

# Mission-critical Business Process Solution Services for Municipal Governments

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## Abstract

Municipal governments are currently affected by severe financial conditions and are facing significant issues in endeavoring to achieve IT cost reductions and to promote business process reforms (BPR).

In order to resolve these issues, NEC has released the mission-critical business process solution service “GPRIME for SaaS.” The service provides a comprehensive IT business process for municipal governments based on the SaaS model. Various advantages are featured and these include low cost and short term system introductions compared to those of the conventional customized systems building model. Also featured are reduced burden for staff members in performing the routine operations of system administration and in dealing with revisions to legal regulations.

## Keywords

cloud computing, SaaS, cost reduction, BPR  
burden reduction in management and operations

## 1. Introduction

Municipal government expectations of benefits from cloud computing are increasing in the areas of reduced TCO (Total Cost of Ownership) of IT infrastructures and for the promotion of operations work outsourcing. Especially those municipal governments that do not have enough IT specialists manning their offices and also have severe financial issues want to run their mission-critical systems on the SaaS model.

To meet such needs, NEC has started to provide “GPRIME for SaaS,” a mission-critical business process solution service that targets the municipal governments of communities with less than one hundred thousands (100,000) population. This paper introduces and outlines the features of this service, as well as discussing the process by which the service is provided.

## 2. Current Conditions and Issues of Municipal Governments

Decreases in tax income due to the economic recession as well as increases in social security related budgets are tending to tighten the finances of municipal governments year by year. Even so, the creation of new social services systems and modifications of existing systems such as medical services for the elderly, child allowance systems, etc. have been intro-

duced. This has resulted in an increase in IT related expense for municipal government offices.

Moreover, online applications have been introduced to provide better services for the community and companies and there are now so many issues waiting for attention in municipal government offices that are accelerating the trend toward IT systems. This trend is strengthening information security policies, as well as preparing countermeasures for BCP (Business Continuity Plan). However, before solving these issues, priorities must be placed on modifications to the legal systems in the context of limited human resources as well as on the budgets. How to enable business processes to solve these issues with a limited number of staff members and a restricted budget is the most urgent priority.

## 3. NEC's Solutions – Providing Services for Mission Critical Business Operations

In order to resolve the aforementioned issues, NEC has prepared “GPRIME for SaaS” a service that provides a comprehensive business operation system for Municipal governments based on the SaaS model. The “GPRIME for SaaS” service has been developed based on the business package software already being employed by many municipal governments, so that users can proceed with their business operations in the accustomed operations environment.

It also provides outsourcing services to conduct various mission-critical business operations such as data input, ledger sheet output, preparation and sealing of letters, delivery operations, etc. in order to achieve a total service in support of mission-critical business operations.

By proceeding with the “business process reform (BPR)” according to the standardized business processes provided by “GPRIME for SaaS,” municipal governments can expect to reduce the TCO of mission-critical systems by around 30% (compared to NEC’s conventional models). They will also be able to significantly reduce the staffing burden required for system modifications brought about by laws and regulations revisions.

Moreover, the system introduction period is expected to be reduced by 50% (compared to NEC’s conventional models). By shifting the enabled spare cost and manpower resources, thus created in the efficient business operation environment to provide better services for the community, municipal governments will be able to generate more citizens satisfaction.

#### 4. Outline of Services

##### 4.1 Target Business Operations of Services (Business Operations Services Menu)

A total of five mission-critical business operations are suit-

able targets for applying SaaS model based services. These are “community information,” “general information,” “finance and accounting,” “payroll” and “document management” (see Fig. 1 ).

##### 4.2 Shared Business Operations Service

The four services described below are classified as shared business operations services and are provided as standard services.

###### (1)SaaS Basic Service

The business operations system described in Section 4.1, is provided as a SaaS based model and it allows users to use the data center facilities and the server system environment and also includes a basic maintenance service.

###### (2)Operations Service

This includes the data center operation and help desk services.

###### (3)System Introduction Support Service

This includes introduction consulting and tutorial services. The tutorial services provide training for preparation and operation planning when introducing the business operations services as well as a system administration training course for managers.

###### (4)Data Migration Support Service

This service migrates existing system data via standard format according to the service starting schedule.

Name of service	Business detail	Name of service	Business detail	
GPRIME for SaaS (Community information)	Community records	GPRIME for SaaS (Community information)	Kindergarten fee	
	Aliens registration		Long-term care insurance	
	Seal*1 registration		Rent for municipal housing	
	Election	GPRIME for SaaS (General information)	General information support	
	National pension			
	School age children list	GPRIME for SaaS (Financial and accounting)	Budget preparation	
	Addresses/payment management		Budget management	
	National health insurance (qualification)		Budget analysis	
	National health insurance		Expenditure management	
	Residential tax (individuals)		Revenue management	
	Residential tax (corporations)		Management of cash that is not classified as expenditure and revenue	
	Light motor vehicle tax		Finance records management	
	Property tax		Statement management	
	Tax collection operation		Statement analysis	
	Back tax management		GPRIME for SaaS (Human affairs/payroll)	Human affair management
Medical care system for senior citizens	Payroll calculation			
Medical care for the disabled, etc.	Welfare			
Child allowances	GPRIME for SaaS (Document management)	Draft storage		
Child-rearing allowance		Storage management		
Nursery school fees		Information disclosure		

\*1 Seal: Signature seal - INKAN

Fig. 1 Services provision list.

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### 5. Features and Advantages of the Service

NEC can offer secure and safe services based on the abundant experience and expertise accumulated from our solutions provided for over 300 municipal governments. The major features and advantages of our services are explained below.

#### 5.1 Cost Reduction with Standardized Business Operations Services

Instead of employing customized services, the use of standardized or shared business services will reduce the cost of service introductions and will also contain maintenance costs after services introductions, TCO (Total cost Ownership) reductions will thereby result.

#### 5.2 Achievement of Short-period Introductions with Pre-configured Services

Many services have already been implemented at the offices of our customers so that we can provide pre-configured services using SaaS based models. This enables a short-term introduction schedule compared to the customized system introduction and configuration. Even for the needs of customization, only simple operations such as parameter settings, etc. are necessary.

Fig. 2 shows the standard introduction schedule that NEC

plans. It requires only about 5 to 7 months: starting from a consultation for service introductions, SaaS implementation (parameter setting) and data migration to ending with a staff tutorial.

#### 5.3 Long-term Continuous Usage Availability

A fixed-rate charging service enables budget administration equalization. NEC will continue to provide services so that long term secure and safe system usage can be expected.

#### 5.4 Reduction of Staffing Burden for Systems Management

Systems management and operations without ownership enable a reduction in the staff burden of systems management and operations. Even when case laws or regulations are revised, NEC will continue to support our customers as a service provider.

#### 5.5 Services with Expandability and Potential

Business operations that are not implemented at the time of the system introduction may be added later on. Due to our plentiful service menus enabling system extension at any time as required, municipal governments can thereby expect even more convenient and efficient business operations and can concentrate on improving their services for the community.

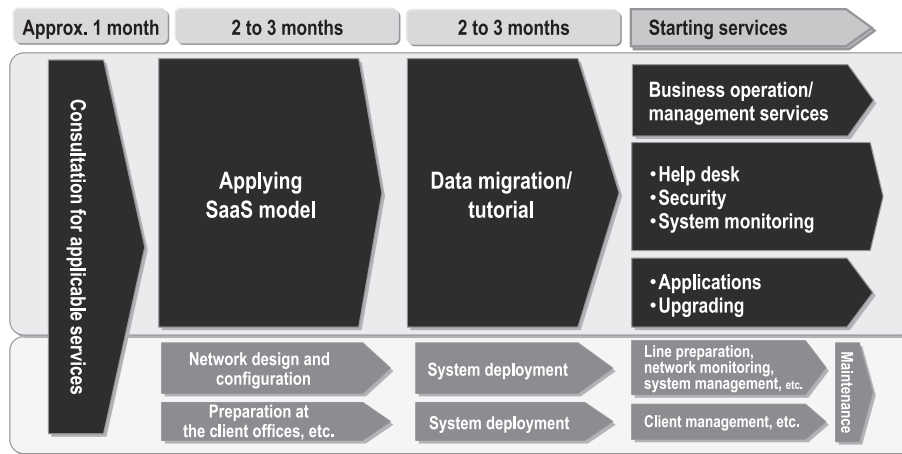


Fig. 2 Schedule of standardized services introduction.

## 6. Conclusion

In the recent market environment that features an increased need for the equalization of IT investments and system TCO reductions, user interest is tending to focus more on the use of services adopting cloud-computing including SaaS. NEC is promoting services providing systems configuration platforms as well as “cloud-oriented service platform solutions.”

One such platform, GPRIME for SaaS has been proven to offer significant efficiencies for the municipal governments that have introduced it.

While cooperating with NEC Nexus Solutions, Inc. and our partner companies nationwide, NEC will promote further expansion of our services and will contribute to municipal governments by reducing their IT investment load and by supporting them in achieving their “business process reforms.”

### Author's Profile

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