## Research program: "Design and implementation of solutions for the secure management of outsourced data"

## Annex C

## Department of Department of Management Engineering, information and production

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## Description

The research is part of the ESCUDO-CLOUD project, whose objective is the development of solutions for data management and security in the cloud. The local scientific coordinator at the University of Bergamo for the project is Prof. Stefano Paraboschi.

The specific objective of this activity is to offer support to the design and implementation of techniques for protecting data hosted by a cloud provider, offering protection safeguards that are independent of the actions of the cloud provider. Data security is achieved through the use of cryptographic techniques that do not offer to the cloud providers the ability to access the encryption key. The project considers the management of these issues in a variety of scenarios, considering resource sharing among users of the cloud provider and the ability to use a variety of cloud providers to offer greater safety and efficiency. The activity will specifically target the OpenStack framework.