**SCOTTISH LOCAL GOVERNMENT ELECTIONS 2017: ELECTRONIC VOTE COUNTING FACTSHEET**

This factsheet explains how votes cast in the Scottish Local Government Elections on 4th May 2017 will be counted.

**When and where will the Counts be held?**

Counts will take place on 5th May 2017, the day after the Elections, at Count Centres located in each of the 32 Council areas across Scotland. All Counts will commence between 08:00 and 09.30 – the precise timing is for each Council to decide.

**Why are Local Government Elections Counted Electronically?**

Council Elections in Scotland use a Single Transferrable Voting system (STV), which means that voters can select candidates in order of preference e.g. 1, 2, 3, 4. Candidates have to obtain a quota in order to be elected. In many circumstances, the quota will not be reached by one or more candidates after counting 1st preferences alone. This means that 2nd and subsequent preferences need to be transferred from the candidate with the fewest votes who is then excluded. This is a complex and time consuming process that could take days to complete manually. To make the count quicker and easier, Scotland Local Government Elections have been counted electronically since STV was introduced.

**Overview of the Electronic Counting Process**

The eCounting solution has been designed by CGI and uses specialist elections software provided by idox. The solution is fundamentally the same as was used successfully for the 2012 Local Government Elections, with some enhancements to make it faster and easier to use. eCounting performs various processing tasks, including:

* Capturing an image of each ballot paper using scanners;
* Identifying the voter’s preference(s) from the ballot paper image;
* Counting the preferences where there is no uncertainty about the voter’s intention;
* Sending an image of the ballot paper to an Adjudicator for checking or to the Returning Officer for a decision where the voter’s intentions are less certain;
* Managing information about the number of ballot papers received and processed so that the accuracy and completeness of each Election result can be assured;
* Calculating the Election result for each ward once various checks have been run to ensure that no ballot papers have been excluded from the Count;
* Producing reports showing the Election result, the number of valid first and subsequent preference votes cast for each candidate, the value of any transferred votes and the number of ballot papers rejected by the Returning Officer.

**How do you know that eCounting works?**

Comprehensive testing of eCounting was undertaken between December 2015 and September 2016 by Scottish Government, the EMB and representatives from Councils. The software that calculates the results has been tested and certified by an independent organisation to confirm that the STV method is being applied correctly. All tests were passed and the solution has been accepted for use.

**How are ballot papers processed by the eCounting system?**

eCounting uses software which interprets what the voter has marked on a ballot paper. The ballot paper will only be processed automatically if there is no doubt as to the voter’s intention. To do this, the software performs a series of checks on the character(s) it captures from the scanned image. If there is any doubt the system will automatically send the ballot for Adjudication. The sequence of preference votes also has to be correct e.g. 1,2,3,4. If a voter has, for example, marked 1,2,4 the system will automatically send the ballot paper image for Adjudication. Only ballot papers that pass both the character recognition checks and the preference vote sequence checks are processed automatically.

**What happens to ballot papers that are not processed automatically?**

If a ballot paper does not pass the system checks, the scanned image is sent to an Adjudicator. This person views the image of the ballot paper to see if the voter’s intentions can be confirmed. In many cases, the voter’s intentions will be obvious when the ballot paper is viewed. A common question is why the ballot paper has been sent for adjudication when it looks perfectly good. This is because, for example, what might look like a “1” to a person might also look a bit like a “7” to the system and the system is set up to send these to an Adjudicator. Typically, between 15% and 20% of ballot papers need to be reviewed by an Adjudicator.

The Adjudicator will accept ballot papers where the voter’s preferences are clear. Where the voter’s intentions are not clear, for example, because they have not marked “1” on their ballot paper, or it is blank, the Adjudicator has to refer it to the Returning Officer (RO). Adjudicators cannot reject a ballot paper and neither can the eCounting system. It is the RO’s responsibility alone to decide if a doubtful vote is valid or not and only they or their appointed Depute can decide to reject a ballot paper.

**What about Fake ballot Papers?**

Every ballot paper has a unique identifying mark and eCounting matches this against valid codes for each specific ward. If there is no match between the codes eg because the ballot paper is a fake, the system will send that ballot paper image directly to the RO for investigation. Similarly, if the same code is found on more than one ballot paper, e.g. a ballot paper has been photocopied, images of all the duplicated ballot papers are sent by the system directly to the RO for investigation.

**Can eCounting be hacked?**

The eCounting solution cannot be hacked remotely or be subject to a cyber attack, since each count centre is completely separate from the others and there is no external connection at all between the eCounting solution and the internet.

As with any system, eCount needs to be protected against someone in the Count Centre trying to break into it. A wide range of both physical and system security measures are in place to reduce the risk of this. The solution has several special checks built into it to ensure that nothing has been tampered with. These system checks are undertaken immediately before the Count starts and are validated by Council staff.