



# Barcode Quality Assessment at POS (Point of Sale) and poor quality barcode impact on POS efficiency

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GS1 Latvija**

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Supernetto**

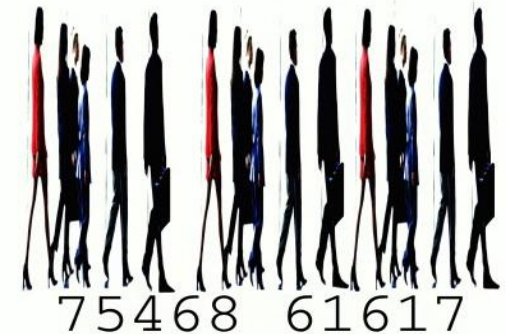


	Rimi Baltic	Latvia	Lithuania	Estonia
<b>Total</b>	<b>243</b>	<b>101</b>	<b>65</b>	<b>77</b>
<b>Rimi supermarkets</b>	<b>67</b>	<b>30</b>	<b>27</b>	<b>10</b>
<b>Rimi hypermarkets</b>	<b>36</b>	<b>14</b>	<b>13</b>	<b>9</b>
<b>Hard discounters</b>	<b>139</b>	<b>57</b>	<b>25</b>	<b>57</b>
<b>Cash &amp; Carry</b>	<b>1</b>			<b>1</b>
<b>DC</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>

# What happens if retailers accept poor quality bar codes

Stand in queue  
again! ☹

- Poor Customer Service at Checkouts
- Frustration by Staff and Customers
- Product Dislike and Avoidance
- Extra costs to fix them.
- Affects all systems (POS, replenishment)





# Cashiers always try to solve the barcode quality problems by





- Manipulating the product, its packaging to get the correct scan
- Call colleague to check the correct barcode number at shelves
- Maintains the self made correct barcode catalogue for frequently damaged codes
- Learning top 5 non scanning barcode numbers by heart





# Rimi Baltic/Supernetto barcode quality conformance program



**Quick Check**

**890: Scan Grade Report**

Filename: 2372335022889\_2.sgf  
 Date: 23-Oct-2009  
 Scan: 10 of 10

Symbology	EAN-13
ISO grade	A - 4,00 / 06 / 660
Traditional grade	OK

**Failure Summaries:**

Scan data	
Reflectance	
Dimensional	
Format	
Miscellaneous	
Applications failure	

**Izdots**

**Komentāri par svītrkoda simbolu: OK!**

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Paskaidrojums: svītrkoda simbola pārbaude tika veikta ar ISO/IEC 15426 atbilstošu verifikatoru un ievērojot ISO/IEC 15416 svītrkoda drukas kvalitātes pārbaudes nosacījumus, kuros noteikts, ka minimālajam svītrkoda kvalitātes novērtējumam jāatbilst C - 1,5 (ISO grade) pēc ISO/ANSI novērtējuma skalas\* un GS1 parametriem\*\* - OK (Traditional grade).

ANSI	ISO/CEN	Komentāri:
A	3,50 - 4,00	Ieskaits
B	2,50 - 3,50	Ieskaits
C*	1,5 - 2,50	Ieskaits
D	0,5 - 1,50	Izskritis
F	0 - 0,5	Izskritis

\*\*GS1 parametru novērtējums (Traditional grade):

OK	OK	Ieskaits
F	Failed	Izskritis

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 projekta vadītājs  
 tālr. 67830821

Since September 2009, in order to prevent losses from accepting poor quality barcodes, our suppliers are asked to verify their barcodes against minimum ISO print quality requirements and traditional GS1 standards.

More information about barcode verification on GS1 Latvia site:

<http://www.gs1.lv/?mid=18>



# GS1 standards used by millions of companies



■ Countries with a GS1 Member Organisation

■ Countries served on a direct basis from GS1 Global Office (Brussels)

**108 Member Organisations.  
150 countries served.  
2,000 people helping us.**

## GS1 Competence area (Enablers)



- First introduced at POS **35 years ago** and the first passed Marsh Supermarket (US) checkout on Wrigley chewing gum pack
- Estimated annual cost savings of **\$17 billion (USD 17'000'000'000)** in the grocery sector alone, *according to the GS1 US and PWC survey.*





# Ideal POS (EAN-13/8) Barcode:



- **Scans with the first time, every time**
- The product number (GTIN) registered and maintained in Global GS1 system
- Has correct location on the product, easy to find and bring to the scanner
- Comply with minimum requirements of traditional GS1 (Dimensional) and ISO print quality requirements;
- Has correct orientation (Ladder or picket fence), depends from product shape and print technique.





**31 billion** annual POS item transactions in France

**2%** had reading errors

**23 seconds** on average to resolve each error

## ***Poor quality barcodes cost time and money***

**20%** of super/hypermarket shoppers had a poor experience due to non-conform barcodes.

**The equivalent of 2700 cashiers per year spend time trying to solve these problems.**



# GS1 Barcode quality audit at Supernetto:

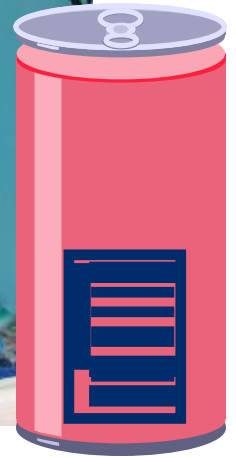


- 1300 control scans
- 45 products with potential reading problems
- Suppliers advised to do the barcode ISO print quality and traditional GS1 verification;
- Suppliers encouraged to do the corrective measures for the barcode labels and/or packaging improvements.
- Field survey on cashiers' time spent on solving barcode errors



# The most common mistakes:

## Wrong placement



- Always consult with designer and packaging company to avoid corner wraps and package flaps.
- Barcode orientation on cylinders = ladder

# The most common mistakes:

## Color problems

**Wrong!**



Four examples of barcode color problems are shown, each with a 'Wrong!' label. The examples are:

- A green label with a barcode on a yellow background.
- A white label with a barcode on a red background.
- A red label with a barcode on a white background.
- A blue label with a barcode on a dark blue background.

**OK!**



Four examples of barcode color problems are shown, each with an 'OK!' label. The examples are:

- A green label with a barcode on a white background.
- A white label with a barcode on a blue background.
- A red label with a barcode on a yellow background.
- A blue label with a barcode on an orange background.

# The most common mistakes:

## Poor print quality



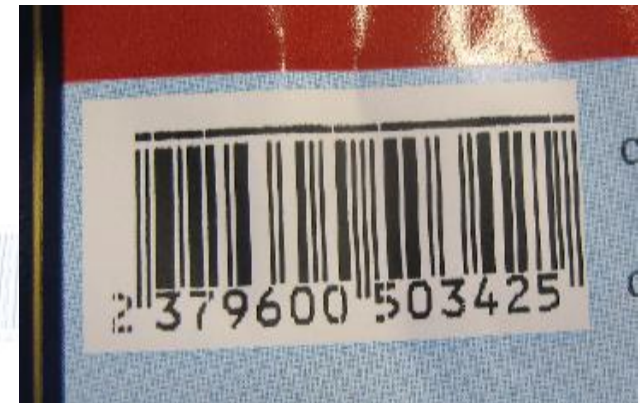
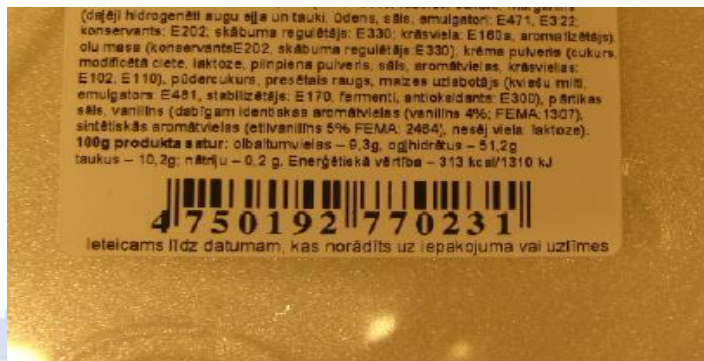
**Print quality** of barcodes must comply with ANSI grade A, B or C (equivalent ISO grade 1.5 and higher), provided that evaluation thereof is carried out following the methods set forth in the standard ISO/IEC 15416:2000

# The most common mistakes: Insufficient height and quite zones



Omni directional scanning environment at POS

Left and right quite zones



# and the Award goes to ...



**1129** pieces sold per Day  
with an average **20** sec for  
manual entry at POS is **188**  
working hours per month

=

**1** extra full time cashier for  
retailer and an average **3-4**  
people standing in the  
queue for 40 hours per  
week on customers side

# Barcode quality remains important also for tomorrow...



Increasing number of **Self checkout services** and the use of **mobile phones for scanning** barcodes by shoppers may require quality barcodes in the future to be read by all.

Paldies

감사합니다

Aitäh  
*Achiu*

ありがとう

*Thank you*

謝謝

*Danke Schön*

***Terima Kasih***

***Gracias***

*Grazie*

Спасибо

Merci

Dank u

