

## Journalistic Description

Nowadays, privately held as well as public Cloud computing services hold the promise to deliver a host of benefits to both public sector organizations and enterprises, including reduced Capital Expenses, improved performance and scalability, enhanced reliability, as well as an overall reduced Total Cost of Ownership for their ICT infrastructures and services. These benefits are particularly important for public bodies, especially for governmental agencies, municipalities and regions, all over the EU, which are nowadays under extreme pressure to operate under constrained ICT budgets. The primary goal of STRATEGIC is to boost the adoption of public cloud services, particularly within public sector organizations, through working towards three complementary directions:

**The migration/porting of existing on-line services to the Cloud** (i.e. the cloud-enablement of existing services). The cloud-enablement of existing on-line distributed services (i.e. the vast majority of public bodies in the EU) can on the one hand, facilitate public bodies to leverage the benefits of cloud computing, while on the other hand, it can also significantly enhance the number of public cloud services that could become readily available for replication and (re)use by other public bodies.

**Replication and re)use of existing services** i.e. of services which have been already successfully deployed across EU countries and regions. This migration and customization effort is required in order to adapt the services to different legal, ethical and governance requirements, while also including the necessary localization effort.

**Composition of new value-added services.** Successful public cloud services can also serve as a basis for building innovative value-added services, thereby extending the pool of available services and encouraging end-users (i.e. business and citizens) to use them. As a result, the ability to compose and integrate novel public cloud services based on other existing/legacy services could allow public administrations to streamline their processes thereby reducing overheads, alleviating bureaucracy and overall improve citizens' benefits and satisfaction.

As aforementioned STRATEGIC will primarily address the need of organizations (notably public sector bodies) to adopt cloud computing and to leverage the benefits of public cloud services. Thus, the STRATEGIC framework will comprise cloud infrastructures and tools that will ease public sector organizations to flexibly and effectively migrate their services to the cloud. Using the STRATEGIC framework, public bodies will be able to cloud-enable their services, but also to adapt and localize «best practice» services that have been successfully deployed by other public bodies in other EU countries and regions. These adaptation and localization functionalities will greatly benefit (cloud «newcomer») public bodies that have no cloud deployments at all, since they will offer them with a readily available bundle of public services that they could directly adopt.

Apart from public bodies, STRATEGIC addresses also cloud application developers, cloud services integrators, independent software vendors (ISVs) and cloud services providers (including providers of hosting services) . Cloud service developers and ISVs will be offered with tools and techniques for developing public cloud services, hence adapting and localizing existing ones. Cloud services providers will have opportunities to offer cloud hosting services to the proliferating public sector organizations that will be gradually adopting public cloud services.

STRATEGIC will integrate and deploy a cloud framework that will provide services to citizens, public bodies, enterprises, ISVs and cloud services providers. The envisaged usage of these services by the various stakeholders is as follows:

**Citizen - End-User of Public Cloud Services:** Citizens will be the end-users of the public cloud services to be developed and deployed through the STRATEGIC framework. These services may include governmental services, as well as services provided by public sector third party providers. Citizens will be able to use «cloudified» versions of existing on-line services, as well as replicated versions of best practice services. Therefore they will directly benefit from their ability to use effective governmental services (such as form filling, transactions with local/regional government), as well as from the reliability and cost-effectiveness of the various services.

**Enterprises:** STRATEGIC will empower commercial organizations to leverage public cloud services from the market place, in order to integrate their business processes into appropriate governmental processes. Exploiting the STRATEGIC tools will also enable the integration and use of government services and processes by enterprises, notably through the composition of services that blend governmental processes with enterprise processes.

**Public bodies - Local/Regional/National Government agencies:** Government agencies will use several services of the STRATEGIC framework towards cloud-enabling existing services, migrating/porting existing services across providers and developing new cloud-based services (in collaboration with ISVs acting on their behalf), thus will be able to benefit from the elasticity, cost-efficiency and reliability of the cloud. At the same time they will have the opportunity to provide added-value services that boost operational efficiency in the public sector e.g., on the basis of reuse of existing services or even based on the appropriate integration of other public cloud services that encode the workflow business processes of enterprises.

**Cloud application developers, solution providers and ISVs:** Cloud application developers and ISVs would be able to adapt existing public services to cloud condition, using the governance toolkit of the STRATEGIC project. Furthermore, they will be offered the possibility to use STRATEGIC services (e.g., establishment of VMs, management of instances, reuse of stubs to existing services) in order to implement novel added-value services either for citizens or for businesses.

**Cloud Services Providers:** Cloud services providers would endeavor to reuse the STRATEGIC tools, services or standards (such as CDMI (Cloud Data Management Interface) and OCCI (Open Cloud Computing Interface)) in order to provide services in conjunction with the STRATEGIC marketplace. In this way they will have opportunities for new customers and revenue streams, through offering hosting services to the users of the STRATEGIC framework and to the STRATEGIC marketplace.

**Public Sector Governmental Cloud provider:** Governmental cloud providers will be able to use STRATEGIC tools in order to deploy and manage services within the STRATEGIC marketplace. In this context, a special reference to cloud providers for the public sector is made given that several core governmental processes (e.g., citizen identification services) should not be outsourced to private sector Cloud infrastructures.

**Cloud broker:** Another role and stakeholder within the STRATEGIC framework is the role of the cloud broker, who will be in charge of operating the brokerage and marketplace services. It is envisaged that the cloud broker will provide not only infrastructure, but also services associated with the negotiation of access to public sector Cloud resources (i.e. access and integration to governmental services) as well.

Concluding, the main goal of STRATEGIC is to enable, pilot and evaluate a radical shift in the way public cloud services (and existing on-line services) can be migrated, replicated and reused across different regions, as well as in the way they can be used in the composition of novel services. To this end, the project will systematically study processes and needs associated with the secure and privacy-friendly replication, migration and extension of public cloud services and will accordingly integrate a cloud-based infrastructure (including various tools and techniques) that could successfully address these needs for a number of stakeholders including public bodies, cloud application developers, cloud service providers and ISVs. The main ICT infrastructure to be integrated in the scope of the project will be the STRATEGIC framework, which will combine/integrate a range of technical developments from background projects (FP7 OPTIMIS, FP7 VENUS-C, FP7 STORK and CIP-PSP SEMIRAMIS) in order to open new horizons in the secure and privacy friendly migration, adaptation, governance and development of public cloud services, notably in terms of e-government services that are operated and/or used by public bodies. The STRATEGIC framework, while also eliciting a wide range of best practices and policy development guidelines for sustaining, extending and enhancing the scope of the STRATEGIC concept for public cloud services migration, development, adaptation and governance. STRATEGIC will focus on cloud computing for e-government services, with the goal of enabling public sector organizations to fully leverage the benefits of public cloud services. Nevertheless, most of the functionalities of the STRATEGIC framework are relevant to the adoption of public cloud services by private enterprises as well.