

**FOLLOW-UP TO
“REVIEW OF ENTERPRISE RESOURCE PLANNING (ERP)
SYSTEMS IN UNITED NATIONS ORGANIZATIONS”
(JIU/REP/2012/8)**

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**FOLLOW-UP TO
“REVIEW OF ENTERPRISE RESOURCE PLANNING (ERP) SYSTEMS IN
UNITED NATIONS ORGANIZATIONS” (JIU/REP/2012/8)**

1. In 2012, the Joint Inspection Unit of the United Nations System (JIU) conducted a “Review of enterprise resource planning (ERP) systems in United Nations organizations” (JIU/REP/2012/8).
2. The report assessed the implementation, management and use of existing ERP systems in the United Nations organizations, and identified success factors and good practices for enhancing their sustainability and flexibility to evolving user requirements and technology. The report was also aimed at helping organizations to improve their ERP systems to derive benefits and identify system-wide opportunities to share, harmonize and standardize ERP operations among the organizations.
3. The report noted that “technology constantly evolves, and new ERP software versions are usually released every four to five years. Organizations have the opportunity to enhance their ERP system and adopt new features and functionalities to meet changing business needs at each ERP upgrade. The latest versions of ERP software also support most new third party products, thus enabling organizations to leverage their ERP system to use new technologies and roll out new applications more easily.... Recent trends in the ERP industry include the development of cloud-based SaaS [*software as a service*] modules, middleware that enables systems’ integration, enhanced business intelligence and analytics functionalities, as well as mobile applications for ERP”.¹
4. The report also noted that ERP vendors continue to develop their cloud-based services, which are already widely used in the private sector, especially by small and medium-sized enterprises. Further, United Nations organizations “cloud-based tools provide easy-to-deploy solutions, at lower cost than “on premise” services. They reduce hosting costs and allow users to pay only for what they need. They provide flexible and scalable solutions that can adapt quickly to business growth”.²
5. The report expressed concern that “third party hosting solutions, including public cloud solutions, might raise confidentiality concerns to some organizations with regard to sensitive data... SaaS does not seem to be mature enough to provide all the functionalities required by large organizations. It tends to be a solution more adapted for small organizations with limited needs and resources, although it can also be used to complement an ERP system’s functionalities... SaaS modules tend to be difficult to integrate”.³
6. The Chief Executives Board for Coordination (CEB) Information and Communications Technology (ICT) Network continues to work on IT-related issues including on cloud computing from a technical point of view. The United Nations system needs, however, a comprehensive policy that also addresses the legal aspects, of cloud computing. While some organizations consider public cloud-based solutions to be like any third-party hosting solution, others may have specific security and data confidentiality requirements that may not be relevant for commercial users.

¹ Ibid., paras.124-125.

² Ibid., para.126.

³ Ibid., para.127.

7. In this regard, the JIU made the following recommendation:

Recommendation 4

The Secretary-General, in his capacity as Chairperson of the CEB, should direct the CEB HLCCM to develop a common United Nations system policy regarding cloud-based solutions, before the end of 2014.

8. In its joint comments, the United Nations organizations supported this recommendation calling for the development of a common United Nations system policy on cloud-based solutions. Some agencies expressed enthusiasm for more aggressively exploring the use of cloud services, which they believed could promote greater flexibility, scalability and cost-effective options, including through a reduction in operating costs. In particular, agencies highlighted the benefits that a system-wide cloud computing policy would bring to ERP system strategies.
9. Organizations urged that guidance on the handling of legal and regulatory constraints in terms of the storage of confidential intellectual property should be included in the guidelines for a common approach developed by the inter-agency mechanisms. They further noted that the legal advisers of the specialized, related and other organizations of the United Nations system had issued a statement on the employment of cloud computing services in response to a request by the Secretary-General of the International Telecommunication Union, as Chair of the Information and Communications Technology Network. The statement acknowledges the benefits of cloud computing as well as the risks, including the possible impact on the privileges and immunities of United Nations system organizations. The legal advisers also suggested that agencies take specific actions prior to initiating cloud services, including performing risk-benefit analysis, strengthening information classification policies and practices, evaluating in-house cloud services ensuring that decisions to utilize cloud services were taken at the highest institutional level.⁴
10. The Inspector remains convinced that the use of cloud computing would continue to increase and evolve in United Nations organizations given its cost-efficiency and flexibility. Further, this technology holds the potential to eliminate the requirements for the set-up of expensive computing infrastructure for IT-based solutions and infrastructures.
11. The Inspector is also of the opinion that United Nations organizations should include in their policies and/or frameworks on the use of cloud computing the specific provisions for the protection of intellectual property, in addition to legal provisions that will ensure data privacy, security and optimal use of digital resources.
12. The Inspector notes that, despite the positive management response as included in A/68/344/Add.1, the recommendation of the 2012 JIU report remains neither accepted nor implemented, as recorded in the Unit's web-based tracking system. **The Inspector therefore requests the executive heads of JIU participating organizations to inform the Unit no later than 15 November 2017 of any action taken individually or jointly to formulate cloud computing policies and/or frameworks including legal provisions to ensure data privacy, security and optimal use.**
13. **The Inspector also would appreciate receiving an update from the CEB ICT Network on the current status and the progress made in the development of a common United Nations policy on cloud-based solutions.**

⁴ See A/68/344/Add.1.