

## The national e-Infrastructure RENAM for the development of high-performance computing and information technologies

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Over the past several years the dependence of research and education on access to high-speed networking infrastructures, to large-scale computing and other e-Infrastructures' services is rapidly increasing [1]. The use of modern high-performance computing and information technologies allows solving complex problems of mathematics, physics, climatology, life science and other scientific fields [2]. The report is devoted to the analysis of approaches and solutions for the development of the national infrastructure of the RENAM network (Research and Educational Networking Association of Moldova, [www.renam.md](http://www.renam.md)), which will ensure the deployment of modern information technologies and services for research and education. The prospects of creating new regional cross-border optical channels and other components of the electronic RENAM-GEANT (Gigabit European Advanced Network Technologies, [www.geant.net](http://www.geant.net)) platform on the basis of the EU EaPConnect project are described [3, 4].

### Bibliography

- [1] Bogatencov P., Secrieru G., *Regional e-infrastructure and services for research and education in E&P Countries*. Eastern European Journal for Regional Studies (EEJRS). Vol.3, Issue 1, June 2017, pp. 89-101.
- [2] Bogatencov P., Secrieru G., Tighineanu I., *E-infrastructura RENAM - platforma interoperabila de colaborare, resurse si servicii informatinale in cercetare si educatie*. Revista ACADEMOS nr. 2(45), 2017, pp. 19-26.
- [3] \*\*\*, *Project*, <https://www.eapconnect.eu>
- [4] \*\*\*, *GEANT Pan-European Network*, <https://www.geant.org>