Emerging Parcel Standards
GS1 initiatives
An overview of tools, projects, pilots

Agata Horzela (GS1 Poland)
Roberto Matsubayashi (GS1 Brazil)

10th September 2018; GS1 Industry & Standards Event 2018; Dublin
How does it work?

• Speaker/s will provide food for thought (40 minutes)
  • Agata will share on-going activities and plans from Poland
  • Roberto will share an exciting new project from Brazil
• Each WG will then work in small groups (5-8 people) on topics presented by speakers.
• **Objective**: capture ideas, comments, plans etc. from each small group
• Group Leader will present results for all attendees (incl. Q&A) for 15”
Emerging Parcel Standards GS1 Poland

WHAT WE HAVE DONE THIS YEAR:

1. We have analysed the identification solutions and possibility of SSCC implementation in CEP (courier-express-parcel) market in Poland – we have the final report

2. We have started project with Polish Post

Poczta Polska
Analysis the possibility of SSCC implementation in Courier, Express, Parcel and Postal market

<table>
<thead>
<tr>
<th>Company name</th>
<th>Market share</th>
<th>Company willing to implement SSCC?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DPD Poland</td>
<td>28%</td>
<td>NO</td>
</tr>
<tr>
<td>2. DHL Parcel</td>
<td>14%</td>
<td>YES</td>
</tr>
<tr>
<td>3. Polish Post</td>
<td>18%</td>
<td>YES</td>
</tr>
<tr>
<td>4. UPS</td>
<td>14%</td>
<td>NO</td>
</tr>
<tr>
<td>5. FedEx</td>
<td>8%</td>
<td>NO</td>
</tr>
<tr>
<td>6. GLS</td>
<td>8%</td>
<td>YES (next year)</td>
</tr>
<tr>
<td>7. Inpost</td>
<td>5%</td>
<td>Only domestic transport</td>
</tr>
<tr>
<td>8. Geis</td>
<td>4%</td>
<td>Only domestic transport</td>
</tr>
</tbody>
</table>

**GENERAL CONCLUSION:**

COMPANIES SEE THE NEED OF STANDARISATION, BUT NOBODY WANTS TO BE THE FIRST!

**other responses:**

„we do not want to change our internal IT systems – it will cost us a lot of money”

„we do not see a business need – our clients do not require standard parcel labels”

„we would change it only if there was such regulation by law”

„we are a global company, we can not make such decision in Poland”
Project with Polish Post

Project assumptions:

- identification of outgoing international parcels
- SSCC is assigned at a source (engage the Polish Post’s clients), but only for B2B cooperation
- we can not abolish UPU number (Polish Post is a Member of Universal Postal Union and have to mark international parcels using their standard)

**AIM:** to find a strong value (for Polish Post or their clients) of using the SSCC next to UPU number. Otherwise they will not conduct the implementation.
Project with Polish Post – what we have done

- Identification and mapping the process of outgoing international shipments (using BPMN standard);

- Prepare TO BE and AS-IS map with simulation of SSCC implementation;

- Identification of key Polish Post’s clients (with GS1 GCP, so that they could generate SSCC);

- Based on eMag (on-line shop/Polish Post’s client) we have simulated what kind of benefits clients could gain after implementation.
Project with Polish Post – results and conclusions

- The implementation of SSCC (next to UPU) will not bring any direct benefits for Polish Post - UPU number would perform the same function as SSCC in PP’s internal processes;

- We have found other potentials for optimisations, which are not directly related to SSCC implementation;

- The idea of harmonised parcel label is right and would bring long-term benefits if IT systems of partners were integrated and all parties would use SSCC instead of UPU

- in our project it is not possible, because other partners (National Post Offices) have to use UPU number and they all use the same integrated system (IPS);

- Polish Post would gain some benefits for SSCC implementation as a receiving HUB for non-register international letters (up to 2 kilos) – mainly that, which come from China because they have problems with handling them.
On-line shops/Clients’ perspective:

- They confirmed that it would be great to have one number for the whole route and which is also used for returning processes

- Great benefits for them would be to have possibility of manage the numbers by themselves. At the moment if their customers want to check the status of parcel, they need to go to the courier’s website and on-line shops lose the traffic

- They are ready to use their own SSCC only if courier’s IT system will be compatible and they will not need to bear the costs of that.
What next?

- We would like to find a partner outside Poland (other National Post) to prove the simulated benefits

- Next year we would like to conduct a pilot project with courier company (non Postal Organisation), they do not need to use UPU number and it would be easier to prove the benefits
Brazilian Post and Postal Industry

- **2005**: Initial approach to Brazilian Post
- **2007**: Participation in the UPU Standards meeting promoting EPC
- **2010**: Setup MO Interest Group
  Memorandum of Understanding between GS1 and UPU signed on Dec. 20th, 2010 to provide a framework for further collaboration.
  Areas of interest:
  - RFID/EPC
  - eCom
  - Local support and implementation
- **2017**: New talks to Brazilian Post and UPU to expand the use of RFID infrastructure
Monitoring Postal Items with RFID
Project Objectives and Benefits

- Quality
- Operation
- Customer
- Cost
- Security

Automated Postal Item Monitoring

VISIBILITY WITH RFID

Joint Project with

UPU UNIVERSAL POSTAL UNION

Correios
Project Scope

Postal Flow

Posting

Handling and Transportation

Delivery

Phase 3 Scope
RFID Adoption Evolution

Phase 1
- Installed Base
- Lead Time Measurement (GMS)
- 2012 – ‘13

Phase 2
- Lead Time Measurement (GMS)
- Tracking
- 2014 – ‘15

Phase 3
- Tracking
- 2017 – ‘21

*PHASE I*
- 2 x Postal facilities
- 20 x RFID control units

*PHASE II*
- 17 x Postal facilities
- 364 x RFID control units

*PHASE III*
- 183 x Postal facilities
- 1962 x RFID control units

*TOTAL*
- 202 Postal facilities
- 2346 GMS RFID units
Roles and Responsibilities

**UPU**

- Hardware:
  - 1962 RFID Reader Kits
  - 10 RFID Handheld Readers
  - 10 RFID Printers
  - Servers
- Quality Management System (QMS) Software Development
- QMS Technical Support

**Correios**

- Infrastructure Deployment (183 facilities)
- IT infrastructure
- QMS and Correios Systems Integration
- RFID Tags
- Maintenance services
Project Milestones

Postal Facilities Infrastructure - Finish
- Start: 09/2018
- Finish: 12/2019

Delivery of Equipment - Start
- Start: 08/2018

Installation - Start
- Start: 09/2018

RFID Tags - Start
- Start: 07/2019

Deploy - 01/2020
## Volume & Timeline

<table>
<thead>
<tr>
<th>Service</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEDEX</td>
<td></td>
</tr>
<tr>
<td>PAC</td>
<td></td>
</tr>
<tr>
<td>MALOTE</td>
<td>461</td>
</tr>
<tr>
<td>INTERNACIONAL</td>
<td></td>
</tr>
</tbody>
</table>

Million Objects (2021 Projection)

- **2019**: 15%
- **2020**: 60%
- **2021**: 100%
Technology and Standards

**Air Interface Protocol**: EPC Global Class 1 Gen 2
ISO-18000-63

**Encoded Data**

**UPU Standard (on barcode)**

*S10 – Identification of postal items – 13-character identifier*  
*S10*

**GS1 Standard (RFID)**

SSCC – *Serial Shipping Container Code*  
*Items and Shipments*

GRAI – *Global Returnable Asset Identifier*  
*Assets*
Next Steps

- Support Correios during the Project implementation
- Promote EPC-IS adoption
- Possible work stream in TIPP to include new use cases

For more information contact
- Ricardo Verza Amaral Melo
  - F +55 11 3068-6259
  - E ricardo.melo@gs1br.org
Obrigado!

Roberto Matsubayashi
roberto.matsubayashi@gs1br.org
+55 11 3068-6205
Work Group reports

Q&A and Discussions
Reports by Group Leaders

Each reporter has 15 minutes e.g. 5 for report and 10 for Q&A

- Emerging Parcel Standards – Garry & Agata
- City Logistics – Jaco & Birgit
Wrap-up & Close
Make the SSCC on parcels even **more** successful than the GTIN on products.
Logistic Label developments

- Many Supply Chain stakeholders including Logistic Service Providers of all kinds are reviewing and updating their Logistics Labels
- More and more are including 2D barcodes on their labels using proprietary approaches
- GS1 is currently working to provide guidance to stakeholders so all can make use of 2D barcodes generated by others
- WR 18-000160 (enabling 2D barcode on Logistics Label) is in Community Review since 4th September
- WR 18-000207 (standards for 2D barcode content) looking for participation
Coming Soon

Last Mile Executive White Paper will be published around end of the month

Transforming the Last Mile
Emerging innovations and solutions in the challenging world of customer-centric logistics
Thank you all for being here
Hope you found the T&L session useful
Please do not forget to register in case you haven’t done so yet.
Please do not forget to rate the session using the Event App.
Wishing you lots of success in your efforts in Last Mile and T&L in general
But for now enjoy your lunch

Bon Appétit
Event App – How to rate sessions

1. Within each session, you will see “surveys” listed at the bottom

2. Select your rating and enter comments

3. A confirmation appears