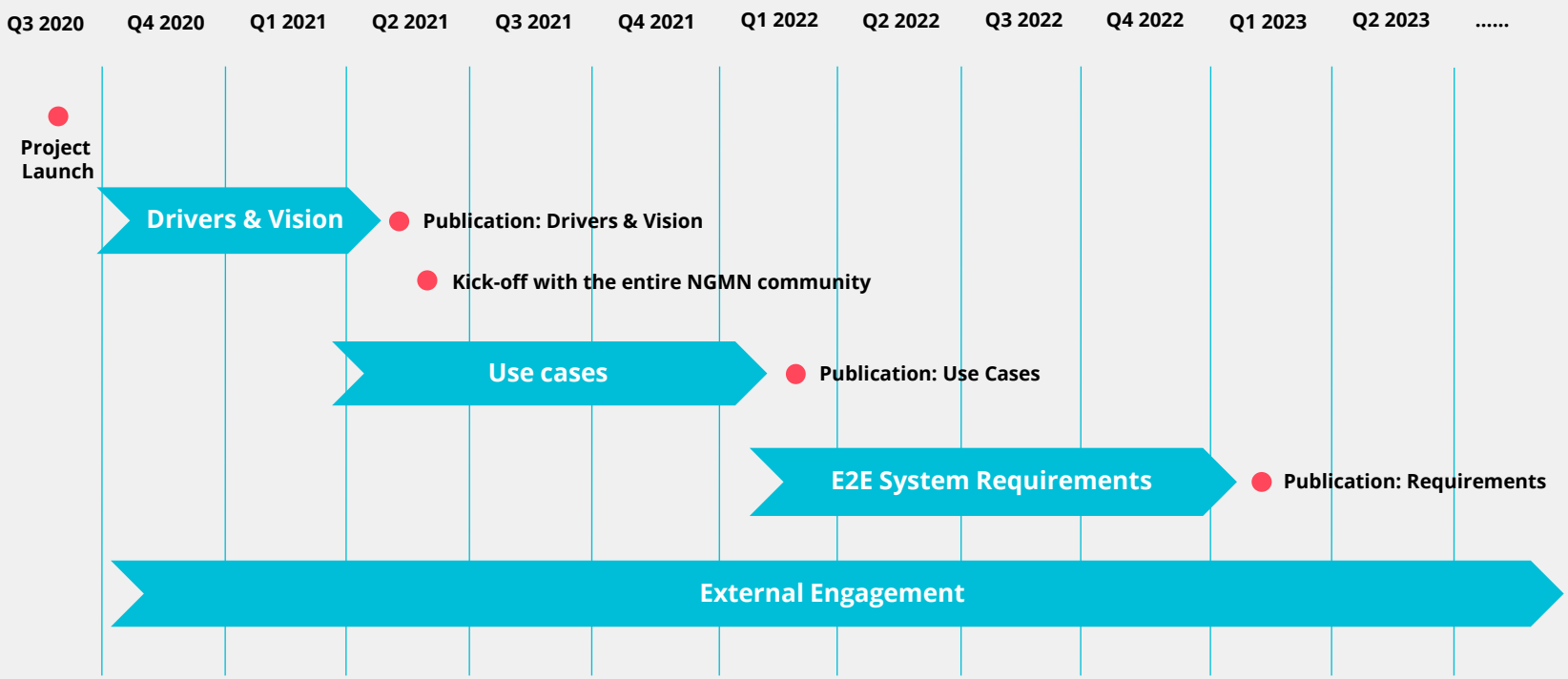
NGMN'S ROAD FROM 4G TO 6G



DRIVERS AND VISION, USE CASES

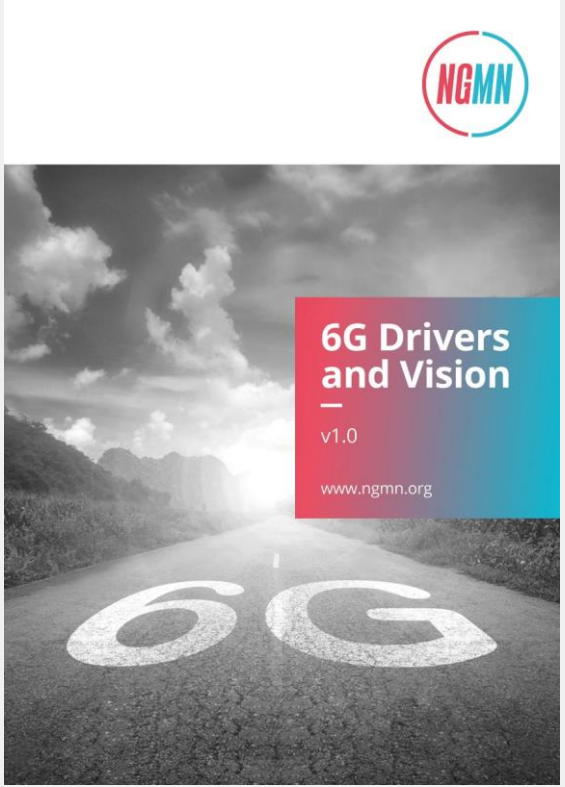
PROJECT CO-LEADS:
QUAN ZHAO (CHINA MOBILE)
DAVID LISTER (VODAFONE)
NAROTHUM SAXENA (USCELLULAR)

6G PROJECT MILESTONES



INTRODUCTION TO NGMN'S FIRST 6G WHITE PAPER

(PUBLISHED IN APRIL 2021)



An Operator's view of 6G Drivers & Vision

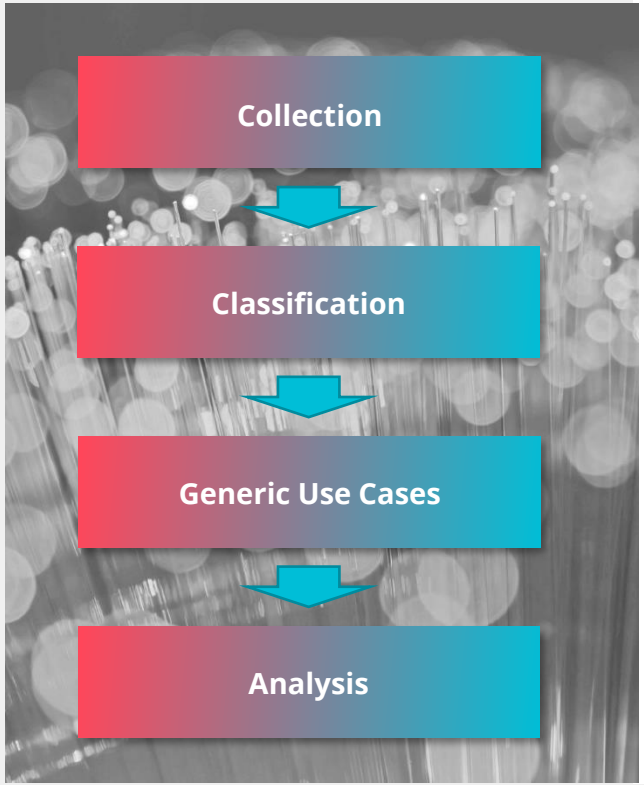
- The need to address **societal objectives** at large, as also expressed in the United Nations (UN) Sustainable Development Goals (**SDG**)
- The need to satisfy **customer requirements** by offering **new services and capabilities**, supported by evolving technologies in a **cost-effective** manner
- The need to make the planning, deployment, operations, management, and performance of the mobile operator's networks increasingly **more efficient**

CURRENT WORK: 6G USE CASES

(WITH ENTIRE NGMN PARTNER COMMUNITY)

- **Identification** of ‘families’ based on contributions of use-cases
- **Alignment** with 6G Drivers & Vision
- Analysis to assess **differentiation** relative to fully featured 5G, **applicability** and **feasibility**.

METHODOLOGY: 6G USE CASES



- **~50 use cases** contributed from Partners
- **Classification** based on the needs and application trends
- **Generic use cases** based on common key characteristics
- **Assessment** to understand viability and market opportunity and provide guidance on 6G design and requirements

PARTICIPATING COMPANIES IN NGMN'S 6G PROJECT

40 COMPANIES AT THIS POINT IN TIME

Operators

Vendors

Research Institutes

BE INVITED TO JOIN THE NGMN ALLIANCE!

Become an NGMN Partner and benefit from the work of the NGMN Alliance:

- Unique opportunity to closely interact and network with key stakeholders in the ecosystem
- Impact and shape the industry and technology development of the coming years
- Gain visibility and strengthen reputation for state-of the-art development and innovation

THANK YOU

In case of further questions please contact

feifei.lou@ngmn.org

FURTHER INFORMATION SOURCES

- View our press & industry briefing, held with TelecomTV on 24th June 2021
- Additional information about our focus topics and actual projects: here
- NGMN 6G Drivers and Vision White Paper: download here
- Access to all NGMN publications