



Ferran Domènech Fusté, Industrial Engineer and Master in Supply Chain Management;  
Standards Implementation Manager for Healthcare in GS1 Spain

October 28, 2019

# Welcome and thank you for attending!



- Welcome to our October 2019 webinar.

Thank you to our guest speaker Ferran Domènech Fusté, Industrial Engineer and Master in Supply Chain Management and at present in GS1 Spain Standards Implementation Manager for Healthcare.

- Some housekeeping for today:
  - All attendees will be in listening-only mode
  - If you have questions during the presentation, please type them into the questions area and these will be monitored then answered at the end of the call
- After the webinar:
  - Within a week, the recording will be posted to: [http://www.gs1.org/healthcare/hpac\\_webinars](http://www.gs1.org/healthcare/hpac_webinars)
  - All previous webinars are also posted to this location, so please feel free to use this resource

and share the link



# GS1 Healthcare Webinars



**Forum for thought leaders and adopters of GS1 Healthcare Standards from the global clinical provider environment. The final goal is to improve patient safety, cost efficiency and staff productivity through implementation of GS1 standards.**

**A forum for sharing and discussion**

**Identification of projects and case studies**

**A source of expertise and advice**

- The practical realities of implementation of GS1 Standards in the care giving environment in regards to the impact on clinical care and patient interaction
- Supporting the adoption of GS1 Standards in healthcare providers and retail pharmacies
- For publication, presentation and sharing
- To those involved in GS1 standards development, the wider Healthcare stakeholder community and senior executives/decision-makers to gain their buy-in and support for implementation of GS1 Standards



# Specific GS1 Healthcare Activities



## Webinars

- Monthly webinars open to all stakeholders interested in learning about GS1 standards implementation in the care giving environment.
- [http://www.gs1.org/healthcare/hpac\\_webinars](http://www.gs1.org/healthcare/hpac_webinars)

## Awards

- Twice per year
- Provider Implementation Best Case Study Award
- Provider Recognition Award
- The prize: travel & accommodation to attend the next GS1 Healthcare conference
- <http://www.gs1.org/healthcare/hpac>

**GS1 Healthcare also holds two global conferences per year. The next conference will be in Delhi, India from November 5–7, 2019, with significant Healthcare Provider participation on the agenda.**



## Ferran Domènech Fusté



- Industrial Engineer in UPC (Universitat Politècnica de Catalunya)
- Master in Supply Chain Management (Universitat La Salle - Ramon Llull)
- Since 2013 at GS1 Spain: GS1 Standards Implementation Manager for Healthcare, leading EDI Implementation in the GS1 Spain's user group, Traceability projects in Spanish market (Serialization, UDI, Hospital Pharmacy and Medical Device) & Standards development at global level.



The Global Language of Business

## GS1 Standards Implementation in Spanish Hospitals

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# Agenda



- About GS1 Spain in Healthcare
- About Healthcare Providers in Spain: The public healthcare system
- GS1 Spain Activities to engage with Healthcare Providers
- 3 Projects in place:
  - Traceability of pharmaceuticals for cancer treatment in Gregorio Marañón Hospital (Madrid)
  - Inventory Management and traceability for high cost Medical Device in Institut Catalá de la Salut.
  - EDI project in Spain.



## GS1 SPAIN in numbers



**+ 30.000 members:** One of the biggest company association in the state.

**+ 1.200 members** in the Healthcare industry

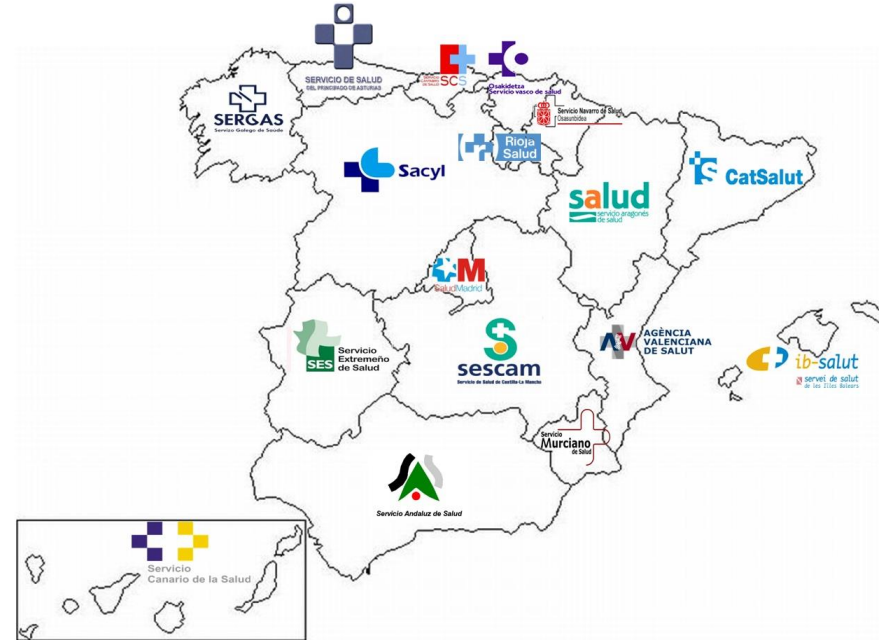
**Meeting point for Healthcare Providers,  
Wholesalers, Laboratories, Medical Device  
Manufacturers...**



# About Public Healthcare Providers in Spain



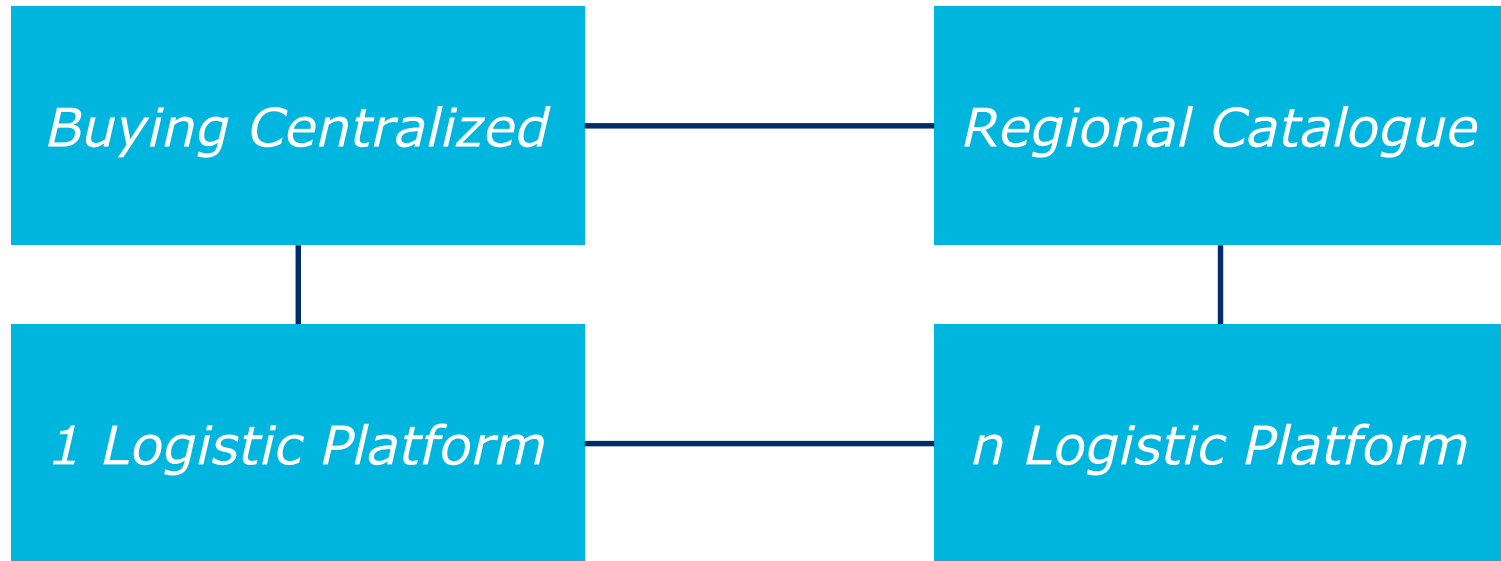
**Do you think we just have one project?**



# About Public Healthcare Providers in Spain



## Different operating models



# GS1 Spain Activities to engage



## In such an atomized market...

### COLLABORATION WITH ENTITIES:

- 7 Procurement Managers from Regional Healthcare Providers in GS1 Spain Healthcare Industry Board



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- Constant engagement with SEFH (Spanish Association of Hospital Pharmacy)
  - Traceability pilots
  - Presentation in technical groups
  - Assessment

# GS1 Spain Activities to engage with Hospitals



## Yearly we organise for them...

- 2 free webinars on the benefits of GS1 Standards for Hospitals – 60 assistants
- 1 free face to face workshop with real projects from hospitals (Sponsored by Technological providers) – 40 assistants
- 1 Healthcare Congress with 200 Healthcare professionals (special price for Public Hospitals)
  
- We count on the Healthcare Providers as presentors in our regular trainings:
  - EDI
  - AIDC



The Global Language of Business

## Traceability in Hospital pharmacy for oncological preparations

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**Guess what...**

3%

Severe medical errors in patients

White R. Journal of Oncology Pharmacy Practice 2014

# Traceability in Hospital Pharmacy



## Preparation of pharmaceuticals for cancer treatments in Gregorio Marañón

Key Point: Security for oncological patient

- High toxicity
- Complexity in preparation (strict doses)
- High cost treatment

Pharmaceuticals



- Adverse effects
- Toxicity accumulation
- Complexity, other illnesses.
- Vulnerable

Patient



- Increasing number of patients
- Complex processes
- Multidisciplinary

Environment





**Traceability to achieve...**

**SECURITY**

**EFFECTIVENESS**

**QUALITY**



# Traceability in Hospital Pharmacy



## The process in the Hospital



***Prescription***



***Validation***



***Preparation***



***Dispensing***



***Administration***



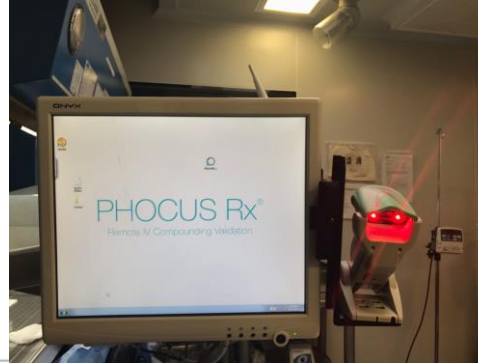
***Patient follow-up***



# Traceability in Hospital Pharmacy



## Preparation → Identification of pharmaceuticals



### Benefits:

- Avoid medical errors
- Security for pharmacists
- Integrated with prescription system

### Main barriers:

- Barcode at the lower level (vial)



## Traceability for implants

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# Traceability of Implants



## Objectives for Vall d'Hebrón Hospital (Barcelona)

Automated registry of  
Implants

Easy tool for nurses

Integrate information  
with Eco-fin system

Patient safety

# Traceability of implants



## IT development:

- Integration between SAP Eco-fin and SAP "Hospital"
- Adapt Master Data
- Integrate equipment : Smart Cabinets

## Process definition:

- Product Master Data registry
- Fulfillment of the operation theatre
- Scan points



## VH\_PROG. QUIR. - INFERMERIA TR //

Formularis Parametrizacions bàsiques

Entorn de treball

- VH\_PETICIONS DE TRANSPORTS - HOSPITALITZACIÓ
- VH\_PROG QUIR - COMPRAS
- VH\_PROG QUIR - COORDINADOR GE
- VH\_PROG QUIR - COORDINADOR MI
- VH\_PROG QUIR - COORDINADOR OBS
- VH\_PROG QUIR - COORDINADOR PV
- VH\_PROG QUIR - COORDINADOR TR
- VH\_PROG QUIR - ESTERILITZACIÓ TR
- VH\_PROG QUIR - INFERMERIA GE
- VH\_PROG QUIR - INFERMERIA MI
- VH\_PROG QUIR - INFERMERIA OBS
- VH\_PROG QUIR - INFERMERIA PV
- VH\_PROG QUIR - INFERMERIA TR

Prog. Quirúrgic Diari

Materials IQ

Protesis

Prog. Quirúrgic Diari - Impressió

Calendar Història Pacient ETO Hist. Reprogramacions ETC Imputar Material Inici IQ atrasada ETO

Prog. Quirúrgic Diari Del 11.01.2012

Sala	Sq	D/h	Dur	SE Ord. (descr)	Tipus d'admissió	Pacient	Pac.	IQ iniciada	Lit Hospitalització	Prestacions ordenades (denominació)
QT 0.1	1	08:05	100	CES	HOSPITALITZACIÓ	11918155	DOMIN	✓	5T009006	Reemplaçament total de múscle
QT 0.1	2	10:35	130	CES	HOSPITALITZACIÓ	11487279	NAVAR	✓	5T009003	Reemplaçament total de maluc. Reempl
QT 0.2	1	08:18	70	ROT	HOSPITALITZACIÓ	11393806	LLORE	✓	5T009013	Exció de lesió d'altres parts toves. E
QT 0.2	3	10:17	55	ROT	HOSPITALITZACIÓ	12333317	OLALL	✓	5T032702	Exció local de lesió o teixit d'os. ta
QT 0.2	2	11:50	100	ROT	HOSPITALITZACIÓ	12023144	ALONS	✓	5TQU0010	Biòpsia d'estructura articular. colze
QT 0.3	1	08:05	130	RAQ	HOSPITALITZACIÓ	14806429	GRAUF	✓	5T009001	Fusió raquídia (antròdesi)
QT 0.4	1	08:44	100	TRA	HOSPITALITZACIÓ	12324638	MARTIN	✓	5T009008	Reducció tancada de fractura amb fixaci
QT 0.4	2	11:08	70	TRA	HOSPITALITZACIÓ	12470775	ANTEL	✓	5TQU0013	Reducció tancada de fractura amb fixaci
QT 0.6	1	08:15	100	CPL	UCE	11827140	BOUSQ	✓	5T030101	Exció radical de lesió cutània. Exció. R
QT 0.6	2	09:31	130	CPL	UCE	11884950	RUIZ D	✓	5T030202	Altra reparació i reconstrucció de pell. Re
QT 0.6	3	11:22	85	CPL	UCE	11312386	ROIG L	✓	5T011301	Altra reparació i reconstrucció de pell
QT 0.6	4	12:45	100	CPL	UCE	11944207	ROSET	✓	5TQU0008	Altra reparació i reconstrucció de pell
QT 0.7	2	08:20	100	ORL	HOSPITALITZACIÓ	11703818	SUGRA	✓	5T020801	Inció de múltiples sins nasals
QT 0.7	1	12:00	180	ORL	HOSPITALITZACIÓ	12511197	VALLS	✓	5TQU0005	Timpanoplastia tipus III. Empelt col·loc
QT 0.8	1	08:45	30	CMF	HOSPITALITZACIÓ	11931930	GUITAR	✓	5T009009	Glossectomia parcial. Reconstrucció on
QT 3.1	1	08:20	70	OFT	CMA	14226173	ROMER	✓		Recessió d'un múscul extraocular

# Traceability of Implants



## **Actions needed**

- Training hospital employees: from Logistics and buyers up to nurses.
- Coordination with Logistic Operator to change management of the consignments.
- Coordination between buying Manager from Healthcare provider to maintain GTINs and contracts.
- Begin for the most critical units of cost (criticality with patient and consumption cost).



## Main barriers

- Barcodes without traceability information



- Low printing quality barcodes: dimensions, quiet zones, colors and contrasts...
- Multiple barcodes in the same packaging.
- Barcode placement in the packaging.



# EDI Implementation for Healthcare Providers

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# EDI implementation in Healthcare providers



## Some numbers...

- 9 Public Healthcare providers using standard EDI



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- 1 Private Healthcare provider using standard EDI



- +500 users in Spain in Healthcare, including laboratories, medical device manufacturers, wholesalers and Hospitals / Healthcare Providers



# EDI scenario in Spain

## ***Supplier***

## ***Healthcare Provider***

*Check order content*

ORDERS

*Order Products*



*Send response*

ORDRSP



*Prepare order*

DESADV

*Verification of delivery*



*Adjust discrepancies*

RECADV

*Send discrepancies*



*Invoice emission*

INVOIC

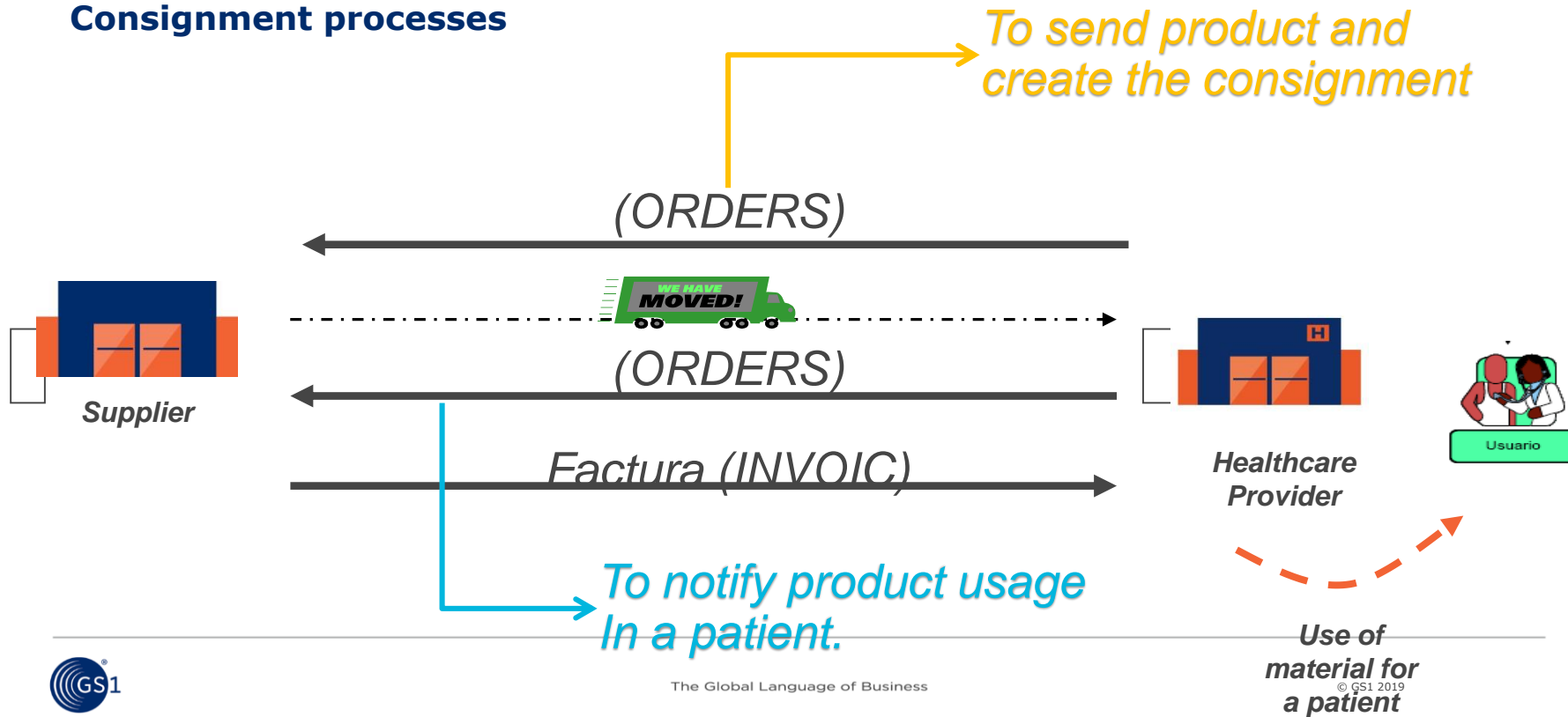
*Validate and accounting*



# EDI Scenario in Spain



## Consignment processes



# EDI in Healthcare providers



## Benefits

- Patient Safety
  - Traceability
    - DESADV message
    - ORDRSP message – helps master data exchange
- Cost saving
  - Reduces administrative tasks
    - ORDRSP message – reduces invoice mistakes
    - DESADV message – decreases reception process up to 60% in time
    - RECADV message – reduces invoice mistakes

# EDI in Healthcare Providers



## How do they increase usage?



XUNTA DE GALICIA  
CONSELLERÍA DE SANIDADE



SERVIZO  
GALEGO  
de SAÚDE



### Medidas de incentivación a la contratación

A. M.

Expediente: MI-SER1-17-014

NOMBRE O RAZÓN SOCIAL DE LA EMPRESA LICITADORA

C.I.F./N.I.R.

DIRECCIÓN  
LOCALIDAD  
PROVINCIA

Nº TELEFONO  
Nº FAX  
E-MAIL

				1º formato				2º Formato				3º Formato						
Nº lote	Forma	Referencia comercial	Unidad de medida	Descripción	Nº unidades	cód GTIN	Formato de pedido a proveedor 5/10	disponible 5/10	Descripción	Nº unidades	cód GTIN	Formato de pedido a proveedor 5/10	disponible 5/10	Descripción	Nº unidades	cód GTIN	Formato de pedido a proveedor 5/10	disponible 5/10

#### II. Logística (hasta 5 puntos):

1) No disponibilidad de EDI.	0 puntos
2) Disponibilidad de EDI (*).	4 puntos
3) Disponibilidad de EDI + disponibilidad de GTIN (GS1) 13/14/128 en unidad de segundo embalaje o unidad mínima de envasado que pueda ser usada como unidad de despacho en la distribución interna del producto. Implica 2 formatos logísticos con código GTIN, en el que como mínimo uno de ellos será un formato logístico para usar al hacer un pedido.	4,5 puntos
4) Disponibilidad de EDI + disponibilidad de GTIN (GS1) 13/14/128 en unidad de segundo embalaje o unidad mínima de envasado que pueda ser usada como unidad de despacho en la distribución interna del producto + GTIN (GS1) 13/14/128 en otro formato logístico distinto de los anteriores con el que operar al hacer pedidos. Implica 3 formatos logísticos con código GTIN, en el que como mínimo 2 de ellos serán un formato logístico para usar al hacer un pedido	5 puntos

(\*) La disponibilidad de EDI implicará que la empresa dispone de los medios tecnológicos necesarios para hacer Intercambio Electrónico de Datos (EDI) con el Servicio Gallego de Salud y que para todos y cada uno



## Some short conclusions

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# Conclusions



**Our standards are “boring”  
for Healthcare Providers**

- Speak their language → Project Imagine is GREAT!!
- Translate our wording to specific BENEFIT for patients.

**Right moment and right  
person**

- You may have to explain the same to different people
- Adapt message to nurses, doctors, CEO, Financial Manager...

**Understand hospital value  
chain**

- LISTEN what is in their agenda as a priority!

**Collaborate with  
stakeholders**

- Hospital pharmacy association, Hospital Logistics Associations...
- They can be GREAT loudspeakers in the sector

# Questions

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# GS1 Healthcare webinar:

## Questions and contact details



Els van der Wilden  
Director Healthcare Providers  
GS1

Tel +31615545868  
eMail [els.vanderwilden@gs1.org](mailto:els.vanderwilden@gs1.org)

Ferran Domènech  
GS1 Standards Implementation  
GS1 Spain

eMail [fdomenech@gs1es.org](mailto:fdomenech@gs1es.org)

[www.gs1.org](http://www.gs1.org)

