NETWORK ARCHITECTURE EVOLUTION TOWARDS 6G

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by NGMN Alliance

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CONTENTS

EXECUTIVE SUMMARY

NGMN - Next Generation Mobile Networks Alliance - initiated collaborative studies with NGMN Mobile Network Operator (MNO) Members, vendors and academia (NGMN Alliance membership) to guide the network architecture evolution towards 6G. This publication explores key factors influencing possible architecture changes, design principles, and challenges.

KEY FINDINGS:

- **Early Stage of 6G Network Architecture Evolution:**

  The work to define network architecture evolution towards 6G is still in its early stage: The varying levels of 5G1 network maturity among MNOs ranging from Non standalone (NSA), to Standalone (SA). results in diverse perspectives on the evolution path.

- **Addressing 5G Gaps and Limitations:**

  While 5G has made significant strides, challenges remain, including network complexity, energy efficiency, limited coverage, scalability and flexibility issues.

- **Supporting New Scenarios:**

  6G should support evolving IMT-2030 scenarios, new services (e.g., AI, sensing, immersive communications), and requirements (e.g., enhanced and new capabilities).

- **Adapting to RAN Change:**

  The impact of a potential new air interface and emerging technologies (e.g., AI/ML, cloud-native) needs careful consideration.

- **Architecture Evolution Principles:**

  Key design principles for 6G architecture include enabling innovation, delivering new features in a modular manner, network simplicity, sustainability, trustworthiness, cloud-native approaches, and seamless migration from 5G.

CHALLENGES:

- Achieving consensus on the migration design from 5G to 6G during standardisation.
- Managing complexity, infrastructure upgrade efforts and identifying key business cases.

WAY FORWARD:

- Fostering collaboration and alignment across the industry is essential.
- Ensuring adequate time is allocated for 6G architecture studies to effectively leverage insights and experience gained from 5G implementations.
- Prioritising cost efficiency and deployment flexibility to address diverse customer and operator needs for successful 3GPP standardisation.

CONCLUSION:

This publication provides a valuable framework for guiding the evolution of network architecture towards 6G. Recognising the diverse needs and evolutionary stages of different MNOs, finding a balance between providing flexibility and ensuring simple, long-term sustainable 6G architecture is crucial. NGMN calls for strong industry collaboration to address these challenges and adhere to the proposed design principles. Fostering Industry collaboration can pave the way to a successful and sustainable future for communication networks.

01 INTRODUCTION

The NGMN's '6G Position Statement An Operator View' [1] envisions that 6G is the graceful evolution of communication networks into the 2030s, delivering compelling new services and capabilities for customers. Historically network architecture has been instrumental in shaping the efficiency and potential of the entire mobile systems. Many believe that in the 6G era, emerging services and scenarios will drive an increasing demand for network architecture to transcend traditional connectivity and integrate multi-dimensional capabilities. With appropriate inclusion of Artificial Intelligence (AI), computing, sensing, and enhanced security. The design of 6G network architecture and a well-defined migration strategy are fundamental to the overall standardisation process.

However, consensus on 6G network architecture has yet to be reached. NGMN Mobile Network Operator Members are currently at different stages of their 4G and 5G network evolution. Some have transitioned to 5G Standalone (SA), while others are still in Non-Standalone (NSA) configurations or progressing through intermediate stages.

This heterogeneity among the MNOs presents diverse perspectives on the most suitable 6G evolution path. Options under consideration include adopting a completely new 6G core, extending and enhancing the existing 5G core, or even integrating elements of the 4G EPC into a hybrid core. These challenges echo those encountered during 5G standardisation process, where diverse migration options (NSA and SA) introduced significant complexity. Finding appropriate balance between the need for flexibility, accommodating diverse levels of 5G network evolution among operators, and the need to ensure simplicity for 6G remain a critical challenge.

Recognising these challenges, the majority of NGMN MNO Members believe that now is the appropriate time to commence studies on 6G network architecture, with many emphasising the urgency of achieving alignment prior to 3GPP standardisation. To this end, NGMN MNO Members, in collaboration with vendor partners and academia from NGMN's membership, have initiated studies focused on the evolution of network architecture toward 6G. Furthermore, NGMN conducted a survey among its Board Members to gather their views on key areas of 6G architecture evolution.

Building on the insights derived from these studies and the survey results, this publication aims to guide the industry in re-thinking the values and requirements of 6G networks, with the goal of fostering early consensus on key aspects. Given the broad scope of network architecture topics and the challenges of achieving consensus within a limited time frame, this document focuses primarily on selected areas, with an emphasis on the core network perspective. It includes lessons learnt from 5G, drivers of architecture evolution from new service requirements, support of new air interface and RAN technology trends, migration strategies, design principles, challenges and the way forward. This collaborative approach seeks to align the industry on a common vision for 6G architecture, promoting a harmonised approach to standards and ecosystem development.

02 FACTORS INFLUENCING ARCHITECTURE EVOLUTION

2.1 ADDRESSING 5G GAPS AND LIMITATIONS

The 5G network architecture marked a significant leap forward compared to previous generations, with its adoption of a Service-Based Architecture (SBA) enabling a cloud-native deployment. These innovations enhanced flexibility and scalability, enabling more dynamic and adaptable network orchestration. While 5G is continuously introducing remarkable advancements, there will likely remain gaps that need to be addressed. From the MNOs perspective, network complexity, integration complexity with legacy systems and energy efficiency are identified as the top three concerns in existing 5G networks, with coverage, roaming, and scalability also highlighted as issues requiring attention.

Network Complexity

5G supports more radio-access technologies (RATs), new band combinations, network slices, and different functionalities. Network complexity arises not only from the advanced 4G and 5G networks but also from challenges associated with integrating legacy systems and inter-operating with other systems. 5G has introduced several interworking architecture options (e.g. SA, NSA). Some of the standardised interworking architecture options have not been implemented in practice, and different choices for standardisation and/or implementation could have resulted in a smoother migration to SA. Such different 5G core options also drive complexity in standardisation, development, and operational deployment in commercial networks. This complexity will be further magnified if there is a new 6G core, and this new complexity needs to be justified. Consideration should be given to reducing complexity where possible.

Energy Efficiency

While 5G offers significant advancements, the 5G rollout has illuminated the energy consumption challenges within wireless systems due to the deployment of massive MIMO antennas, beamforming, and the operation of higher frequency bands and wider bandwidth. Additionally, to support time-sensitive services, 5G networks allow placement of the user plane and computing power at the edge, which increases processing demands and energy usage due to additional edge hardware and pooling overheads. As 6G emerges, with its promise of even higher data rates, lower latency, greater device connectivity, and providing AI and computing services, energy efficiency will become an even more critical concern and need additional measures to lower the overall energy consumption.

Coverage and Connectivity in Remote Areas

Several operational reasons (e.g. deployment constraints, radio propagation characteristics, complexity of sharing infrastructure) make it challenging to offer coverage in rural and remote regions (or indoor locations). 6G should continue to enhance users' connectivity experience by enabling seamless interoperation between mobile, fixed, and non-terrestrial networks (NTNs).

SBA and Cloud Native Support

The 5GC (core) contains a mixture of SBA APIs and legacy point-to-point protocols with NFs sometimes implemented in a non-cloud-native manner. This mixture creates challenges in flexibility, scalability, and resilience. 6G is expected to further extend SBA interfaces and extend cloud-native principles for NF implementations.

Roaming and Global Availability

Roaming to provide global service availability is an important feature, especially for machine-to-machine (M2M) services (where many devices are “permanent roamers”). Given the long life of M2M devices, changes to roaming architecture need to be carefully considered. Unlike previous generations, 5G’s session management signaling between the mobile and core network, and between RAN and core network, is routed to the home Session Management Function (SMF). Any evolution of the N1 and N2 interfaces for 6G, that results in differences in roaming interfaces, needs to be considered in the light of the potential reuse of 5GC roaming agreements.

2.2 SUPPORTING NEW SCENARIOS AND REQUIREMENTS

IMT-2030 Scenarios and Capabilities

The future network architecture needs to consider how to effectively support the evolving demands of IMT-2030 usage scenarios, capabilities, and requirements. The ITU-R IMT framework for 2030 and beyond [7] expands the three usage scenarios defined in IMT-2020 and introduces three new ones: Ubiquitous Connectivity, Artificial Intelligence and Communication, and Integrated Sensing and Communication. Similarly, the framework extends the nine capabilities from IMT-2020 with the addition of six new critical areas: Coverage, Sensing-related capabilities, AI-related capabilities, Sustainability, Interoperability, and Positioning.

New Services

In 2022, NGMN identified fourteen potential generic use cases in its 6G Use Cases and Analysis publication [3]. In 2024, an internal survey conducted among NGMN MNO Members on 6G services revealed that approximately half of the participating MNOs prioritised four key areas: Sensing-assisted Communication, Multiple Robot Networking and Collaboration, AI Agent-driven Interactions, and Multilateral Ecosystems. Some of the surveyed MNOs selected VR/AR, Autonomous Vehicles, Smart Transportation, Industry 4.0 Applications, Smart Homes/Cities, and Internet of Things (IoT). However, several MNOs indicated that all these new services can be accomplished via current 5G, or through software upgrades without necessarily introducing a new architecture.

New Requirements

Regarding new requirements triggering architecture change, a majority of MNOs participated in survey selected Autonomous network management (78%) and AI-native design (67%). Integrated Sensing and Communication (56%), Network resilience and elasticity (56%), Co-ordination between network and computing (44%), Decentralised and distributed architecture (44%), and Sustainability (44%) also ranked high among the priorities. However, few MNOs also indicated that none of these requirements necessitate a fundamental change to the existing network architecture.

2.3 ADAPTING TO POTENTIAL RAN CHANGE

New Air Interface

NGMN acknowledges the potential benefits of improved efficiency and lower cost in 6G air interfaces. However, these advancements must be carefully evaluated against established performance and cost benchmarks to ensure they deliver tangible value. Deploying a new 6G RAT will significantly increase network architecture complexity due to the need for managing multiple RATs. However, the support of dual connectivity, and potentially inter-RAT spectrum sharing would enable enhanced data rates. New innovations should prioritise the minimising of both operational and technical complexity.

While some MNOs advocate to retain existing air interface technologies, many MNOs suggest that a new 6G air interface should focus on providing tangible improvement over 5G-advanced in key areas including increased spectrum efficiency, and ISAC, as well as dense low-cost device connectivity.

If a new 6G air interface is adopted, as per internal survey, 60% of the MNOs prefer to anchor it with the 5G SA core network, while 40% prefer a dedicated 6G core network. Potential enhancements to the core network for optimal 6G RAN evolution include tight integration with AI/ML, a more distributed architecture with edge computing, enhanced network slicing to provide more flexible and customised network services to meet diverse application requirements. Virtualisation enhancements must facilitate the deployment of various RAN technologies enabling dynamic resource allocation. A new RAT should not reverse recent advances towards a more open multi-vendor RAN, by ensuring the timely specification and inter-operability testing of RAN interfaces including the fronthaul interface.

2.4 EMBRACING EMERGING TECHNOLOGY TRENDS

Each generation of mobile networks has been driven by technological advancements. To remain future-ready, NGMN recognises the potential impact of several emerging technology trends on future network architecture.

Key areas include:

- **AI-Native Paradigm:**
  Design systems with AI capabilities embedded deeply within their architecture and processes.
- **Cloud-Native Technologies:**
  Leveraging cloud-native principles for greater agility, scalability, and efficiency.
- **Multi-Access Convergence:**
  Ensuring seamless connectivity and integration across various access technologies (e.g., 5G, Wi-Fi, satellite).
- **Integrated Computing Services:**
  Supporting network and computing integration, extending edge computing capabilities to provide advanced services.
- **Data-Driven Operations:**
  Enabling efficient data acquisition, processing, and management to support AI-driven applications and network optimisation.
- **Decentralisation and Enhanced Security:**
  Facilitating robust and flexible network operations through distributed architectures and advanced security measures.
- **Network Digital Twins:**
  Utilising real-time network simulations and digital twins for improved planning, optimisation, and troubleshooting.
- **Protocol Evolution:**
  Exploring the potential of protocols like QUIC (Quick UDP Internet Connections) to enhance efficiency and performance.
- **Post-Quantum Cryptography:**
  Encryption mechanisms that can resist attacks from both classical and quantum computers.

03 THE 6G NETWORK ARCHITECTURE DESIGN PRINCIPLES

As analysed in the preceding section, the future 6G network architecture should address 5G gaps and limitations. It should support new scenarios and requirements, adapt to RAN changes, and embrace emerging technology trends. NGMN envisions the 6G framework as a service-based platform that introduces innovations to efficiently meet the growing demands of users, applications, and industries. This framework will leverage AI/Agentic-AI as key components for enabling autonomous, intelligent networks. In addition, compared to previous generations, 6G should be designed to accomplish sustainability requirements from scratch.

The IMT-2030 framework highlights sustainability, security, and resilience, connecting the unconnected, and ubiquitous intelligence as overarching aspects which act as design principles commonly applicable to all usage scenarios. While opinions within industry vary on the need for a new air interface or core network, NGMN recognises that defining the overall 6G architecture is a complex task that will require extensive discussion and collaboration across industry.

Establishing clear design principles is essential to promote cooperation, minimise unnecessary complexity, and ensure alignment with long-term objectives. As a foundation, the NGMN MNO Members propose the following design principles to guide the evolution of the network architecture towards 6G.

- **Enable Innovation:**

  The network architecture should facilitate the delivery of new IMT-2030 capabilities, including sensing, AI/ML, computing, and enhanced security.

- **Modular Manner:**

  New features should be deployable on-demand when needed without compromising existing core connectivity services. This concept of modularity can apply to both networks and devices.

- **Network Operational Simplicity:**

  Prioritise network operational simplification through AI/Agentic-AI-driven or other methods of automation, cloud-native design, open standards and interoperable components, network exposure, an extended SBA, and alignment on key multi-vendor interfaces.

- **Sustainability:**

  Minimise environmental impact by reducing energy consumption and carbon footprint through cross-layer and cross-domain optimisation. Ensure economic sustainability through cost-efficient deployments and operational models. Ensure social sustainability, in terms e.g., of digital inclusion and trustworthiness.

- **Trustworthiness:**

  Ensure built-in security by leveraging evolving security paradigms and technologies and implementing quantum-safe infrastructure to enhance security, privacy and resilience.

- **Cloud-Native:**

  Embrace cloud-native principles and further extend the SBA.

- **Native Voice Services:**

  Ensure seamless support for native voice services from day one.

- **Network as a Service:**

  Enable the provision of new services, such as computing as a service, data as a service, and AI as a service, leveraging the network's capabilities and assets, to enhance the value of telco infrastructure.

- **Interoperability and Compatibility:**

  Ensure seamless interoperability with fixed networks, NTNs, and 5G systems to enable ubiquitous connectivity; Ensure compatibility and interoperability with 5G.

- **Smooth Migration:**

  Prioritise a smooth migration path from 5G SA to 6G, avoiding unnecessary deployment options.

- **Automation and Network Digital Twins:**

  Utilise AI/Agentic-AI-enabled automation and network digital twins for proactive network management, enabling predictive maintenance and improved user experience.

- **Appropriately Disaggregated Multi-Vendor Approach:**

  Foster a multilateral ecosystem where diverse stakeholders can collaborate and innovate on a shared platform, creating value through open standards and interoperability, and supporting decentralised deployments when needed.

- **Backwards Compatibility and Reusability:**

  Avoid unnecessary incompatibility and maximise the reuse of existing infrastructure through software upgrades.

04 CHALLENGES & WAY FORWARD

4.1 CHALLENGES

The journey toward the evolution of network architecture from 5G to 6G is still in its early stages. At this point, detailed discussions about specific architectural options are premature, particularly as many foundational aspects remain uncertain, such as the specific use cases and the necessity for a new RAT. NGMN MNO Members identified the following challenges in migration from 5G to 6G, particularly concerning the core network:

- Achieving consensus during standardisation
- Managing the complexity of enabling new capabilities & capacity and preserving legacy systems
- Efforts for infrastructure upgrades
- Identify and understand key 6G business case
- Spectrum issues
- Redeploying existing services
- Achieving consensus on standardisation is the most critical challenge among these.

4.2 STANDARDISATION CONSIDERATIONS

Collaboration and alignment across the industry are evidently essential to ensure a successful transition. Many NGMN MNO Members and vendors and academia from NGMN's membership are actively participating in 3GPP discussions, focusing on 6G use cases, requirements, and sustainability studies that will lay the foundation for the 6G network architecture. It is imperative to allocate sufficient time for 6G architecture studies to avoid repeating the challenges encountered with the 5G design process. As we witnessed, implementation with early support for 5G NSA created challenges for the subsequent migration towards 5G-SA. Along with 3GPP standardisation, NGMN MNO Members also consider prioritising cost efficiency as one of the top areas of focus.

4.3 NEXT STEPS

NGMN is dedicated to guiding the evolution of mobile networks across generations towards a successful future. Building upon the analysis of factors influencing future network architecture change and the proposed design principles. NGMN will continue to lead studies and deliver guidance and recommendations on key areas related to network architecture evolution. These include developing migration strategies, ensuring seamless coexistence with existing 5G networks, and exploring the new capabilities that 6G must support. These efforts will drive the evolution of future network architecture towards a scalable, innovative, efficient, sustainable, and future-proof framework that will empower a truly connected and intelligent society.

05 LIST OF ABBREVIATIONS

3GPP	3rd Generation Partnership Project
AI	Artificial Intelligence
ML	Machine Learning
DT	Digital Twin
EPC	Evolved Packet Core
IMT	International Mobile Telecommunications
IMT-2020	Requirements for networks beyond 2020 (5G)
IMT-2030	Requirements for networks beyond 2030 (6G)
IoT	Internet of Things
ISAC	Integrated Sensing and Communications
ITU	International Telecommunication Union
ITU-R	ITU Radiocommunications Sector
M2M	Machine-to-Machine
MNO	Mobile Network Operator
NF	Network Function
NGMN	Next Generation Mobile Network Alliance
NSA	Non-Standalone
NTN	Non-Terrestrial Network
QUIC	Quick UDP Internet Connections
RAT	Radio Access Technology
RAN	Radio Access Network
SA	Standalone
SBA	Service Based Architecture
SMF	Session Management Function

06 REFERENCES

[1] NGMN, 6G Position Statement, Sep 2023,
https://www.ngmn.org/wp-content/uploads/NGMN_6G_Position_Statement.pdf

[2] NGMN, 6G Drivers and Vision, April 2021,
https://www.ngmn.org/wp-content/uploads/NGMN-6G-Drivers-and-Vision-V1.0_final.pdf

[3] NGMN, 6G Use Cases and Analysis, February 2022,
https://www.ngmn.org/wp-content/uploads/220222-NGMN-6G-Use-Cases-and-Analysis-1.pdf

[4] NGMN, 6G Requirements and Design Considerations, Feb 2023,
https://www.ngmn.org/wp-content/uploads/NGMN_6G_Requirements_and_Design_Considerations.pdf

[5] NGMN, ITU-R Framework for IMT-2030: Review and Future Direction, Feb 2023,
https://www.ngmn.org/wp-content/uploads/ITU-R_FRAMEWORK_FOR_IMT-2030.pdf

[6] NGMN, Radio Performance Assessment Framework, Dec 2024,
https://www.ngmn.org/wp-content/uploads/241018_Radio_Performance_Assessment_Framework_V1.0.pdf

[7] Recommendation ITU-R M. 2160,
Framework and overall objectives of the future development of IMT for 2030 and beyond,
https://www.itu.int/dms_pubrec/itu-r/rec/m/R-REC-M.2160-0-202311-I!!PDF-E.pdf

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NEXT GENERATION MOBILE NETWORKS ALLIANCE

NGMN is a global, operator-driven leadership network founded in 2006 by leading international mobile network operators (MNOs). As a global alliance of nearly 70 companies and organisations - including operators, vendors, and academia - NGMN provides industry guidance to enable innovative, sustainable and affordable next-generation mobile network infrastructure.

NGMN drives global alignment of technology standards, fosters collaboration with industry organisations and ensures efficient, project-driven processes to address the evolving demands of the telecommunications ecosystem.

VISION

The vision of NGMN is to provide impactful industry guidance to achieve innovative, sustainable and affordable mobile telecommunication services to meet the requirements of operators and address the demands and expectations of end users. Key focus areas include Mastering the Route to Disaggregation, Green Future Networks and 6G, while supporting the full implementation of 5G.

MISSION

The mission of NGMN is:

- To evaluate and drive technology evolution towards the three **Strategic Focus Topics:**
  - **Mastering to the 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:**

    Developing sustainable and environmentally conscious solutions
  - **6G:**

    Anticipating the emergence of 6G by highlighting key technological trends and societal requirements, as well as outlining use cases, requirements, and design considerations to address them.
- To define precise functional and non-functional requirements for the next generation of mobile networks
- To provide guidance to equipment developers, standardisation bodies, and collaborative partners, leading to the implementation of a cost-effective network evolution
- To serve as a platform for information exchange within the industry, addressing urgent concerns, sharing experiences, and learning from technological challenges
- To identify and eliminate obstacles hindering the successful implementation of appealing mobile services.