

# HKSAR Government Department 香港特區政府部門

Facilitating Asset Management  
Process with GIAI  
全球個體資產識別碼 助資產管理更周全

“ **GS1’s Global Individual Asset Identifier (GIAI) can uniquely identify and manage a particular asset, while its scalability and interoperability matches the requirements of OGCIO.**

Mr. John Wong, CEO, SP Infinite Technology Ltd.

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## Background

A HKSAR Government department commissioned SP Infinite Technology Ltd. (SPIT) (A subsidiary of SecurePro Group), which is one of the leading IoT and RFID solution providers in Hong Kong, to develop a RFID application system that can be integrated to the inventory system. The RFID application system helps to perform the asset stock-taking by RFID technology. The system allows multiple users working for verification at multiple locations in order to improve the verification accuracy and effectiveness. However, challenges came up when the department requested the RFID tags number (EPC) must be unique worldwide, which could enhance scalability, management efficiency, data integrity and data interoperability. GS1 Hong Kong thus plays a big part in the whole solution.

## Solutions

The department adopted GS1’s Global Individual Asset Identifier (GIAI) keys to identify its electronic assets in various divisions, where the keys are encoded into EPC RFID tags and affixed to the assets, which enables its staff to easily and quickly verify the inventory appointed location.

The GIAI enables assets to be individually recorded and harmonizes the various inventory coding system used by different departments. It is also highly scalable to incorporate systems from other government departments as needed in future.

GIAI is carried in the unique EPC Class 1 Gen 2 security features that pertains to GS1 RFID standard, where no change can be made once encoding is completed. This ensures no tampering of the coding by anyone, enhancing the security level for the department’s annual inventory verification system.

GIAI standard is a global GS1 standard and also ISO-compliant: ISO/IEC 15459-4 & ISO/IEC 15459-5. Using global identifier to encode asset record in the system simplifies the department inventory management process. It allows the department to conduct computer inventory taking in a faster and more accurate manner.

## Benefits

**Deploying GIAI identifier in RFID tags that forms part of the Government department’s inventory system helps the organisation in the following ways:**

- 1 • Its IT team is able to increase its operation efficiency by completing inventory verification process more rapidly and accurately;
- 2 • The team can increase the frequency of inventory verification to ensure sufficient asset for maintaining daily operation;
- 3 • GIAI is scalable to enable the department to harmonies the various asset numbering scheme by other government departments.

### GS1 standards used or solution(s) / service(s) applied

- Global Individual Asset Identifier (GIAI)
- EPCIS (Electronic Product Code Information Services)

## 背景

香港特區政府某部門委託安寶創科有限公司(SPIT)開發一套無線射頻識別(RFID)應用系統，整合到部門的庫存系統中。SPIT是安寶集團的子公司，是行內提供物聯網及RFID解決方案的領先企業之一。該套RFID應用系統利用RFID技術，協助部門處理年度庫存盤點。系統容許多名用戶在不同地方盤點庫存，令盤點程序更有效及更準確。然而，部門要求RFID的產品電子代碼(EPC)必須獨一無二，確保其可擴展性、管理效率、數據完整性及數據互通性，這絕對是一大挑戰。香港貨品編碼協會(GS1 HK)就此扮演著重要角色。

## 解決方案

該部門採用GS1的全球個體資產識別碼(GIAI)，去識別不同業務單位的電子設備資產。識別碼會被編碼成為EPC RFID標籤，並附於電子設備資產上。員工便可輕易並快捷地確認該批資產的指定位置。

GIAI可獨立記錄資產，並可協調不同部門正使用的庫存編碼制度。GIAI的應用擴展性高，故日後若有需要，也能用於其他政府部門的系統。

GIAI擁有GS1 RFID標準專屬而獨有的Class 1 Gen 2產品電子代碼的安全特徵，意味一旦完成編碼，將不能作任何改動。此舉確保無人可擅自更改編碼，提高部門年度庫存清點系統的安全性。

GIAI標準是GS1全球性標準其中之一，並已獲ISO/IEC 15459-4及ISO/IEC 15459-5的認證。該部門利用GIAI為資產紀錄編碼，簡化了其庫存管理的步驟，同時讓部門可更快捷、更準確地處理電腦庫存盤點。

“ GS1的全球個體資產識別碼(GIAI) 可讓資產被獨立識別及管理，完全符合該政府部門對方案擴展性及相互操作性的要求。

安寶創科有限公司行政總裁John Wong

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## 效益

部門的庫存系統採用內含GIAI的RFID標籤，有以下好處：

1. 其資訊科技團隊得以更快速並更準確地完成庫存盤點，提高運作效率；
2. 團隊可以增加庫存盤點的次數，確保有足夠的資產應付日常運作；
3. GIAI的可擴展性相當高，令部門可協調不同政府部門現有的各種資產編碼系統。

應用的GS1標準或方案 / 服務

- 全球個體資產識別碼
- 產品電子代碼訊息服務(EPCIS)