

Timeliness and punctuality in the State Statistical Office

Ivan Spasovski

State Statistical Office, Republic of North Macedonia

Abstract

The purpose of this paper is to present the timeliness and punctuality of the publication of output data, in news releases and in thematic publications, through the quality indicators related to Concept 14 of the SIMS v2.0 (Principle 13 of ESS Code of Practice, 2017).

This paper analyses the calculated quality indicators at individual and aggregate level and evaluates the quality of timeliness and punctuality of publication of output data. This analysis ascertains the situation and presents numerical assessments, descriptive explanations and interpretations of the quality of timeliness and punctuality of the publication of output data from 2016 to 2020. After the analysis, suggestions were made on how to improve the quality of publishing the output data in the State Statistical Office.

This paper also presents the inputs for the calculation of quality indicators such as: the statistical domain, the last day of the reference period, the year of the statistical survey and the planned and realised dates of publication of the news releases and thematic publications. Also, this paper provides explanations for standardisation of input and output data such as the last day of the reference period, correspondence of news releases and thematic publications with statistical surveys, and explanations of calculations of the quality indicators at individual and aggregate level.

Quality indicators TP1-Time lag - first results, TP2-Time lag - final results and TP3-Punctuality - delivery and publication are prepared at the level of statistical survey, statistical domain and periodicity of publication of the news releases and thematic publications for 2016, 2017, 2018, 2019 and 2020. The quality indicators are prepared according to: ESS Handbook for quality reports, 2014 (Eurostat), ESS Quality and performance indicators (QPI), 2014 (Eurostat).

Keywords: Quality indicators, timeliness, punctuality, SSO

1. Introduction

The State Statistical Office of Republic of North Macedonia (SSO) produces and disseminates official statistics about the Macedonian economy and society as a basis for making decisions based on quality information.

Quality is defined as "the totality of characteristics of an entity that bears on its ability to satisfy stated or implied need" (ISO 8402:1986) or "the degree to which a set of inherent characteristics of an object fulfils requirements" (ISO 9000:2005).

The quality of statistical results is measured to the extent to which the statistics are relevant, accurate and reliable, timely and punctual, coherent and comparable, accessible and clear, i.e. according to principles 11 to 15 of the European Statistics Code of Practice (2017).

Quality indicators are specific and measurable elements and are used in statistical practice to characterise the quality of statistics. They measure the quality of statistical products or processes. Quality indicators compare the quality between different statistics and different time periods.

Quality indicators are used to inform the users about the quality of statistics and include qualitative interpretations of quality.

2. Scope

In the calculation of the quality indicators, are included all published news releases and thematic publications of the State Statistical Office in the reference years from 2016 to 2020. Due to the Corona pandemic in 2020, we will see the impact of the pandemic and results gathered for 2020 will be commented separately.

The number of published news releases and thematic publications, in the period 2016-2019, ranges from 343 to 360. In 2019, that number is 360, which is an increase of 5.0% compared to 2016 and 3.4% compared to 2018.

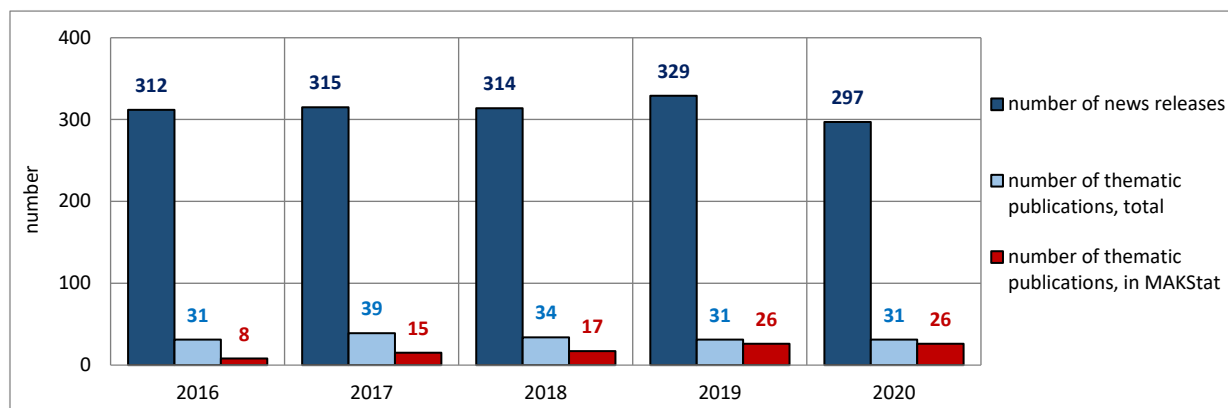
The number of published news releases and thematic publications in 2020 is 328 and that is decrease of 8.9% compared to 2019.

Thematic publications are published in printed form (pdf and xlsx) and/or in tables in the MAKStat database.

The SSO, according to the Dissemination Strategy, will reduce the number of printed publications and will publish the data in the MAKstat database. Because of that, the number of printed thematic publications decreased from 23 in 2016 to 5 in 2019.

The published multi-domain publications are not included in the calculation of the indicators.

Chart 1 Number of news releases and thematic publications



3. Analysis of the timeliness and punctuality of the published statistical data of the SSO

3.1 Time lag - first results (TP1)

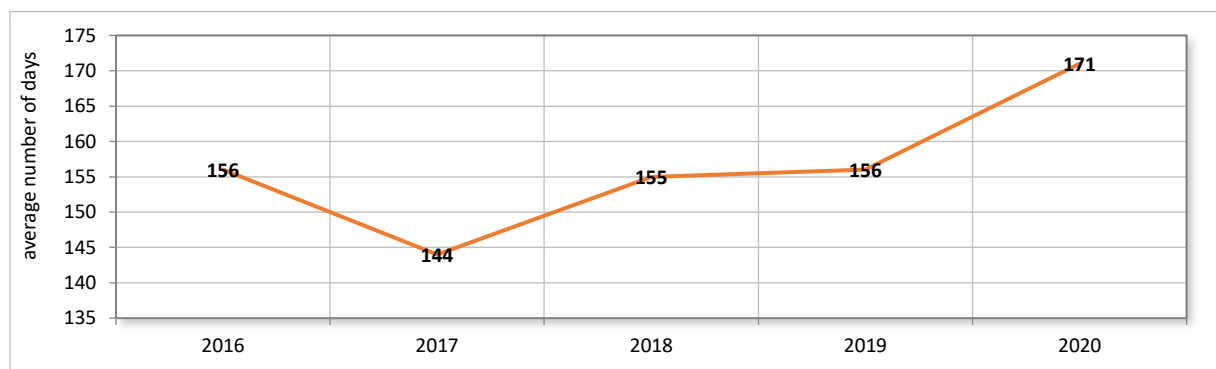
Time lag to the first/preliminary results means the number of days from the last day of the reference period, of the statistical data in the statistical survey, to the day of publication of the first/preliminary results in news releases in the current year.

News releases with first results include published estimated and/or previous data.

The total average time lag to the first results in the news releases in the period 2016-2019 is between 144-156 days. The smallest time lag to the first results in the news releases of 144 days is in 2017 and the largest of 156 days is in 2019 and 2016.

The total average time lag to the first results in the news releases in 2020 is 171 days and that is an increase of 9.6% compared to 2019.

Chart 2 Time lag to the first results in news releases



The number of news releases with first results according to the periodicity of publication in 2016, 2017, 2018, 2019 and 2020 is:

- 3 monthly news releases,
- 2 quarterly news releases,
- 4 annual news releases and
- 2 multi-annual news releases (only in 2017).

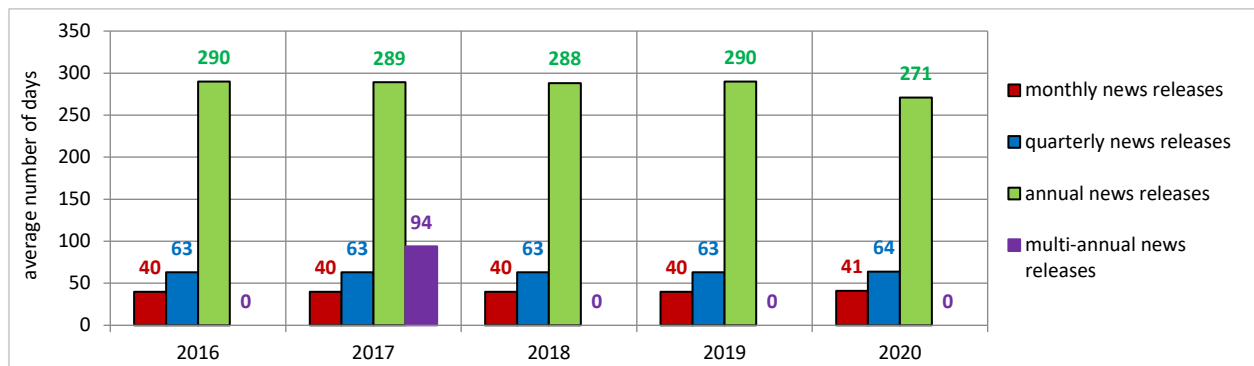
The average time lag to the first results is 40 days for the monthly news releases and 63 days for the quarterly news releases in 2016, 2017, 2018 and 2019.

For annual news releases, the average time lag to the first results, ranges between 288-290 days in the period of 2016-2019.

The average time lag to the first results in 2020 is 41 days for the monthly news releases, 64 days for the quarterly news releases and 271 days for the annual news releases.

The average time lag to the first results for the multi-annual news releases is 94 days in 2017 and refers to the Census of capacities in retail trade and the Census of capacities in catering trade.

Chart 3 Time lag to the first results in news releases, by periodicity



3.2 Punctuality - delivery and publication, final results (TP3.11)

The time lag of the publication of the first (estimated/preliminary) results means the number of days between the date of publication and the date of the planned publication of the first results in news releases in the current year.

The total time lag of the publication of the first results in the news releases is 0.0 days in 2016, 2017, 2018, 2019 and 2020.

The time lag of the publication of the first results for the monthly, quarterly, annual and multi-annual news releases is 0.0 days for the period of 2016 – 2020.

The time lag of the publication of the first results, total and by periodicity, in 2016, 2017, 2018, 2019 and 2020 shows that the news releases were published on the planned date of publication.

Table 1 Time lag of publishing of the first results

Year of publication	Total	News releases				
		monthly	quarterly	semi-annual	annual	multi-annual
2016	0,0	0,0	0,0	-	0,0	-
2017	0,0	0,0	0,0	-	0,0	0,0
2018	0,0	0,0	0,0	-	0,0	-
2019	0,0	0,0	0,0	-	0,0	-
2020	0,0	0,0	0,0	-	0,0	-

3.3 Time lag - final results (TP2)

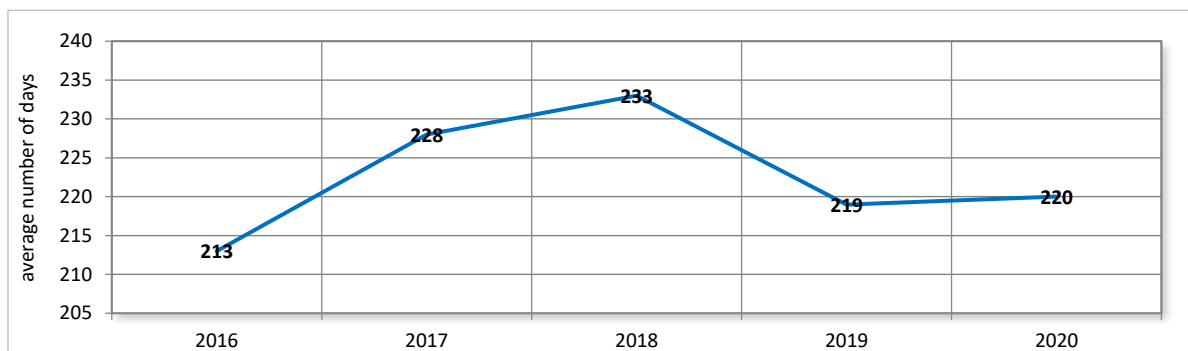
Time lag to the final results means the number of days from the last day of the reference period, of the statistical data in the statistical survey, to the date of publication of the final results in news releases and thematic publications in the current year.

The total average time lag to the final results in the news releases and thematic publications in the period 2016-2020 is between 213-233 days.

The smallest time lag to the final results in the news releases and thematic publications of 213 days is in 2016 and the largest of 233 days is in 2018.

The total average time lag between the first results and the final results is not comparable.

Chart 4 Time lag to final results in news releases and thematic publications



The average time lag to the final results in the news releases in the period 2016-2020 ranges from-to:

- 34-38 days for monthly news releases,
- 47-57 days for quarterly news releases,
- 61-91 days for semi-annual news releases,
- 227-284 days for annual news releases and
- 244-392 days for multi-annual news releases.

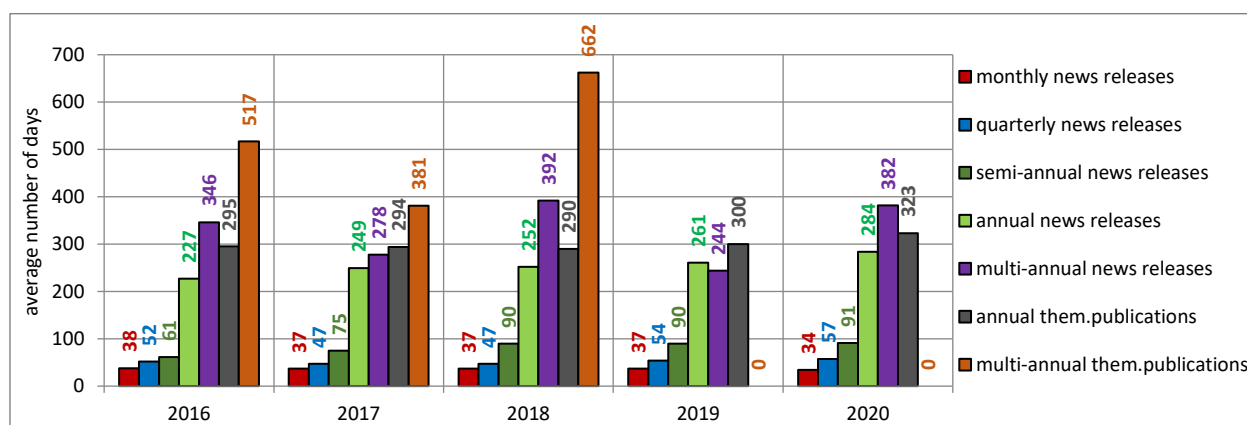
The average time lag to the final results in the thematic publications in the period 2016-2020 ranges from-to:

- 290-323 days for annual thematic publications and
- 381-662 days for perennial thematic publications.

Final results of the data in the statistical surveys are usually published in thematic publications.

Multi-annual news releases and thematic publications, by years, have greater variations in the average number of days, which is a result of the different periodicity of publishing data from multi-annual statistical surveys (2-year, 3-year, 4-year, 5-year and over 5-year).

Chart 5 Time lag to final results in news releases and thematic publications, by periodicity



3.4 Punctuality - delivery and publication, final results (TP3.12)

The time lag of the publication of the final results means the number of days between the date of publication and the date of the planned publication of the final results in news releases and thematic publications in the current year.

The total time lag of the publication of the final results in news releases and thematic publications in the period 2016-2019 ranges from -0.7 to 0.3 days.

The total time lag of the publication of the final results in news releases and thematic publications in 2020 is 1.2 days.

The time lag of the publication of the final results for the monthly, quarterly, semi-annual, annual and multi-annual news releases is 0.0 days in 2016, 2017, 2018 and 2019. The time lag of the publication of the final results for the annual news releases in 2020 is 1.4 days.

The time lag of the publication of the final results for:

- Annual thematic publications range from -2.3 days in 2017 to 8.7 days in 2020 and

- Multi-annual thematic publications range from -1.3 days in 2017 to 0.7 days in 2018.

The time lag of the publication of the final results, total and by periodicity, in 2016, 2017, 2018 and 2019 shows that the news releases were published on the planned date of publication.

The time lag of the publication of the final results in 2020 shows that the annual news releases were published after the planned date of publication.

Table 2 Time lag of the publication of the final results

Year of publication	Total	News releases					Thematic publications	
		monthly	quarterly	semi-annual	annual	multi-annual	annual	multi-annual
2016	0,3	0,0	0,0	0,0	0,0	0,0	1,2	-1,0
2017	-0,7	0,0	0,0	0,0	0,0	0,0	-2,3	-1,3
2018	-0,2	0,0	0,0	0,0	0,0	0,0	-0,9	0,7
2019	0,0	0,0	0,0	0,0	0,0	0,0	-0,1	-
2020	1,2	0,0	0,0	0,0	1,4	0,0	8,7	-

4. EVALUATION of the timeliness and punctuality of the published statistical data of the SSO

4.1 Timeliness of the published statistical data

The first results published in the news releases of the SSO in the period 2016-2020 are published on the planned date of publication. In 2020 there is an increase of the time lag for publishing the first results of 15 days.

The final results published in the news releases of the SSO in the period 2016-2019 are published on the planned date of publication.

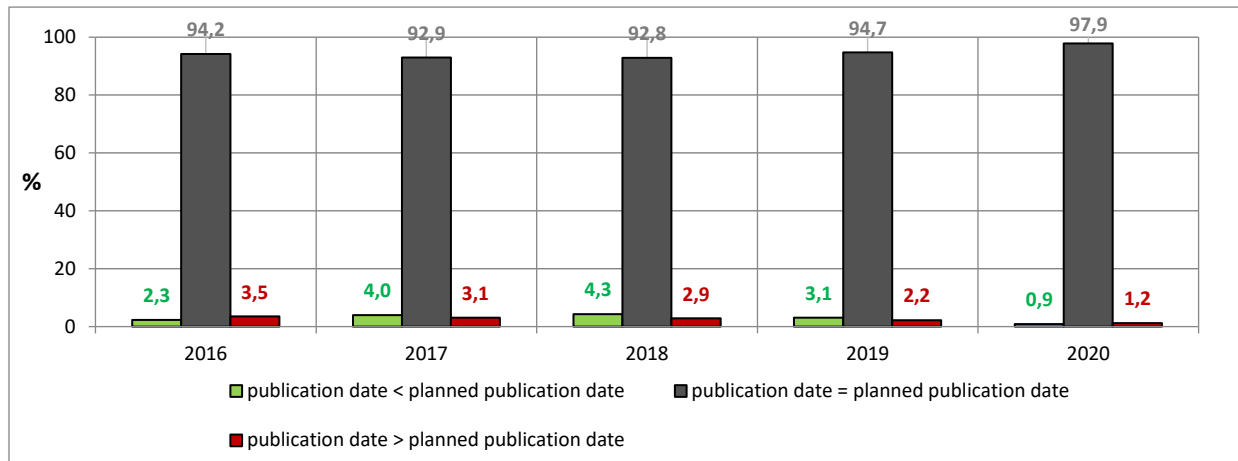
4.2 Punctuality of the published statistics

The time lag in the publication of the first results, total and by periodicity, in the period of 2016 – 2020 shows that the news releases are published on the planned date of publication.

The time lag in the publication of the final results, total and by periodicity, in 2016, 2017, 2018 and 2019 shows that the news releases are published on the planned date of publication and in 2020 there is delay in publishing the annual news releases of 1.4 days due to corona pandemic.

The final results published in the thematic publications of the SSO in the period 2016-2019 deviate from the planned date and the time lag of the publication of data for annual thematic publications ranges from -2.3 days in 2017 to 8.7 days in 2020 and for multi-annual thematic publications ranges from -1.3 days in 2017 to 0.7 days in 2018.

Chart 6 Time lag of publishing of the first and of the final results



In 2016, 96.5% of the total published news releases and thematic publications were published before/on the planned publication date, and 3.5% were published after the planned publication date.

In 2017, 96.9% of the total published news releases and thematic publications were published before/on the planned publication date, and 3.1% were published after the planned publication date.

In 2018, 97.1% of the total published news releases and thematic publications were published before/on the planned publication date, and 2.9% were published after the planned date of publication.

In 2019, 97.8% of the total published news releases and thematic publications were published before/on the planned publication date, and 2.2% were published after the planned date of publication.

In 2020, 98.8% of the total published news releases and thematic publications were published before/on the planned publication date, and 1.2% were published after the planned date of publication.

Used characters

- = no occurrence

% = share

Sources of data

State Statistical Office (http://www.stat.gov.mk/Indikatori_kvalitet_en.aspx)

- Programme for Statistical Surveys
- Methodological Documentation for Statistical Survey

- MAKStat database
- Advance Release Calendar (updated no later than 3 days before the planned publication)

References

ESS Handbook for quality reports, (2014), Eurostat

ESS Quality and performance indicators (QPI), (2014), Eurostat