# POLICE SCOTLAND MANAGEMENT INFORMATION REVISIONS ANALYSIS

## Figures for 2018/19 Quarter 4

# **Background**

Official statistics for recorded crime in Scotland are published by the Scottish Government on an annual basis. Police Scotland publishes Management Information on recorded crime each quarter. The data underpinning these publications come from Police Scotland's Scottish Operational Management Information System (ScOMIS) which is a dynamic database of current and historical records that are continually being updated. The published figures are derived from snapshots of this information system.

These revisions analyses represent a regular review of changes in recorded crime held by the Police Service in Scotland, and are used to track change over time. It demonstrates the fluidity of recorded crimes and the importance of recognising that these data are "live" and subject to change over time.

This note demonstrates how data held in the system are revised over time and shows how the latest figures compare to previously published figures. In particular, it focuses on (A) how year-end data for the first year (2013/14) of Police Scotland have changed over time, and (B) how 2017/18 year-end figures have changed since they were first published.

## A. How 2013/14 data have changed over time

Table 1 (see page 2) shows how the number of recorded crimes in each group has changed in the intervening period.

Although the end result, over all, is very little change (less than 1%) it can be seen that much of the revision to recorded crime data occur in the first two quarters. This indicates that the most recent quarters are most susceptible to revision. It is also important to note that some larger changes occur approximately one year later, suggesting an ongoing review.

However, it should also be noted that there have been further amendments during the intervening period, particularly to Group 7 during Q2 and Q4 of 2015/16. In the last three quarters of 2016/17 (Q2 to Q4), there has been very little change to the level of recorded crimes (initially recorded in financial year 2013/14).

During Q1 of 2016/17 Group 1 crimes reduced by 110, whilst Group 5 crimes increased by 102 crimes. This change is explained by the fact a crime classification (101108 - Offences relating to Serious Organised Crime) moved from Group 1 to Group 5 (504001). Also, during Q1 of 2016/17 Group 3 crimes reduced by 163 crimes. Most of this is explained by 161 fraud crimes in Fife being deleted, and replaced with a single fraudulent crime scheme crime (in accordance with Scottish Crime Recording Standards).

In the first quarter of 2017/18 there were a number of changes to note. The total of Group 6 offences has decreased by 67, but this has no material impact on the overall level. The reason for this change is that two offence classifications have been moved. The first classification relates to the ill-treatment or neglect of adults with incapacity. This has moved to Group 1 where the number of crimes has increase by 7. The other reassignment increased the number of Group 2 crimes by 60 and related to offences under the Communications Act 2003.

Group 1 crimes have remained constant for seven consecutive quarters (since Q2 2018/18). Group 4 has also stayed the same for six consecutive quarters too (Q1 2017/18 to Q2 2018/19), but has shown one revision in the last quarter of data, with no further changes in the most recent quarter. Apart from these two examples, there has been no long term consistency in any of the other groups.

TABLE 1
Recorded crimes - Police Scotland:
Year end 2013/14 revisions analysis; 2013/14 Q4 to 2018/19 Q4.

Published Date	Crime Groups									
Tubilished Date			Group 3	Group 4	Group 5	Total Gp 1-5	Group 6	Group 7	Total Gp 6-7	Total Gp 1-7
Recorded Crimes 2013/14 Q4	6 785	8 604	137 324	54 418	63 266	•	207 190	204 001	501 281	771 678
2013/14 Q4 (as at) 2014/15 Q1	6 759	8 687	137 324	54 376	63 031	269 646	210 266	294 091		775 120
2014/15 Q2	6 768	8 723	136 610	54 234	62 963	269 298	207 048	295 258	502 306	771 604
2014/15 Q3	6 768	8 741	136 566	54 234	62 915	269 224	207 008	295 254	502 262	771 486
2014/15 Q4	6 768	8 747	136 475	54 221	62 881	269 092	206 973	295 349	502 322	771 414
2015/16 Q1	6 763	8 757	136 443	54 218	62 855	269 036	206 956	295 349	502 305	771 341
2015/16 Q2	6 762	8 770	136 435	54 217	62 850	269 034	206 953	295 119		771 106
2015/16 Q3 2015/16 Q4	6 764 6 764	8 766 8 767	136 428 136 417	54 218 54 218	62 842 62 835	269 001	206 944 206 937	295 118 295 339	502 062 502 276	771 277
2016/17 Q1	6 654	8 768	136 254	54 218	62 937	268 831	206 932	295 339	502 271	771 102
2016/17 Q2	6 654	8 767	136 249	54 217	62 937	268 824	206 930	295 338	502 268	771 092
2016/17 Q3	6 654	8 766	136 246	54 217	62 939	268 822	206 934	295 342	502 276	771 098
2016/17 Q4	6 654	8 765	136 245	54 218	62 938	268 820	206 944	295 342	502 286	771 106
2017/18 Q1	6 661	8 825	136 241	54 218	62 940		206 877	295 342	502 219	771 104
2017/18 Q2	6 661	8 828	136 238	54 218	62 940		206 876	295 352	502 228	771 113
2017/18 Q3	6 661	8 828	136 238	54 218	62 940		206 877	295 352	502 229	771 114
2017/18 Q4	6 661	8 829	136 239	54 218	62 932		206 877	295 352	502 229	771 108
2018/19 Q1 2018/19 Q2 2018/19 Q3 2018/19 Q4	6 661 6 661 6 661	8 830 8 832 8 832 8 833	136 238 136 238 136 238 136 236	54 218 54 218 54 219 54 219	62 929 62 929 62 929 62 928	268 876 268 878 268 879 268 877	206 877 206 877 206 876 206 874	295 353 295 354 295 354 295 354	502 230 502 231 502 230 502 228	771 106 771 109 771 109 771 105
Number CHANGE (as at) 2014/15 Q1	- 26	83	- 531	- 42	- 235	- 751	3 076	1 117	4 193	3 442
2014/15 Q2	9	36	- 183	- 142	- 68	- 348	- 3 218	50	- 3 168	- 3 516
2014/15 Q3	0	18	- 44	0	- 48	- 74	- 40	- 4	- 44	- 118
2014/15 Q4	0	6	- 91	- 13	- 34	- 132	- 35	95	60	- 72
2015/16 Q1	- 5	10	- 32	- 3	- 26	- 56	- 17	0	- 17	- 73
2015/16 Q2	- 1	13	- 8	- 1	- 5	- 2	- 3	- 230	- 233	- 235
2015/16 Q3	2	- 4	- 7	1	- 8	- 16	- 9	- 1	- 10	- 26
2015/16 Q4 2016/17 Q1	0 - 110	1	- 11 - 163	0	- 7 102	- 17 - 170	- 7 - 5	221	214 - 5	197 - 175
2016/17 Q2	0	- 1	- 5	- 1	0	- 7	- 2	- 1	- 3	- 10
2016/17 Q3	0	- 1	- 3	0	2	- 2	4	4	8	6
2016/17 Q4	0	- 1	- 1	1	- 1	- 2	10	0	10	8
2017/18 Q1 2017/18 Q2 2017/18 Q3 2017/18 Q4	7 0 0 0	60 3 0 1	- 4 - 3 0 1	0 0 0	2 0 0 - 8	65 0 0 - 6	- 67 - 1 1 0	0 10 0 0	- 67 9 1 0	- 2 9 1 - 6
2018/19 Q1	0 0	1	- 1	0	- 3	- 3	0	1	1	- 2
2018/19 Q2		2	0	0	0	2	0	1	1	3
2018/19 Q3		0	0	1	0	1	- 1	0	- 1	0
2018/19 Q4  Percentage CHANGE (as a	0 nt)	1	- 2	0	- 1	- 2	- 2	0	- 2	- 4
2014/15 Q1	- 0.4	1.0	- 0.4	- 0.1	- 0.4	- 0.3	1.5	0.4	0.8	0.4
2014/15 Q2	0.1	0.4	- 0.1	- 0.3	- 0.1	- 0.1	- 1.5	0.0	- 0.6	- 0.5
2014/15 Q3	0.0	0.2	0.0	0.0	- 0.1	0.0	0.0	0.0	0.0	0.0
2014/15 Q4	0.0	0.1	- 0.1	0.0	- 0.1	0.0	0.0	0.0	0.0	0.0
2015/16 Q1	- 0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2015/16 Q2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	- 0.1	0.0	0.0
2015/16 Q3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2015/16 Q4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
2016/17 Q1	- 1.6	0.0	- 0.1	0.0	0.2	- 0.1	0.0	0.0	0.0	0.0
2016/17 Q2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2016/17 Q3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2016/17 Q4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2017/18 Q1	0.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2017/18 Q2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2017/18 Q3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2017/18 Q4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2018/19 Q1 2018/19 Q2 2018/19 Q3	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0
2018/19 Q4  Change 2013/14 Q4 to 2019		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Number	- 124	229	- 1 088	- 199	- 338	- 1 520	- 316	1 263	947	- 573
Percentage	- 1.8	2.7	- <i>0.8</i>	- <i>0.4</i>	- 0.5	<i>- 0</i> .6	- <i>0</i> .2	<i>0.4</i>	<i>0.</i> 2	- 0.1

Five years after the Q4 2013/14 data were originally published there are still minor revisions occurring within the data. So whilst the data are relatively stable, we now know that revisions may occur for many years following initial publication. Although the latest revisions are unlikely to have a material impact on high level analysis for time series or percentage changes, it is possible that these may have a greater impact in lower level analyses.

TABLE 2a

Recorded Crimes (Group 1) - Police Scotland:
Year end 2013/14 revisions analysis; 2013/14 Q4 to 2017/18 Q4.

<b>Published Date</b>	2013/14		2013/14 Total		
	Q1	Q2	Q3	Q4	
2013/14 Q4	1 659	1 789	1 657	1 680	6 785
2014/15 Q1	1 649	1 783	1 645	1 682	6 759
2014/15 Q2	1 651	1 783	1 649	1 685	6 768
2014/15 Q3	1 652	1 785	1 647	1 684	6 768
2014/15 Q4	1 653	1 786	1 649	1 680	6 768
2015/16 Q1	1 654	1 784	1 650	1 675	6 763
2015/16 Q2	1 654	1 784	1 650	1 674	6 762
2015/16 Q3	1 654	1 784	1 650	1 676	6 764
2015/16 Q4	1 653	1 784	1 650	1 677	6 764
2016/17 Q1	1 628	1 737	1 626	1 663	6 654
2016/17 Q2	1 628	1 737	1 626	1 663	6 654
2016/17 Q3	1 628	1 737	1 626	1 663	6 654
2016/17 Q4	1 628	1 737	1 626	1 663	6 654
2017/18 Q1	1 628	1 737	1 625	1 671	6 661
2017/18 Q2	1 628	1 737	1 625	1 671	6 661
2017/18 Q3	1 628	1 737	1 625	1 671	6 661
2017/18 Q4	1 628	1 737	1 625	1 671	6 661
2018/19 Q1	1 628	1 737	1 625	1 671	6 661
2018/19 Q2	1 628	1 737	1 625	1 671	6 661
2018/19 Q3	1 628	1 737	1 625	1 671	6 661
2018/19 Q4	1 628	1 737	1 625	1 671	6 661

Using Group 1 crimes as an example, we can see (Table 2a above) that although there have been periods of no change over the last five years, there are also several substantive changes, generally from amendments to where recorded crimes are being classified. Following a small (7) revision in 2017/18 Q1, Group 1 crimes for 2013/14 have remained constant for the last eight quarters.

The change of 110 crimes between 2015/16 Q4 and 2016/17 Q1 is the result of Offences relating to Serious Organised Crime being moved out of Group 1. And, as stated above, the increase of seven crimes in 2017/18 Q1 is due to a crime classification moving from another Group.

Overall, the same general stability shown above is not replicated in other crime groups. Although most of the other Groups have experienced periods of no change, only Groups 1 and 4 crimes has shown any long-term stability (i.e. six months or more, see Table 1).

TABLE 2b

Recorded Crimes (Group 3) - Police Scotland:
Year end 2013/14 revisions analysis; 2013/14 Q4 to 2017/18 Q4.

Published Date	2013/14				2013/14 Total
	Q1	Q2	Q3	Q4	
2013/14 Q4	34 628	36 394	34 300	32 002	137 324
2014/15 Q1	34 613	36 373	34 231	31 576	136 793
2014/15 Q2	34 611	36 365	34 204	31 430	136 610
2014/15 Q3	34 608	36 363	34 194	31 401	136 566
2014/15 Q4	34 601	36 349	34 187	31 338	136 475
2015/16 Q1	34 599	36 347	34 181	31 316	136 443
2015/16 Q2	34 599	36 346	34 177	31 313	136 435
2015/16 Q3	34 599	36 346	34 173	31 310	136 428
2015/16 Q4	34 599	36 344	34 168	31 306	136 417
2016/17 Q1	34 599	36 343	34 168	31 144	136 254
2016/17 Q2	34 598	36 342	34 167	31 142	136 249
2016/17 Q3	34 597	36 341	34 166	31 142	136 246
2016/17 Q4	34 595	36 342	34 165	31 143	136 245
2017/18 Q1	34 595	36 340	34 163	31 143	136 241
2017/18 Q2	34 595	36 338	34 162	31 143	136 238
2017/18 Q3	34 595	36 338	34 162	31 143	136 238
2017/18 Q4	34 595	36 339	34 162	31 143	136 239
2018/19 Q1	34 595	36 339	34 161	31 143	136 238
2018/19 Q2	34 595	36 339	34 161	31 143	136 238
2018/19 Q3	34 595	36 339	34 161	31 143	136 238
2018/19 Q4	34 595	36 339	34 161	31 141	136 236

By way of a secondary example, Table 2b (above) shows changes to Group 3 crimes over time. Only three times in the five year period has the number of crimes recorded remained the same from one quarter to the next. Last quarter (Q3 2018/19) is the first time that the data have remained the same for two consecutive periods. In effect these data are in an almost constant state of flux. Although the changes are extremely small and are unlikely to materially impact analysis, it does demonstrate the requirement to use refreshed data to ensure that the most up-to-date number of recorded crimes are reported.

Whilst we observe that some minor revisions continue to take place more than five years after the original crime was recorded, the very nature of crime means that this should not be unexpected. A combination of ongoing investigations, new information coming to light, audit and review of crimes, changes to the crime classification structure and general housekeeping are all likely to be factors in these revisions.

Although it has always been known and accepted that recorded crimes may be subject to revisions, it is only in the last few years that efforts have been made to quantify the exact nature and extent of these revisions.

## B. Revisions analysis of year-end 2017/18 data

Table 3, below, presents the impact of revisions to the year-end 2017/18 (Q4) data (originally extracted 02/04/2018, and published in May 2018), when compared to the latest extract (i.e. Q4 2018/19, extracted 02/04/2019).

TABLE 3

Recorded crimes - Police Scotland:

Revisions analysis Q4 2017/18 data; as at 2017/18 Q4 and 2018/19 Q4.

Published Date	Crime Gr	oups								
	Group 1	Group 2	Group 3	Group 4	Group 5	Total Gp 1-5	Group 6	Group 7	Total Gp 6-7	Total Gp 1-7
Recorded Crimes	7.054	10.107	444.474	54.000	50.070		107.010	107.015		
2017/18 Q4 As at 2018/19 Q4	7 251 7 268	12 487 12 624	114 474 113 356	51 322 51 301	58 970 57 450	244 504 241 999	137 012 136 718		264 027 264 561	508 531 506 560
Change										
Number	17	137	- 1 118	- 21	- 1 520	- 2 505	- 294	828	534	- 1 971
Percentage	0.2	1.1	- 1.0	0.0	- 2.6	- 1.0	- 0.2	0.7	0.2	- 0.4

There have been large numerical changes in Group 3 and Group 5, with downward revisions of 1,118 (1.0%) and 1,520 (2.6%) respectively. The overall impact of recorded crimes was a revision of -1.0% (down 2,505 crimes). In terms of offences, Group 7 has been revised upwards by 828 (0.7%) offences, and Group 6 down by 0.2% (294 offences).

#### **Further information:**

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