

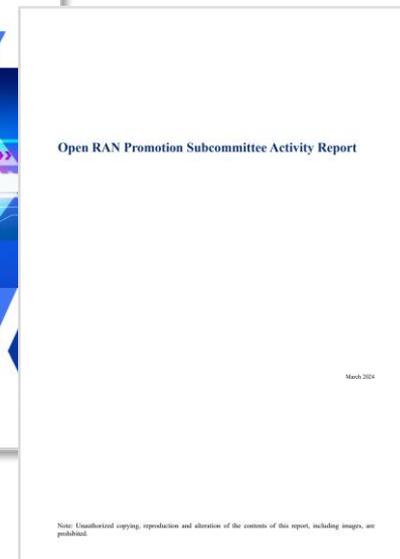
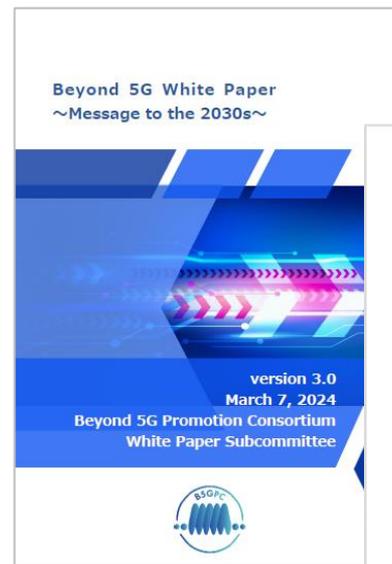
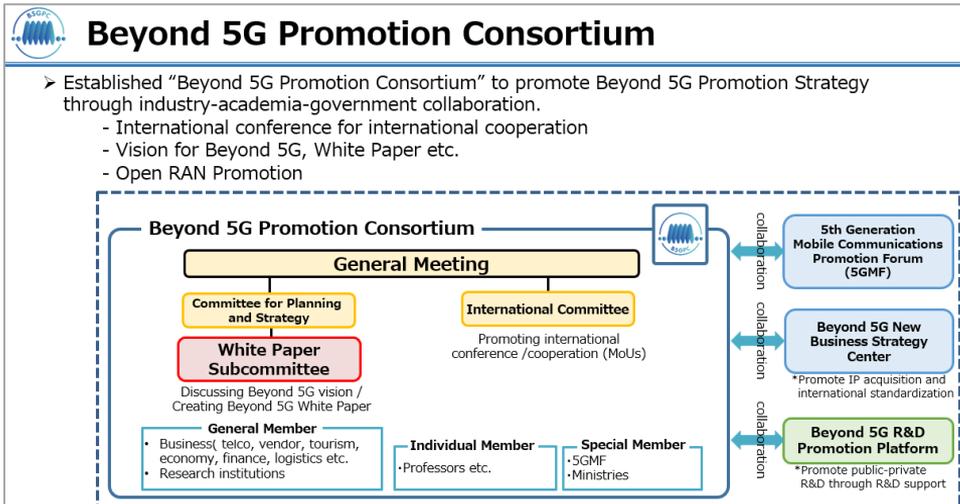
# XG Mobile Promotion Forum Overviews

Takehiro Nakamura

Leader of 6G Promotion Project, XGMF

CSO, NTT DOCOMO, Inc.

Established in December 2020



<https://b5g.jp/en/output/>

# XGMF Launched



5G Mobile Communications  
Promotion Forum (5GMF)

Beyond 5G Promotion  
Consortium (B5GPC)

Incorporated

From April 1, 2024

XG Mobile Promotion Forum  
(XGMF)



<https://xgmf.jp/en/>

**Co-chair**

Prof. MORIKAWA, Hiroyuki (The UNIVERSITY OF TOKYO)  
Prof. NAKAO, Akihiro (The UNIVERSITY OF TOKYO)

Number of members: 179 (as of January 15, 2025)

- **Sharing 5G/6G Global information**

Gathering global information on 5G deployment, 6G technology development, understanding trends and landscape, etc., and disseminating the 5G/6G information in Japan.

- **Strengthening international coordination**

Building consensus in pre-standardization activities in preparation for the full-scale launch of 6G standardization activities

- **Promoting international industry-academia collaboration**

Building a human resource network for international industry-academia collaboration, such as organizing 5G/6G events and academic conferences in Japan and overseas.

# Global Collaborations

## Collaboration partners



5G Alliance for Connected Industries and Automation

5G ACIA



WWRF



INDONESIA 5G FORUM

Indonesia 5G Forum



IMT-2020(5G) Promotion Group



5GTR Forum



NBTC



Automotive Association

5GAA (LOI締結)



MTSFB



FLEXIBLE FACTORY  
PARTNER ALLIANCE

FFPA



IMT-2030(6G) Promotion Group



6G Forum



Open6G

## To be collaboration partners



Bharat 6G Alliance



6G Platform



6G Future Network Services



6G Flagship

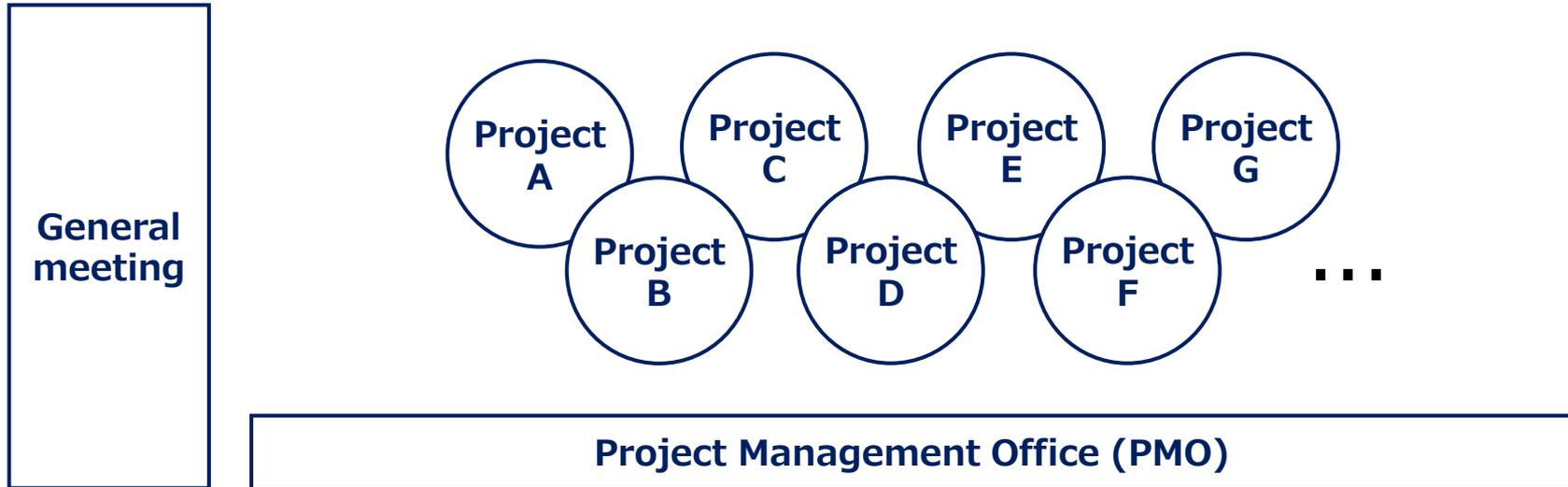


Next G Alliance



6G-IA

- **Project** : Unit of activity established based on XGMF member proposals for each mission
- **The Project Management Office (PMO)** : Supports project activities and makes decisions on general Forum management matters



★General meeting: Decision-making body for important matters (business plans, income and expenditure accounts, election of directors, etc.)

# XGMF Projects



Currently 24 projects on 6G, mmWave, Local 5G, NTN, verticals, ...

 <p><b>NTN Promotion Project</b> Leader: Morio Toyoshima NICT</p>	 <p><b>6G Promotion PJ</b> Leader: NAKAMURA, Takehiro NTT DOCOMO</p>	 <p><b>Space × Ground Use Case Study Project</b> Leader: FUJIMOTO, Koichirou NEC</p>	 <p><b>Local 5G testbed for smart manufacturing</b> Leader: SAKAMOTO, Yosuke NEC</p>
 <p><b>6G Network Architecture Project</b> Leader: IWASHINA, Shigeru NTT DOCOMO</p>	 <p><b>6G Radio Technology Project</b> Leader: OHTSUKI, Tomoaki Keio University</p>	 <p><b>Planning for a city-sized large-scale living laboratory</b> Leader: HIMONO, Takehiro NEC</p>	 <p><b>Creation of 5G × OT business use cases for industry</b> Leader: ISHII, Takanori SOFTBANK Corp.</p>
 <p><b>StarNet Earth</b> Leader: TAKAHASHI, Madoka NIPPON TELEGRAPH AND TELEPHONE CORPORATION</p>	 <p><b>Agriculture × XG Project</b> Leader: KANO, Kayo ON BOARD Co., Ltd.</p>	 <p><b>Terahertz Wave Wireless Technology Project</b> Leader: HOSAKO, Iwao NICT</p>	 <p><b>XG-Supply Chain Management Project</b> Leader: NATSUME, Shinobu Gems Co., Ltd.</p>
 <p><b>Greedy Multi-Tasking Displays</b> Leader: SAKUMA, Morika incri Inc.</p>	 <p><b>Social Ed-Tech for Individuality and Diversity</b> Leader: ONIZAWA, Miho incri Inc.</p>	 <p><b>Local 5G Licensing Process Shortening Project</b> Leader: MASHIYAMA Daishi NTT East</p>	 <p><b>Updating the Future of Manufacturing Manufacturing (factories, etc.) × XG</b> Leader: KAMATA, Naomi ON BOARD Co., Ltd.</p>
 <p><b>Feasibility Study of a Multimodal Generative AI Service Using Multiple LLMs with ICT (XG for LLM)</b> Leader: OKANO, Yoshiki NTT DOCOMO</p>	 <p><b>ODAIBA IX Core</b> Leader: IWANAMI, Gota INFOCITY, Inc., NAKAMURA, Takehiro NTT DOCOMO</p>	 <p><b>Surveys on the communication environment in areas attracting customers</b> Leader: YOSHII, Daijuro Murata Manufacturing Co., Ltd.</p>	 <p><b>Space-Time Synchronization Project</b> Leader: IDO, Tetsuya NICT</p>
 <p><b>The Expansion of Marine Utilization through the Evolution of ICT</b> Leader: HATAKAWA, Yasuyuki KDDI</p>	 <p><b>The Social Infrastructure in the Decreasing Population Era</b> Co-leader: HATAKAWA, Yasuyuki KDDI, NAGATA, Satoshi NTT DOCOMO, IIZUKA, Rumi Multimedia Promotion Center</p>	 <p><b>Project for realization of cross-industry orchestration</b> Leader: ISHIZU, Kentaro NICT</p>	 <p><b>Project on creation of mechanisms for linking technology with social and economic value</b> Leader: HASEGAWA, Fumiki Mitsubishi Electric Corporation</p>

# 6G Projects



## NTN Promotion Project

Leader: Morio Toyoshima NICT

Subleaders: TSUDA, Yuya SOFTBANK Corp.



## 6G Promotion PJ

Leader: NAKAMURA, Takehiro NTT DOCOMO

Subleaders: KISHI, Yoji KDDI Research  
Kashima, Tsuyoshi Ericsson Japan  
SHIROTA, Masakazu Qualcomm Japan

Advisor: NAKAO, Akihiro The University of Tokyo



## 6G Network Architecture Project

Leader: IWASHINA, Shigeru NTT DOCOMO

Subleaders: KUWABARA, Takashi FUJITSU  
TAKAHASHI, Hideaki Nokia Solutions and Network Japan

Advisor: NAKAO, Akihiro The University of Tokyo



## 6G Radio Technology Project

Leader: OHTSUKI, Tomoaki Keio University

Subleaders: SUYAMA, Satoshi NTT DOCOMO  
KANNO, Issei KDDI Research



## Terahertz Wave Wireless Technology Project

Leader: HOSAKO, Iwao NICT

Subleaders: KAWANISHI, Tetsuya Waseda University  
SHOJI, Yoza NICT



## Space-Time Synchronization Project

Leader: IDO, Tetsuya NICT

Subleaders: HARA, Motoya NICT  
SHIGA, Nobuyasu NICT

- Activities were started from the last summer.
- Each project will develop and publish some materials capturing their achievements in this spring and onward

## Objectives

- Promote 6G R&D and implementation in Japan and abroad.
- Dramatically increase Japan's presence and voice in international 6G activities and strengthen international collaboration.
- Promote inter-industry collaboration and industry development for the 6G era.
- Promote industry-academia-government and international collaboration on 6G

## Activities

- Global information gathering and domestic dissemination
- Consensus building in pre-standard activities
- Promotion of international collaboration
- Promotion of International Industry-Academia Collaboration
- Collaborate with other PJs to promote 6G discussions
- Support for Japan's activities in ITU-R WP5D



### white paper

[Beyond 5G White Paper - Message to the 2030s - Version 4.0](#)

### white paper supplement

[Beyond 5G White Paper Supplementary Volume E2E Architecture](#)

[Beyond 5G White Paper Supplementary Volume Cell-Free Distributed MIMO](#)

[Beyond 5G White Paper Supplementary Volume Radio Technologies for higher frequency](#)

[Beyond 5G White Paper Supplementary Volume Relay and Reflector Technologies](#)

[Beyond 5G White Paper Supplementary Volume AIML Technologies](#)

[Beyond 5G White Paper Supplementary Volume Sensing Technologies](#)

[Beyond 5G White Paper Supplementary Volume Sustainability and Energy Efficiency](#)

[Beyond 5G White Paper Supplementary Volume NTN Technologies](#)

- Objectives
  - Promote use cases that utilize the potential of 5G with millimeter wave and local 5G including demonstrations
  - Contribute to industry efficiency, revenue growth, and the resolution of social issues
  - Demonstrate Japan's international initiative in millimeter wave and private/local 5G.
  - Promote practical advanced 5G applications such as millimeter wave and local 5G to serve as a steppingstone toward success in the 6G era.
- Activities
  - Update white papers and other documents to promote the use of millimeter wave and local 5G
  - Hold workshops and events for industries
  - Survey and understand user needs and issues in mobile usage
  - Envision the expected usage scenarios of 5G/6G by receiving presentations on future business models from various industry players



[https://xgmf.jp/wp-content/uploads/2025/01/XGMF-White-Paper-5G-EMWD\\_Ver4.pdf](https://xgmf.jp/wp-content/uploads/2025/01/XGMF-White-Paper-5G-EMWD_Ver4.pdf)

- 6G projects in XGMF will accelerate activities for international collaboration and technical studies for key 6G technical topics
- Each project will develop and publish some materials capturing their achievements in this spring and onward
- XGMF 6G projects hopes to have opportunities to sharing views and collaborate with 6G organizations in the world to facilitate 6G standardization and deployment
- As a leader of XGMF 6G Promotion Project, I'm pleased to be a contact window for the international collaboration
  - Contact: [nakamura@nttdocomo.com](mailto:nakamura@nttdocomo.com)

Thank you for your attention

