Changes in mixture of kerbside collections and their consequences for sorting

(status, trends, consequence)

2 March 2021, INGEDE-Symposium 2021

Kerbside collection Nuremberg 2021

KERBSIDE COLLECTION NUREMBERG 2016

Kerbside collection Nuremberg 2021

ROWE

Agenda

I. Changes in composition of kerbside collections since 2015

II. Economic effects

III. Effects of the changed parameters

IV. Conclusion

Changes in composition of kerbside collections since 2015

I.

I. a) ROWE sees a decline in the share of print advertising

	1.–3. Quartal 2020			1.–3. Quartal 2019		
	Mio. €	ggü. Vorjahr in %	Anteil in %	Mio. €	ggü. Vorjahr in %	Anteil in %
Werbedrucke/Kataloge	2.939	-17,5	37,1	3.561	-1,8	39,3
Kataloge	571	-21,2	7,2	724	-14,4	8,0
Plakate	310	-19,0	3,9	383	9,6	4,2
Geschäftsberichte	23	-15,8	0,3	28	-8,4	0,3
Prospekte	1.363	-14,6	17,2	1.596	–	17,6
Mailings	155	-10,6	2,0	174	–	1,9
Andere Werbedrucke/ -schriften	515	-21,4	6,5	656	–	7,2
Geschäftsdrucksachen	726	-15,1	9,2	855	-6,0	9,4
Zeitschriften	547	-18,6	6,9	672	-7,2	7,4
Zeitungen/Anzeigenblätter	754	-10,5	9,5	842	–	9,3
Tageszeitungen	490	-10,6	6,2	548	-15,5	6,1
Wochen-/Sonntagszeitungen	99	-17,5	1,2	120	-6,3	1,3
Anzeigenblätter	164	-5,7	2,1	174	–	1,9
Bücher/kartografische Erzeugnisse	609	-9,1	7,7	670	-0,8	7,4

De-Ink relevant print advertising =
- 14,8 %

Quelle: bvdm-online.de – 26.01.2021

ROWE

I. a) ROWE sees a decline in the share of print advertising

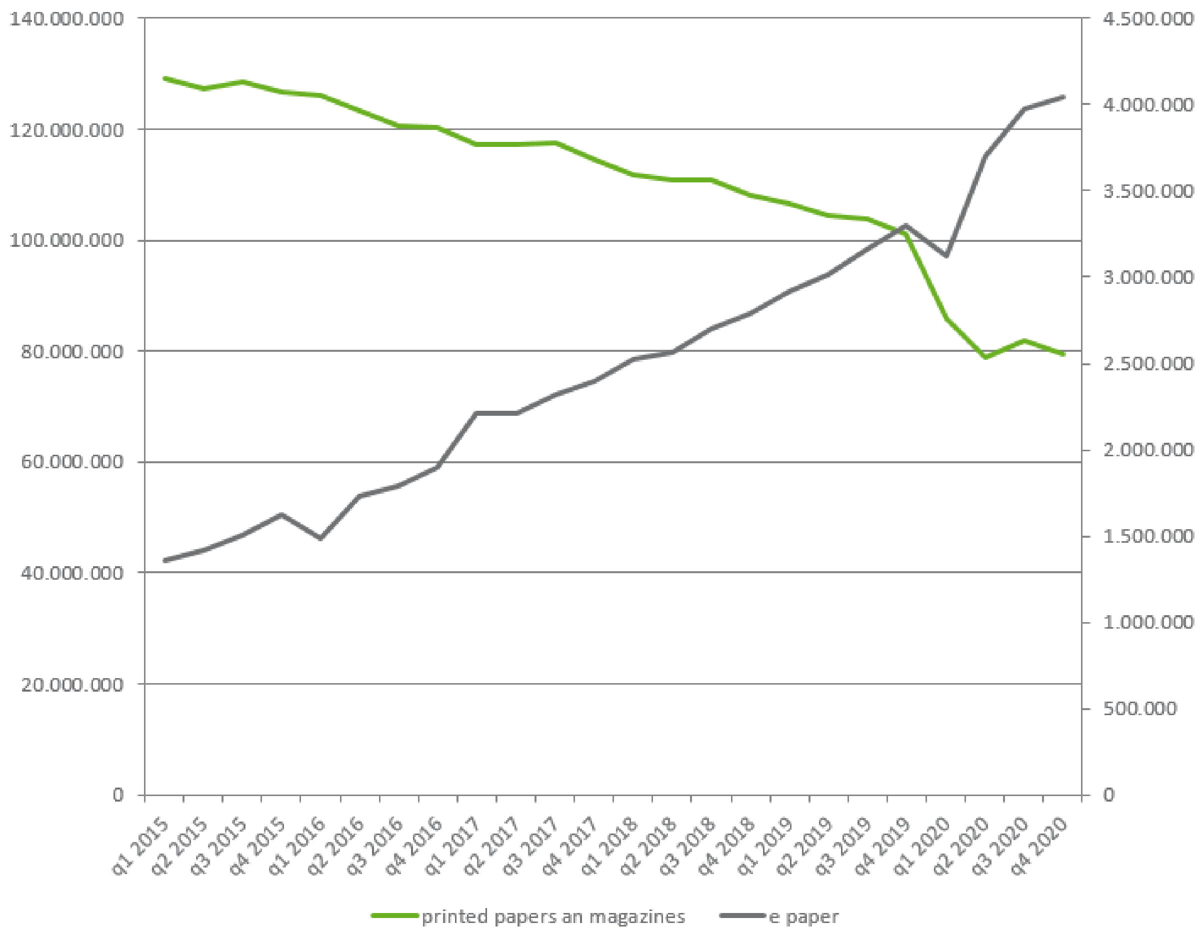
	1.–3. Quartal 2020			1.–3. Quartal 2019		
	Mio. €	ggü. Vorjahr in %	Anteil in %	Mio. €	ggü. Vorjahr in %	Anteil in %
Bedruckte Etiketten	1.050	-0,4	13,3	1.054	11,1	11,6
Kalender/Karten	79	-7,1	1,0	85	-21,2	0,9
Sonstige Druckerzeugnisse	1.219	-7,2	15,4	1.313	-0,2	14,5
Textildruck (Bekleidung)	*17*	*-27,8*	*0,2*	*24*	*–*	*0,3*
Bedrucken von anderen Materialien als Papier	*490*	*-4,6*	*6,2*	*514*	*–*	*5,7*
Andere Drucke	*711*	*-8,2*	*9,0*	*775*	*–*	*8,6*
Summe Druckerzeugnisse	**7.922**	**-12,5**	**100,0**	**9.053**	**-1,9**	**100,0**
Druck- und Medienvorstufe	587	-10,5	60,9	656	-9,5	58,7
Druckweiterverarbeitung	377	-18,4	39,1	462	-10,7	41,3
Summe Druckdienstleistungen	**964**	**-13,8**	**100,0**	**1.118**	**-10,0**	**100,0**
Summe Druckerzeugnisse und Druckdienstleistungen	**8.886**	**-12,6**		**10.170**	**-2,9**	

There was an 12,6 % decrease in print advertising in comparison to I-III Q/2019 = I-III Q/2020

Quelle: bvdm-online.de – 26.01.2021

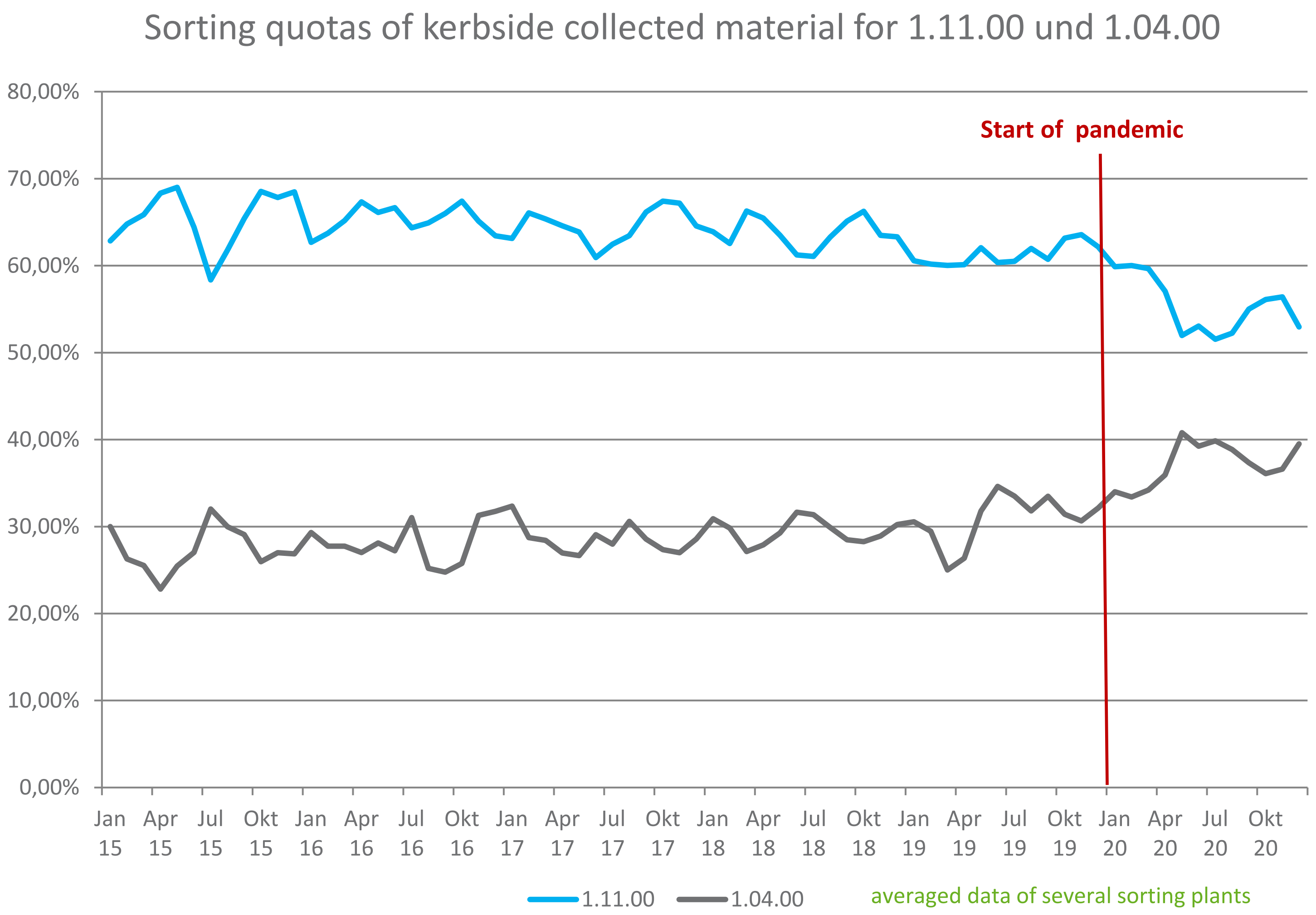
I. b) Development of distributed newspaper and magazines /

Digital media trend continues



Source: IVW

I. c) Development of sorting results in PfR sorting plants



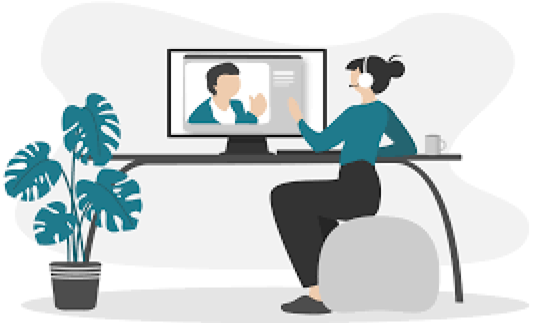
The long-term trend has intensified since the beginning of the corona pandemic

I. d) Packaging materials increase / De-Ink materials decrease

- Strongly increased share of small pieces of containerboard
- Trend towards white top containerboard
- ROWE notices an increased share of used paper towels

I. e) Home Office

Caused by the pandemic, the trend to home offices is increasing the shares of office papers and solid-coloured papers. Usually these grades will be found at separate file destruction volume streams.



Economic effects

II.

II. Economic effects

- Rising costs for sorting PfR due to:
  - Decreased output from sorting plants
  - Extended mechanical downtime due to blocked aggregates
  - Higher energy consumption (or costs)
  - Increased labour costs due to intensive re-sorting
  - Increased maintenance costs

- Falling revenues through:
  - Increased share of the volume of “Green dot service providers”
  - Declining share of N&P in collected volumes
  - Increased sorting losses of 1.11.00 due to lack of suitable material

→ loss of efficiency

Effects of the changed parameters

III.

III. a) From technical side

Optical systems **partly overloaded** or **non-suitable**

- The increasing share of small pieces containerboard exceeds the capacity of optical units or „keener parameters“ increase the loss of deinking quality. The solution lies either to install more optics or in the reduction of output (for existing sorting plants).

- White-top containerboard is not sufficiently recognized by optical systems – the share of this grade in output streams increases necessarily.

- Mechanical sorting techniques fail on small containerboard

III. a) From technical side

- Almost parity between deinking and packaging shares – if the trend continues a positive sorting needs to be carried out in the future – the single mechanical sorting units of the existing systems are not designed for this.

Conclusion:

A facility change in terms of the new mixture of kerbside collected material would have to focus mainly on:

- Wider reels or longer lanes
- Additional units responsible for a wider spreading of sorting material Intensified optical sorting
- changed constellation of single aggregates

III. b) From quality side

- 1.11.00 will include more packaging
- Current EN 643 requirements can hardly be met with conventional sorting effort

III. c) Marketing

- Mixed sorting quotas are difficult to guarantee and increase the risks substantially for sorting plant operators
- Increase of complaints which will lead to further cost implications for ROWE/merchants who have sorting facilities

Conclusion

IV.

We are convinced that the mixture of kerbside collected material will not return to the status **"Quo ante Corona"**.

*A **new solution** needs to be found for the changing situation that we (The world) now find ourselves in.*