



Recommendation from BSA| The Software Alliance on Japan's Digital Transformation

October 30, 2020

BSA | The Software Alliance (**BSA**)¹ appreciates the ongoing effort by the Government of Japan to accelerate digital transformation across society. We support the Government of Japan's aim to advance reforms by fully unleashing the potential of digital technologies, including the plan to establish a dedicated agency functioning as a control tower to drive this goal. BSA members lead the world in offering cutting-edge technologies and services, including cloud computing, data analytics, machine learning, and artificial intelligence, working closely with governments around the world to improve citizen services. We recognize the importance of enabling societies to benefit from the social developments that are supported by advanced software-enabled technologies and we are eager to contribute to Japan's efforts to create a strong, resilient foundation to prepare for current and future challenges including pandemics and natural disasters.

Observations and Recommendations

To support governments around the world to leverage digital solutions, BSA's foundation, Software.org,² published "The Case for Modernizing IT Now"³ which introduces six steps governments can take to modernize IT. This document provides examples of software solutions that can transform government operations. With the Government of Japan launching the Office for Preparing Digital Transformation Promotion Bill (Preparatory Office) and in the process of setting digital policies for the creation of the new Digital Agency next year, we hope the White Paper would be helpful reference. Specifically, we strongly recommend partnership between government and industry to:

1. Support and expand remote workforce collaboration
2. Ensure the security of distance work technology
3. Improve digital presence and offerings
4. Invest in digital service delivery tools
5. Modernize citizen support operations
6. Plan and prepare for future disruptions

The Government of Japan's current focus on digital transformation is closely aligned with the above priorities. We commend the Government for recognizing the importance of enabling "best service for citizens", including by taking full advantage of online medical consultations, medication instructions, and distance learning — all of which is enabled by cloud-based solutions.

¹BSA's members include: Adobe, Amazon Web Services, Atlassian, Autodesk, AVEVA, Bentley Systems, Box, Cadence, Cisco, CNC/Mastercam, IBM, Informatica, Intel, MathWorks, Microsoft, Okta, Oracle, PTC, Salesforce, ServiceNow, Siemens Industry Software Inc., Sitecore, Slack, Splunk, Synopsys, Trend Micro, Trimble Solutions Corporation, Twilio, and Workday.

² <https://software.org/>

³ https://software.org/wp-content/uploads/ITmodernization_whitepaper.pdf

Cloud computing services provide economies of scale and allow customers, including government clients, to tailor their costs to their needs. As such, we encourage the Government of Japan to enable more flexibility in the government procurement system for acquiring cloud computing services, including reforms to budget planning and evaluation methodologies. We support the planned Digital Agency functioning as the control tower for setting unified standards for adopting digital service, monitoring digital budget and spends of central and local governments. It is critical that the Digital Agency provides such oversight and ensures that 'cloud by-default principle' is adopted across agencies.

Furthermore, to fully embrace the potential of today's technology, we support government efforts to improve the digital skills of the public sector workforce and to build government's data science capabilities.

In addition, to provide fair and seamless services across Japan and to realize the above mentioned remote-based activities, there is a need to remove existing restrictions and reduce or eliminate policy fragmentation among local governments. In this respect, we provide the following recommendations to the Preparatory Office as you consider the design of comprehensive policies to promote the Government of Japan's digital transformation objectives and to ensure that all citizens in Japan can fully benefit from of the digital economy.

BSA encourages revising security guidance to local governments to better embrace technological advancement

As part of the overarching goal to enhance usability and convenience of local government workers and to improve citizen services, we are encouraged that the Government of Japan is reconsidering its current approach to the information security regime for local governments. Specifically, we understand the Ministry of Internal Affairs and Communications (**MIC**) is reviewing the three-tiered network security measures in the Guidelines for Information Security Policies in Local Governments (**Guidelines**). We strongly recommend narrowing the scope and circumstances of when physical network separation from the Internet is advised as a viable security measure. Reducing unnecessary instances of physical network separation and procuring highly secure cloud services will enable local governments to more fully leverage cloud computing services.

Since 2016, when MIC endorsed network separation measure primarily to protect My Number related information, security approaches have evolved rapidly reflecting technological advancement. Best security practices have shifted from physical isolation to more risk-based, security outcome oriented practices such as advanced user ID management and limitations, network controls such as always-on secure virtual private networks and network segmentation, and implementation of strong data encryption. We encourage the Government of Japan to take this opportunity to adopt security solutions better tailored to current technologies and best practices based on "defense in depth" to more effectively advance government operations through the acquisition and use of secure cloud computing services. We also encourage active information-sharing between government agencies, industry, and other interested stakeholders on the adoption of best practices by local governments. This will help ensure that the revised guidance enables the best choices on the systems needed to effectively support citizens.

BSA supports the review of local government ordinances on personal information protection to relax the principle of prohibiting online connection

As the Government of Japan considers ways to strengthen the medical care system and to improve the quality of education, facilitating the expansion and interoperability of public services provided by multiple local governments will be critical. A significant challenge to enabling greater collaboration and information sharing between local government agencies is the existing 2,000 municipal ordinances on personal information protection. These have led to confusion by citizens, officials, and service providers caused by varying interpretations of the

many local rules, impeding the ability to provide services across local government systems. In this respect, BSA welcomes the Government of Japan taking steps this year to address this issue, including the discussion by the Taskforce Reviewing Personal Information Protection System under the Cabinet (**Taskforce**) on the personal information protection systems of local governments within the comprehensive review by the Taskforce of the privacy regime of public and private sectors in Japan.

The current ordinances on the protection of personal information established by many local governments do not take into consideration the importance of collaboration on data utilization with private sector and include provisions which limit on-line connections of computers processing personal information. The management of names, accounts, and other personal information is often necessary when providing remote online services. For example, in the context of the GIGA school initiative,⁴ students have increasingly had to take home school issued devices originally intended for in-school use only. Restrictions on connecting such devices to the Internet prevent full utilization of digital education. Also, with limits on using cloud computing services, the deployment of security and privacy enhancing solutions, such as multi-factor authentication and filtering for individuals, has also been delayed.

Conflicting or outdated local rules also introduce challenges in data utilization for regional revitalization, especially in conducting demonstration experiments related to Internet of Things and artificial intelligence, to realize smart cities. Requirements to process data in particular locations (such as for conducting analytics of personal data), and impediments to connecting local government-managed systems and external systems and varying penalties imposed by different local governments for handling personal information are all difficult for private sector business operators to accept, deterring private sector investment and collaboration in moving these innovative projects forward.

As such, BSA strongly encourages the Government of Japan to implement reform and harmonization of local government ordinance related to personal information protection, and to relax or eliminate the principle of prohibiting online connection as to not require approval from the designated council of privacy experts as a condition to allow online connection. We were encouraged to see the recent direction proposed in the Expert Committee under the Taskforce, which is proposing to set common rules to be adopted nationally and to create implementation guidelines to resolve the current policy fragmentation. We hope the common rules will take full consideration of the above challenges and encourage the Government of Japan to share draft rules with the interested private sector stakeholders, including with BSA and our members, to provide our comments.

BSA encourages ensuring Information system Security Management and Assessment Program (ISMAP) to be a successful mechanism to drive cloud computing uptake across agencies

We also appreciate the ongoing effort by the Government of Japan to facilitate government-wide adoption of secure cloud services. While we understand and support efforts to establish a baseline set of security policies for cloud service providers (CSPs) to provide high standards of trust and security in cloud services adopted by the Government of Japan, these efforts should also be designed to enable the easy procurement of cloud computing services by government agencies. In this respect, we are concerned that the current approach to cloud security assurance proposed by the ISMAP could result in highly expensive upfront costs for CSPs and time-consuming procedures for relevant stakeholders, which may not achieve the objectives of the cloud-by-default principle.

⁴ GIGA (Global and Innovation Gateway for All) School is a plan led by Ministry of Education, Culture, Sports, Science and Technology (MEX) in Japan which aims to improve the IT environment to nurture talent and capabilities of all kinds of children through providing one computer per child and enabling high-speed communication network.
https://www.mext.go.jp/a_menu/other/index_00001.htm

We recommend the Government of Japan continue exploring ways to make improvements to ISMAP, including:

- Refining the proposed ISMAP to make it more flexible and implementable, minimizing compliance burdens on CSPs, and better taking into account the different types of cloud services (SaaS, IaaS, PaaS)
- The ISMAP should cover the core, fundamental security controls, and any additional security controls should be agreed between the procurer and CSP.
- Narrowing down essential security controls in the ISMAP and setting a less frequent auditing schedule (e.g. once every three years) to reduce the audit overheads for CSPs and the Government of Japan alike. Yearly audits could mean CSPs having to conduct back-to-back audit processes holding them in a constant state of audit and placing an increased burden on procuring agencies to renew the associated contracts yearly.
- Developing and appropriately resourcing a process for training and skilling an IT audit and certification workforce for cloud services in Japan, in parallel to the ISMAP development process.

We encourage the Government of Japan to continuously engage with private sector stakeholders to gain insights into various ways to make the ISMAP more efficient and adaptable to enable more effective and resilient operations across government agencies.

BSA encourages formalized private sector process in the planning and implementation of digital transformation

BSA also applauds the government actively recruiting private sector personnel to be the member of Preparatory Office. In order to drive further active public-private sector collaboration, we encourage the government to set up an external committee or conference, to provide an opportunity for IT industry stakeholders and Preparatory Office staff to have active discussions on ongoing policies and strategies. Enabling open and transparent process during the preparation phase will be the key to ensuring successful implementation of digital transformation, and such collaborative forum will enable the government to benefit from gaining up-to-date expertise and best practices from industry representatives.

Conclusion

BSA looks forward to the opportunity to have wide range of conversation on how BSA and our members can work together with the Preparatory Office in order to generate value for government investment in cloud computing services provided by the private sector and to enable the development of remote-based activities in the post-COVID era. Please let us know if you have any questions or would like to discuss these comments in more detail.