

平成 30 年度日欧共同公募委託研究（第四弾） 第 2 回中間レビュー評価結果（概要）
（研究期間 平成 30 年度～令和 3 年度）

研究開発課題名	受託者（共同研究者）
採択番号 19601 欧州との連携による Beyond 5G 先端技術の研究開発 副題 大容量アプリケーション向けテラヘルツエンドトゥーエンド無線システム Acronym ThoR	学校法人早稲田大学 （学校法人千葉工業大学、国立大学法人東海国立大学機構、日本電気株式会社、高速近接無線技術研究組合） （Technische Universität Braunschweig(ドイツ)、Deutsche Telekom AG(ドイツ)、 Fraunhofer Institute for Applied Solid State Physics(ドイツ)、Siklu Communication Ltd.(イスラエル)、 University of Lille(フランス)、University of Stuttgart(ドイツ)、Vivid Components Ltd.(イギリス)）
評価※	Project has fully achieved its objectives and milestones for the period.
主な評価コメント	<p>The ThoR project targets the provision of solutions for the wireless fronthauling and backhauling links required by 5G and B5G networks. In view of the data traffic density and volume, and the network densification, data rates of 200+ Gbps will be targeted. This will be made possible by exploiting frequency bands around 300GHz. ThoR targets demonstrations (both HW and SW) to validate their system concept and confirm its feasibility, and also the securing of the corresponding spectrum allocation at the World Radio Conference 2019.</p> <ul style="list-style-type: none"> The level of innovation during this second period remain very high for reaching a high performance 300 GHz@100+Gbps RF wireless link demonstrator which requires specific THz PHY technology, advances in photo-mixers, amplifiers including travelling wave tube amplifiers, receivers, up-converters and channel aggregation. The deliverables about propagation and models for antennas and WRC 2019 consequences on ThoR frequency range provide very interesting results for the robustness of the 300 GHz communication and its acceptance in the radio spectrum.
※評価 ランク表	<ol style="list-style-type: none"> (1) Project has fully achieved its objectives and milestones for the period. (2) Project has achieved most of its objectives and milestones for the period with relatively minor deviations. (3) Project has achieved some of its objectives and milestones; however, corrective action will be required. (4) Project has failed to achieve critical objectives and/or milestones and/or is severely delayed.