



GLN application in the European Commission's e-PRIOR project

Case Study by:

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Background

Since 2009, the **GS1 Global Location Number (GLN¹)** is an integrated component in the European Commission's own electronic Public Procurement pilot, **e-PRIOR²**. It is used as the unambiguous routing key for directing electronic messages to EC Directorate Generals and agencies.

According to the i2010 EC e-Government Action Plan, the take up of public eProcurement is highly desirable for Europe. This plan followed the Manchester ministerial declaration of 24 November 2005 which set out a number of ambitious political objectives in the field of eProcurement:

- All public administrations across Europe will have the capability of carrying out 100% of their procurement electronically, where legally permissible;
- At least 50% of public procurement above the EU public procurement threshold will be carried out electronically.



With these goals in mind, in 2007, the European Commission's Directorate General for Informatics (DIGIT), supported by the Directorate General for Internal Market (DG-MARKT), began paving the way for electronic trade in the EC's supply chain. As a result the EC launched the e-PRIOR project aimed at piloting the digitising of DIGIT's procurement purchase-to-pay processes in a real-life cross-border environment. Given the ultimate goal of cross-border interoperability and the fact that the European Commission is a transnational organisation, this project is sponsored by the Interoperability program of the European Commission, IDABC³. In 2009, e-PRIOR went live with a three supplier pilot and started electronic invoicing and is able to electronically exchange documents that traditionally have been conveyed in paper format via fax or postal services.

The e-PRIOR project has adopted the GS1's Global Location Number (GLN) as the routing mechanism for the electronic documents which is a small, but important, part of the whole B2G eProcurement solution.

¹ See: <http://www.gs1.org/1/glnrules> for further details

² Electronic **P**rocurement **I**nvoicing and **O**rdering

³ Interoperable **D**elivery of European eGovernment Services to public **A**dministrations, **B**usinesses and **C**itizens. Replaced in 2010 by the ISA program. (Interoperability Solutions for European Public Administrations)

Goals of eProcurement in the European Commission's supply chain, e-PRIOR

As of 2009 the EC e-PRIOR receives electronic invoices from suppliers and expects multiple gains from digitising their systems and streamlining those of their suppliers.

Goals:

- To build up confidence in e-Procurement in Europe starting with the pilot of interoperable e-invoicing, later expanding to interoperable e-Ordering and e-Catalogue.
- Automate certain post-awarding Procurement processes which could ultimately improve the quality of procurement management, including monitoring and decision-making.
- Promote green Procurement by limiting the use of paper documents.
- Harnessing the potential of information and communication technologies applied to the field of e-Procurement. Sharing this experience and good practice between the European Commission, public administrations and also with the private sector.
- Promote the use of open specifications in agreement with the European interoperability framework to increase the trustworthiness, security and interoperability of Procurement processes.
- Contribute towards the standardisation process in a consensus based environment.
- Promote the simplification of post-awarding Procurement processes and cross-border services.

To enable these goals, a central part of e-PRIOR was the portion of the EC's eProcurement solution which dealt with identification of Directorate Generals and their agencies. The EC required a unique, unambiguous numbering identification system for their suppliers and Directorate Generals based on two primary requirements:

- To be a tool for routing electronic messages via a peer to peer protocol, conveyed in a message header.
- Be a mechanism to identify the European Commission in electronic messages.

How is the GS1 GLN used in e-PRIOR?

The Supplier is required to know the GS1 GLN of the Directorate Generals, agencies or services to be used as the unique identifier of the Customer in the message. This information is exchanged at the beginning of the set-up process when the interchange agreement is signed by the supplier.

In order to route the message correctly, each trading partner's interchange agreement must have a unique combination of SupplierID, CustomerID and the framework contract.

GS1 GLN as the routing key in e-Prior messages

```
<SOAP-ENV:Envelope><SOAP-ENV:HEADER>  
  
<ec:AuthorisationHeader>  
  
<ec:supplierID>5790000000081</ec:supplierID>  
  
<ec:customerID>5790001791483</ec:customerID>  
  
</ec:AuthorisationHeader>  
  
</SOAP-ENV:Body>
```

GLN & e-PRIOR releasing the potential

The final effect of the eProcurement program cannot be underestimated and could lead to 10s of billions of Euros in savings annually.

If online procurement is generalised, it can save governments up to 5% on expenditure and up to 50-80% on transaction costs for both buyers and suppliers. While it is difficult to quantify competition and efficiency benefits for the EU as a whole, greater competition and efficiency in public procurement markets can impact - directly and indirectly - on the whole European economy and play an important role in achieving the Lisbon objectives.⁴

⁴ http://ec.europa.eu/internal_market/publicprocurement/docs/eprocurement/actionplan/actionplan_en.pdf

GLN - The identification solution

Why is the GS1 GLN a choice for e-PRIOR?

Characteristic	Benefit
The GLN is a major global location identification key.	GLN acceptance by supply and retail is huge and is widely adopted in the private sector with its usage also being well applied in the public sector.
The GLN is a major global routing key.	Ensured GLN adoption by VANs as a routing key for EDI messages. The GLN is a <i>de facto</i> routing key for EDI and is well established.
Guaranteed Capacity.	Large availability of numbers makes the GLN a scalable solution.
Unambiguous identification scheme.	The GLN is recognised in UN/CEFACT EDIFACT, UN XML and other coding schemes as a valid coding scheme for locations and routing.
Numbering integrity.	Strong GS1 governance and control of the GLN system. The check digit algorithm helps number integrity.
Non-significant GLN number.	Secure, GLN has no meaning attached to it above and beyond its role as a key to database information.
PEPPOL project ⁵ (EC: Pan-European Public eProcurement On-Line project.)	GLN is one of four major keys used in an XML syntax solution being piloted in this EC funded public sector eProcurement project.
CEN/ISSS Business interoperability interface models	The GLN is a recognised best practice key in the CEN workshop agreement on public sector eProcurement models released 2009.

⁵ <http://www.peppol.eu/>

Lessons learned for the Commission

By PricewaterhouseCoopers, consultants to the EC e-PRIOR project.

Lessons learned	Why apply the lesson?
Need to standardise.	Common standards are a pre-requisite for digitisation. Choose an identification key and a standard that will scale.
Need to apply market solutions.	Proven market solutions are highly preferable if e-invoicing is to provide economic incentives for adoption.
Need to communicate to stakeholders: i.e. Public institutions, standards bodies, end users.	A broad range of channels have been applied in communicating the e-Prior solution which have proved crucial for implementing such a large project in a such a short implementation period.
Make the GLN openly available.	During the pilot it was recognised that the GLN was not always known by the supplier. There needs to be a more effective method of communicating the GLN allocation process of a supplier's GLN to a supplier.



Summary

“Ultimately, the ‘winners’ in the e-PRIOR roll-out should be the suppliers and Member States who will be able to use this experience to streamline their procurement processes.

Additionally, other public sector bodies should be able to take advantage of the e-PRIOR open source platform which will be made freely available to public sector administrations.”

(João Rodrigues Frade, Manager at PwC, contractor of DIGIT)

After the implementation of the eInvoice in the EC e-PRIOR pilot there have been several lessons learned to come out of the project. One major consideration worth emphasising has been that the application of global standards that have already gained traction in the commercial market place is an effective method of ensuring adoption and success of an eInvoicing eGovernment initiative.

Due to the GS1 system’s widely installed user base in the private/public sectors and the GLN’s main role as a routing key for electronic messages, GLNs easily make the transference to public sector systems without causing undue divergences to private sector operations.

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