



Net Solutions Workshop

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The global language of business

www.gs1.org



Welcome

Welcome to the new business unit **Net Solutions**

Net Solutions will become the new Internet platform for the GS1 Community. There are two aspects of this network approach:

- Internal
 - Hosted MO services, Global licenses and common platform for web-services and products
- External
 - Customer oriented services
 - GEPIR
 - Data Driver
 - PKI



Net Solutions

GEPIR

- The global yellow pages of the GS1 system users

DATA DRIVER

- Help small and medium enterprise to manage their GS1 number bank

PKI

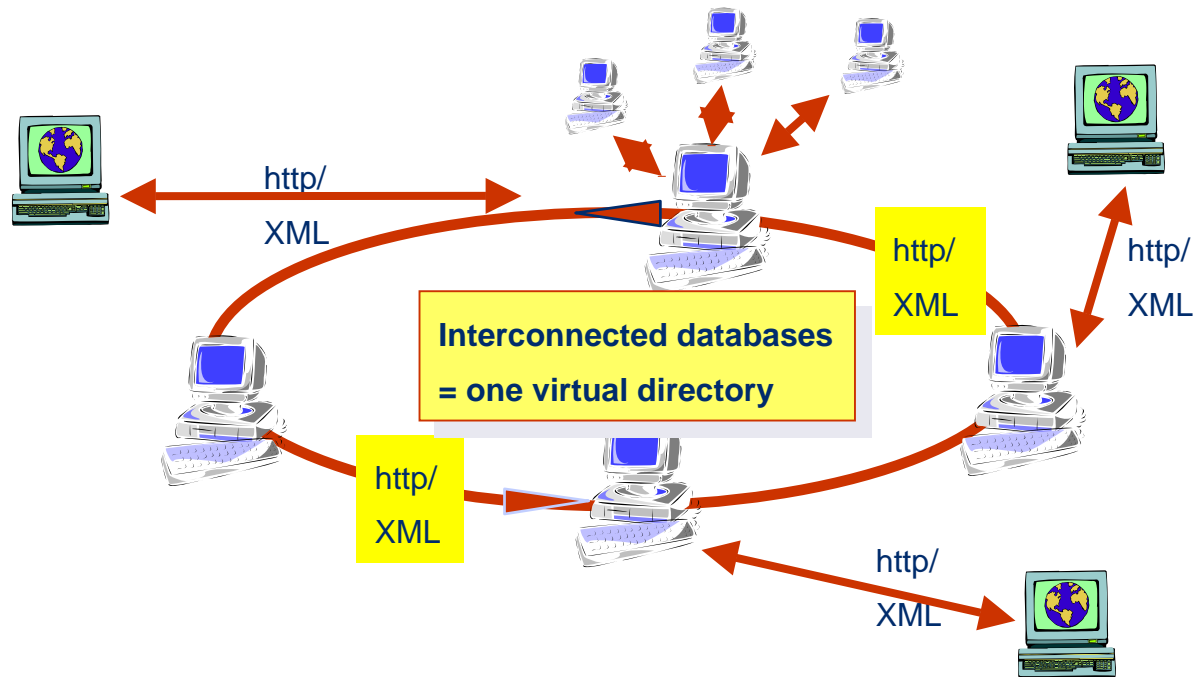
- Secure communications over the Internet and authentication of parties using our services



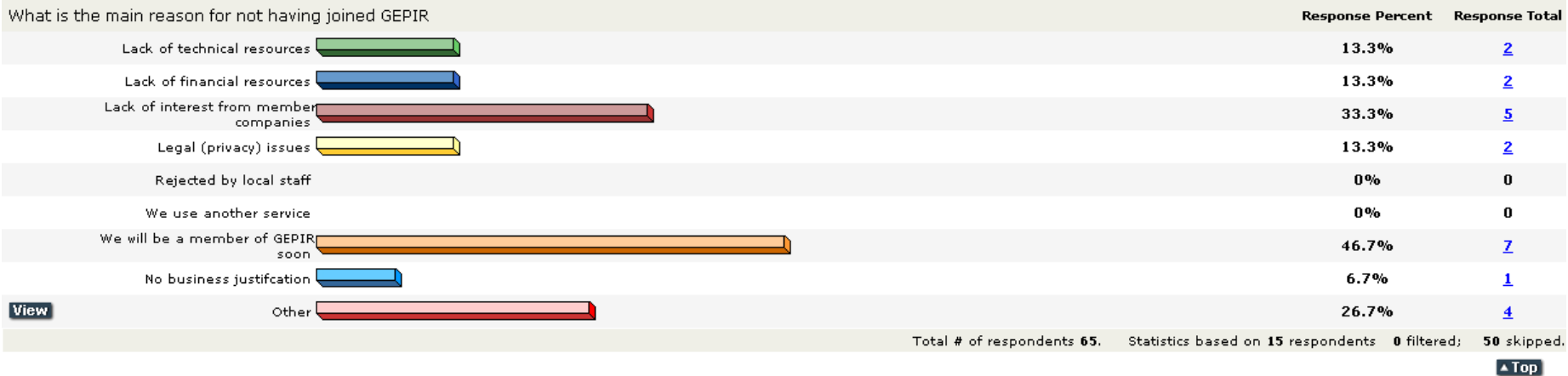
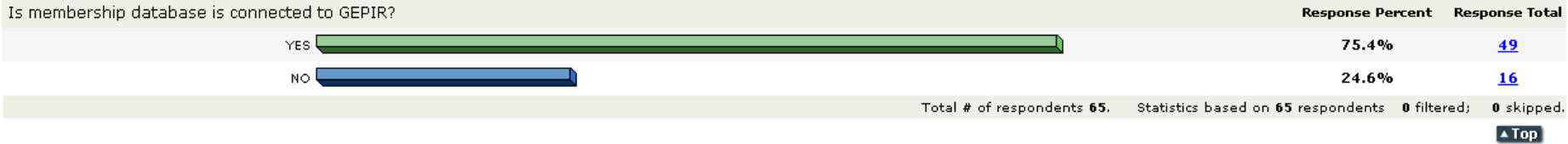
GEPIR

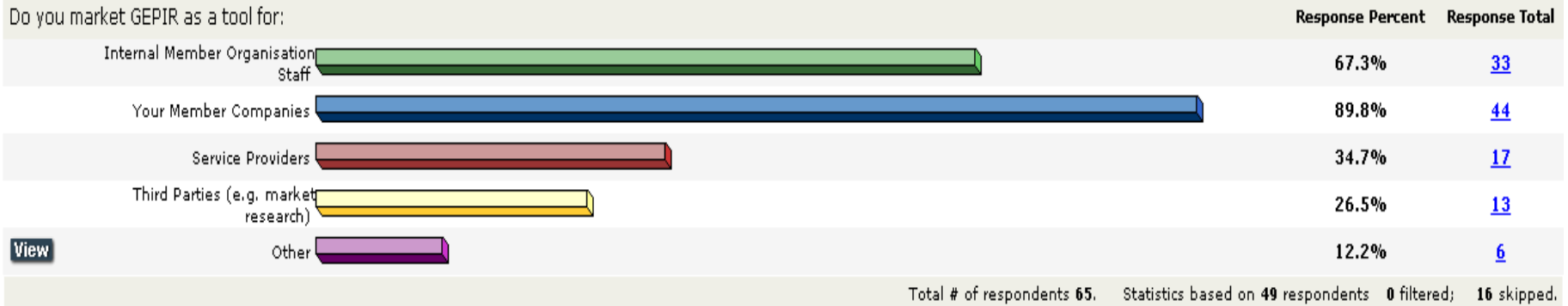
- The global yellow pages of the GS1 system users
- Search GS1 identification keys and find the company in charge of them
- Validate GS1 identification keys when entering them in the internal applications

- Currently 76 MOs and the Global Office are linked to the GEPIR Network
- Giving access to the addresses of 1 Million GS1 system users

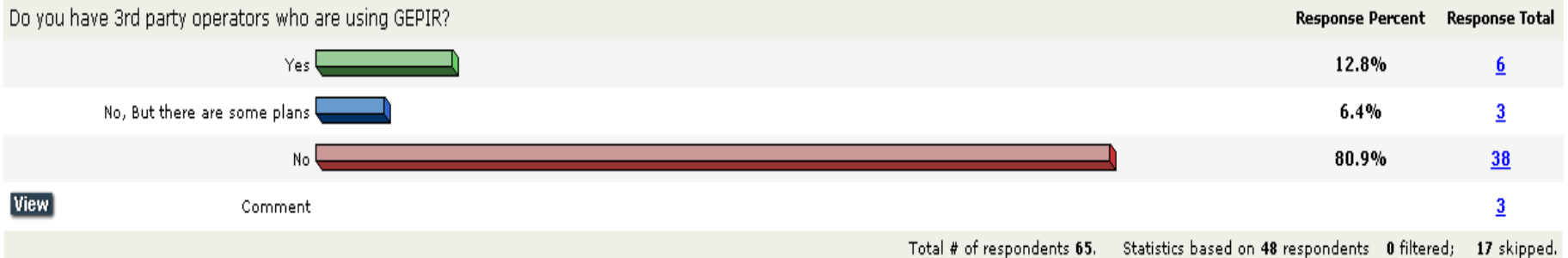


Making our Vision a Reality





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25 missing countries

Bahrain	Kuwait
Bolivia	Libya
Cambodia (started)	Macau
China	Macedonia
Cuba	Mexico
Dominican Republic (started)	Mongolia
Ecuador	Paraguay
Iceland	Saudi Arabia
Iran (started)	Sri Lanka
Israel	Syria
Kenya	Uzbekistan (started)
Korea, South	Vietnam (started)
Korea, North	



	MOs responding	Total 2005
Number of queries (hits) per client	32	2'664'113
Visitors (unique IP) on clients	28	182'616
Number of queries (hits) per router	30	3'044'324
Visitors (unique IP) on router	26	46'609
survey covering member companies	37	339'977

- Japan, US and UK did not participate in this survey
- Biggest external user TESCO UK with 120'000 hits since December 1st, 2005



GEPIR

User benefits

- Global visibility of Companies and Products
- Verification of valid company prefixes when items are captured on ERP systems
- Reduction of MO administrative work (queries)
- Platform for additional and new services



GEPIR

Net Solutions User Group

- Audience: GS1 member companies that use GEPIR
- Tasks: Define system requirements and give feedback on the experiences made with GEPIR
- Commitment: The members of the User Group should commit to use GEPIR and to grant access to their GLN and GTIN data via GEPIR
- Time and effort: Most of the communications will be done via e-mail. Up to 4 face to face meetings a planned a year. These meetings will always be held in conjunction with other GS1 events (e.g. GSMP, Uconnect etc.)



DATA DRIVER

- Help small and medium enterprise to manage their number bank
- No double numbers, correct check-digit, clear printing instructions for bar-code master film producers
- Controlled attribution of GLNs and storing of the master data
- Controlled attribution of GTINs, their hierarchy and storing of the relevant master data

Products are packaged at different levels, and each level requires a specific type of bar code. To help us understand what level you need a bar code for, which option below best describes your packaging for your product:

Note: Packaging levels are hierarchical, which means you must define the lowest level (each/individual unit) first before proceeding to a higher level.

Please select the option below that best describes the packaging level you want to bar code.



- Pallet (Shipping - can be Mixed Module)** : A packaging level that can contain within it cases, inner packs, or each/individual units. Used for shipping only, never sold at the point of sale (POS) (ex. 20 cases of widgets)..
- Case (Shipping - can be Display Shipper)** : This is the standard shipping level. Can contain within it inner packs and/or each/individual units. (ex. 12 inner packs of widgets.)
- Inner pack:** A packaging level that is not sold at the point of sale. Can only contain each/individual units (ex. a sleeve or poly bag, etc... of 12 widgets)
- Each/Individual Unit (Retail):** The lowest level of item packaging. These units are almost always sold at the point of sale. This typically is the product by itself. (ex. a widget)

Next



To have your product's bar code labels printed, contact a [UCC-Certified Solution Partner](#). You may choose a vendor who can print the labels for you or you may purchase software to print the labels yourself.

EAN.UCC Company Prefix: 81414100

GTIN: 00814141000009

Product Bar Code Number: 814141000009

SKU/Internal Part Number:

Product Line/Brand: Super Cleaner

Product Description: Super Cleaner, Fresh Scent

Required Symbology: UPC-A

Min Size of label is:

Width: 1.719

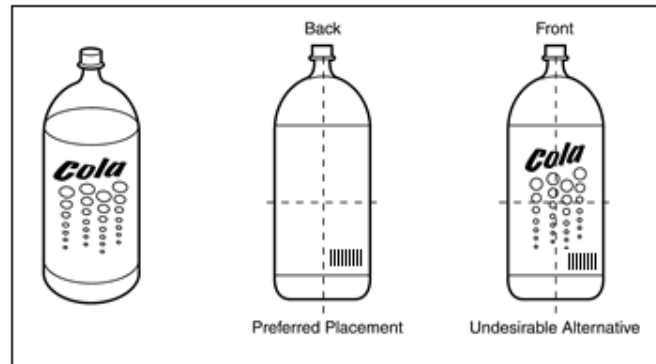
Height: 1.271

Barcode Dimensions: W 1.469 x H 1.021 (100%)

Minimum Quality Specs: 1.5/06/670

Company: GS1 US ENTERPRISES
Location Contact: JOHN TERWILLIGER
 LAWRENCEVILLE PIKE CORPORATE CENTER,
 1009 LENOX DR, SUITE 202, LAWRENCEVILLE,
 NJ, 08648, US
Address:
Contact Phone: (609) 620-0200
Email: JTERWILLIGER@UC-COUNCIL.ORG
Fax: (609) 620-1200

Bar code label placement example



Label is applied to what type of packaging

(e.g. wood, plastic, paper, corrugated):

I would like to order quantity bar code labels.

[Find label manufacturing vendors to order bar code labels](#)



GTIN

All products | **Load GTINs already in use**

Enter a Product that needs a bar code | Edit | Clone | Summary | Product Identification Detail Sheet | Special Applications

Filter Criteria % = Wildcard

Type: Each Case Innerpack Pallet

Brand Name: Bar Code: Clear Filter

Description: GTIN: Run Filter

SKU: Status: All

Rows displayed - 3

Status	Type	Product/Brand Name	Description	S.K.U.	Bar Code Number	GTIN
Complete	Product (UPC-A)	Super Cleaner	Super Cleaner, Fresh ...		81414100009	0081414100009
Complete	Product (UPC-A)	Super Cleaner	Super Cleaner, Pine S...		81414100016	0081414100016
Complete	Case (ITF-14)	Super Cleaner	Super Cleaner, Displa...		0081414100023	0081414100023

GLN

Add new location | Edit location

Global Location Number	Location Name	Address	Location for receiving label orders
081414100009	GS1 US ENTERPRISES	LAWRENCEVILLE PIKE CORPORATE CENTER, 1009 LENOX DR, SUITE 202, LAWRENCEVILLE, NJ, 08648.	<input checked="" type="radio"/>
081414100016	Lawrence Twp DC	16 Industrial Pkwy, Lawrence, NJ, 08647.	<input type="radio"/>



DATA DRIVER

User benefits

- Data remains stored on the MO server (security)
- Quick and easy entry to GDSN and GEPIR for SMEs
- Correct bar-codes on the products
- No number clashes



DATA Driver

Net Solutions User Group

- Audience: GS1 member companies that use Net Solutions. For DATA DRIVER mainly retailers, as they use the data captured by DATA DRIVER
- Tasks: Define system requirements and give feedback on the experiences made with DATA DRIVER
- Commitment: The members of the User Group should motivate SMEs to use DATA DRIVER
- Time and effort: Most of the communications will be done via e-mail. Up to 4 face to face meetings a planned a year.



PKI

Public Key Infrastructure

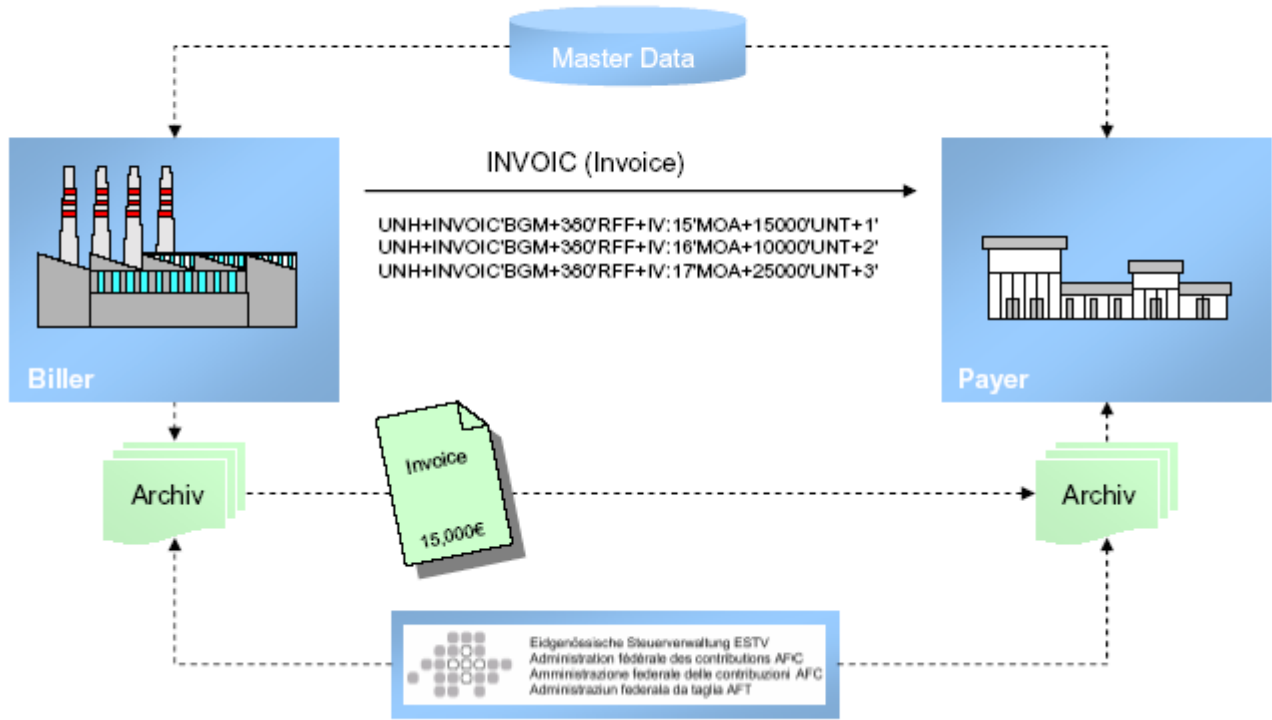
- Internet is insecure, anonymous and prone to interference
- The GS1 PKI will add security and certainty to business transactions that use the GS1 system and that are performed over the Internet
- The GS1 PKI will authenticate parties and secure and control the access to the GS1 web-services



- Some MOs have already implement a PKI infrastructure
- Different approaches are implemented (self signed, trusted)
- These certificates are not compatible amongst each other.
- Future GS1 web-services need a common and clear access control
- TST has developed concept that is ready for implementation

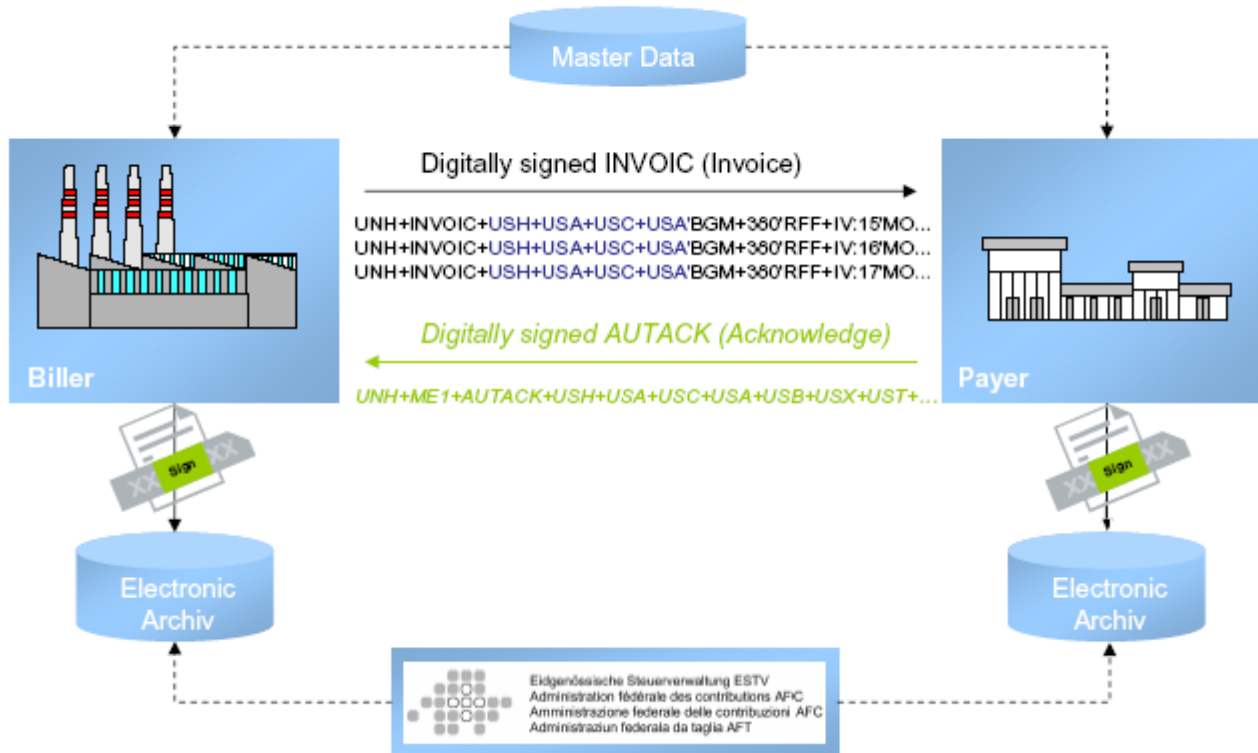
Example: Switzerland

INVOIC with parallel paper-based invoice



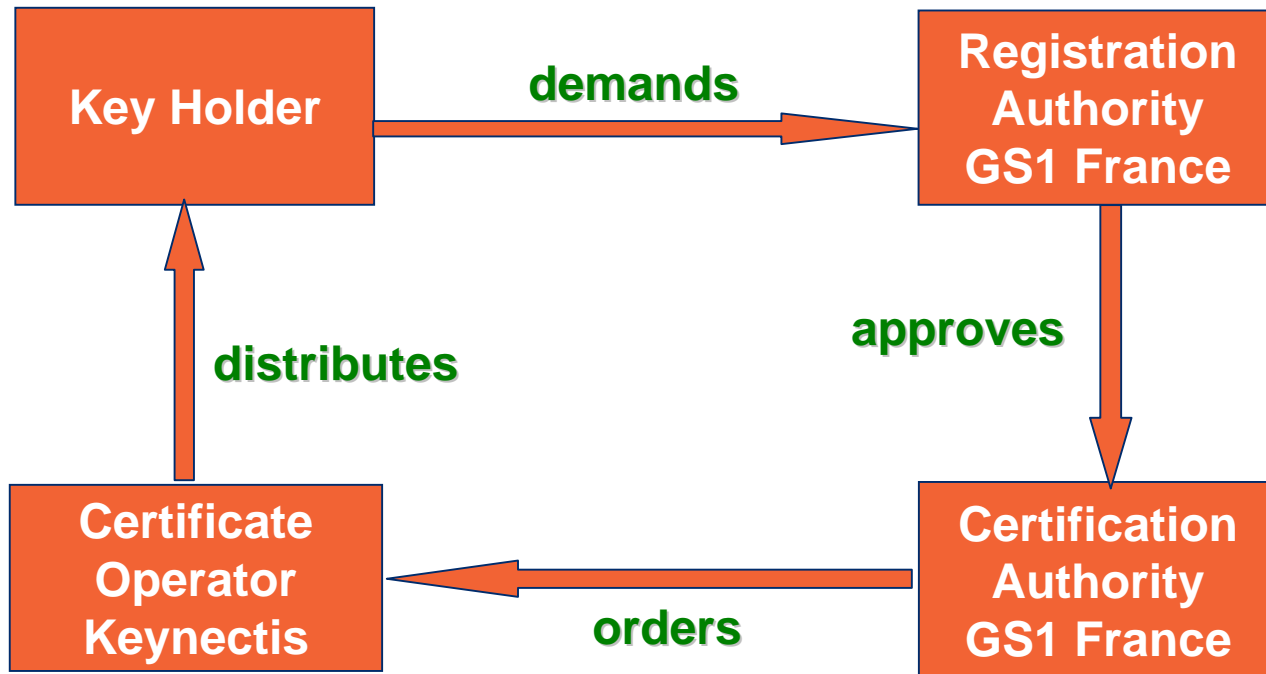
Example: Switzerland

INVOIC with Digital Signature





Example: France





PKI

User benefits

- Internet is insecure, anonymous and prone to interference
- The GS1 PKI gives security and certainty to business transactions that use the GS1 system and that are performed over the Internet
- The GS1 PKI will authenticate parties and secure and control the access to the GS1 web-services



PKI

Net Solutions User Group

- Audience: GS1 member companies that use Net Solutions
- Tasks: Rise awareness for the security issues in relationship with the Internet. Work of one single access and certificate to enter GS1 system solutions (e.g. GDSN, EPC, GEPIR etc.)
- Commitment: Where a genuine need is expressed the members of the User Group should commit to use GS1 certificates for the digital signature.
- Time and effort: Most of the communications will be done via e-mail. Up to 4 face to face meetings a planned a year.



Conclusion

Net Solutions

- Net Solutions is a platform for delivering standards and web-services to MOs and GS1 user companies
- Internal benefits through reduction of administrative work, hard savings through sharing of global software licenses
- GEPIR, DATA DROVER and PKI are areas where we can provide powerful Net-Solutions to our users
- They are opportunities for you
- **Get involved!!!**



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