

平成 30 年度日欧共同公募委託研究（第 4 弾）終了レビュー評価結果（概要）
（研究期間 平成 30 年度～令和 4 年度）

研究開発課題名	受託者（共同研究者）
<p>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</p> <p>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</p> <p>Acronym ThoR</p>	<p>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）</p>
<p>評価※</p>	<p>Project has achieved most of its objectives and milestones for the period with relatively minor deviations.</p>
<p>主な評価コメント</p>	<p>Globally the project objectives are met with some difficulties to fully achieve Objective-O2 and demonstrating THz communication links close to 1 km distance with significant throughputs, due to the lack of powerful PA based on TWTA technology which could not reach the 300 GHz frequency range. This point is however important for the exploitation plan. In the use case of THz wireless communication to replace Optical fiber communication into dense areas, the 160m link demonstrated is too short for being attractive to the market. The km distance seems necessary.</p> <p>Beside this point, the project has been exceptionally well managed with a good collaborative atmosphere and outcomes despite the complex conditions of Covid time while managing multi-site DEMO and operations. The resources have been well monitored and controlled within the +10% margin.</p> <p>All deliverables are of high quality and in general meeting DoA expectations and performances. They were delivered in time and according to the new Amendments plans.</p> <p>The DEMO concept based on 4 demos with sub-demos is well appreciated and helped in reducing risks for the final DEMO-3. It has also helped each of the partners to characterize their technology and consequently supporting them in the development of the impact benefits of their ThoR contribution. The modularity of the hardware and Software/Simulation DEMOs could be reused for future THz projects.</p> <p>The milestones were completed and in line with DoA.</p> <p>Dissemination, Exploitation, and impact parts of the project are excellent and well documented into WP7 and its deliverables.</p>
<p>※評価 ランク表</p>	<p>(1) Project has fully achieved its objectives and milestones for the period. (2) <u>Project has achieved most of its objectives and milestones for the period with relatively minor deviations.</u> (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.</p>