

Memorandum of Understanding

Between “*The 5G Infrastructure Association*” and “*Telebrasil – Projeto “5G Brasil”*”
Considering that:

“*The 5G Infrastructure Association*” is established as an international non-profit association, under Belgian law, with its seat in Gent, Belgium, with a financial and organizational structure with a brand and a web-site (<http://5g-ppp.eu/>). *The 5G Infrastructure Association* is an open and independent organization and is open for collaboration to international bodies focusing on

- 5G communication systems and networks and/or
- particular technologies

and bodies working on

- 5G research,
- pre-standardization activities,
- regulatory issues and
- 5G frequency concepts and future frequency bands.

The purpose of *The 5G Infrastructure Association* is:

- Major objectives
 - To enter into the 5G PPP Contractual Arrangement with the EU Commission.
 - To promote R&D in the networks industry in order to strengthen the networks industry in the European Union.
 - To endorse the Strategic Research and Innovation Agenda as developed by the NetWorld2020 European Technology Platform and the industry roadmap as developed by the 5G Infrastructure PPP competent body.
 - To foster technology skills in Europe by attracting students.
 - To increase the competitiveness of the European industry by providing new tools and capabilities for manufacturing in Europe.
- Scope
 - 5G communication systems and networks.
 - Related research activities.
 - Contributions to the preparation of future global standards.
 - Contributions to regulatory discussions including future frequency bands.

Telebrasil – Projeto “5G Brasil” is established as a Brazilian non-profit association, under Brazilian law, with its seat in Rio de Janeiro, Brazil (<http://www.telebrasil.org.br/5gbrasil>).

Telebrasil – Projeto “5G Brasil” is willing to collaborate with international bodies focusing on

- Research and development
- Standardization
- Use cases
- Technology promotion
- 5G Frequencies and Spectrum

and bodies working on

- 5G research,
- pre-standardization activities,

- regulatory issues and
- 5G frequency concepts and future frequency bands.

The purpose of *Telebrasil – Projeto “5G Brasil”* is:

- Major objectives
 - To promote the 5G introduction in Brazil aligned with the society needs and promoting the country development and competitiveness.
 - To promote 5G R&D and utilization with financial support of entities and sectorial funds
 - To foster the signature of national and international agreements for the 5G technology deployment and technical cooperation
 - To establish a continuous interaction with non-ICT organizations, also denominated verticals, establishing the cooperation between vertical and the Telebrasil – Projeto “5G Brasil”
 - To foster technology skills in Brazil by attracting students and R&D professionals

- Scope
 - 5G communication systems and networks.
 - Related research and development activities.
 - Contributions to the preparation of future global standards.
 - Contributions to regulatory discussions including future frequency bands.

The parties agree therefore to the following:

1. The *5G Infrastructure Association* and Telebrasil – Projeto “5G Brasil” may exchange information as they may deem fit free of charge, regarding programs of work in areas of mutual interest in the field of 5G communication systems and networks.

2. The two parties agree to explore collaboration opportunities on
 - Vision of 5G communication systems and networks.
 - Technology exploitation and dissemination to ensure awareness, understanding and involvement and finally adoption
 - Requirements on 5G communication systems and networks.
 - Discussions on basic system concepts, architecture and use cases
 - Development of prototypes and proofs of concept as part of Innovation initiatives
 - Frequency bands and spectrum arrangement, identification and assignment in order to support the global regulatory process.
 - Preparation of future global standards by identification of common interest, consensus building and collaboration projects to the joint development of such standards aligned to international initiatives and bodies
 - Promoting cooperation among European and Brazilian R&D organizations and industries as well as joint-financing of R&D projects
 - Use cases of 5G, including mMTC (massive Machine Type Communications), eMBB (enhanced Mobile Broadband) and URLLC (Ultra-Reliable and Low Latency Communications), aligned to applications such as Smart Cities, Mission Critical IoT, Broadband, Consumer-centric 5G, Industry 4.0 and other topics

Means of exploring collaboration opportunities may include but are not limited to: exchange of information, documents, meetings, workshop and other joint initiatives when mutually agreed.

3. Seek to attract, develop and deploy funding sources and mechanisms to promote 5G-related R&D initiatives based on the aligned opportunities identified by both parties

4. This Memorandum of Understanding shall enter into force on the date it is signed by duly authorized representatives of both parties. This Memorandum of Understanding shall last for three years and may be renewed by mutual consent. This Memorandum of Understanding may be terminated by either Party before the expiry date with three months notice.
5. Any difficulties arising shall be agreed wherever possible at the working level between the relevant Working Groups and Technical Bodies of both organizations. Matters which cannot be resolved at working level shall be subject to discussion between the two parties at the level of the Chair of the Board of The 5G Infrastructure Association and the Chair of Telebrasil – Projeto “5G Brasil”.
6. The contact persons for the application of this Memorandum of Understanding will be Jean-Pierre Bienaimé, Secretary General of *The 5G Infrastructure Association* and Cesar Rômulo Silveira Neto, Chair of *Telebrasil – Projeto “5G Brasil”*.
7. General
 - 7.1 Notwithstanding any other provision or clause in the present MoU, the signature of this MoU can in no way be construed as an obligation to engage into certain activities or projects with legally binding commitments, or as a restriction for the Parties in their activities in any other way.
 - 7.2 In principle Parties will not exchange confidential information in the context of the MoU. If the Parties want to exchange certain confidential information for specific purposes, they will have to enter into a specific non-disclosure agreement.
 - 7.3 The existence of the present MoU and the content thereof will not be considered as confidential information. However, each communication by either Party that will refer to the other Party will be subject to the prior approval of the latter.
 - 7.4 Either Party shall bear its own costs, fees or other expenses incurred during the term and in connection with this MoU.
 - 7.5 This MoU shall not be construed so as to create any legally binding commitments or any liabilities between the Parties, and the Parties shall not be under any obligation to pay any damages under this MoU. However, should such exclusion of liability not be enforceable under the applicable law, any liability or damages which any Party may face as between it and the other Parties, however caused or arising and irrespective of the specific theory of liability giving rise to or supporting such liability or damages, shall not in any case (even in case of gross negligence) exceed the amount of 5.000 € in the aggregate.

Done at Barcelona on February 28th

Christine Leurquin
Acting Chair of the Board of
The 5G Infrastructure Association

Cesar Romulo
Chair of the Board of
Telebrasil – Projeto “5G Brasil”