

# SCOTTISH LOCAL GOVERNMENT ELECTIONS: 4<sup>th</sup> MAY 2017 ELECTRONIC VOTE COUNTING FACTSHEET

This explains how votes cast in the Scottish Local Government Elections will be counted.

#### When and where will the counts be held?

Counts will take place on 5<sup>th</sup> May 2017, the day after the Elections. There are dedicated count centres for each of the 32 Councils Scotland. All Counts will commence between 08:00 and 09:30 hrs – each Council will decide the exact time.

## Why are Local Government elections counted electronically?

Council Elections in Scotland use a Single Transferable Voting system (STV). Voters select 1 or more candidates in order of preference e.g., 1, 2, 3, 4. Candidates have to obtain a quota – a minimum number of votes – to be elected, except in the final stage. There are at least 3 candidates to be elected in every ward and in most circumstances the quota will not be reached by one or more candidates after counting 1<sup>st</sup> preferences alone. This means that 2<sup>nd</sup> and subsequent preferences need to be transferred from the candidate with the fewest votes, who is then excluded. This process continues until all candidates to be elected reach the quota or there is only one left, who is then elected. 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 electronic counting

To count votes electronically, an IT system is used – one in each Count Centre. The system that will be used in 2017 is very similar to the one used successfully for the 2012 Local Government Elections The IT system performs various tasks, including:

- Scanning each ballot paper;
- > Identifying the voter's preferences by reading the scanned ballot paper;
- > Counting the voter's preferences where these are clear;
- Sending the scanned image of the ballot paper to an Adjudicator for review or to the Returning Officer for a decision if the voter's intentions are less certain;
- > Checking that the number of ballot papers received and processed are the same to ensure the accuracy and completeness of each Election result;
- Calculating the Election result for each ward;
- > Producing reports showing the Election result, including: the number of valid first preference votes cast for each candidate; the value of any transferred votes; and the ballot papers rejected by the RO as invalid.

## How do you know that the electronic counting system works?

The IT system used was thoroughly tested between December 2015 and September 2016 by Scottish Government and representatives from Councils and the Electoral Management Board for Scotland. 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.









## How are ballot papers processed by the electronic counting system?

The IT system uses special software to read what the voter has marked on a ballot paper. It then performs a series of checks on what it reads from the scanned image. The system will automatically process a ballot paper only if there is no doubt as to the voter's preferences and the preference votes have been made correctly e.g. 1,2,3,4. If there is any doubt about the voter's preferences, or if a voter has made a mistake in their preferences e.g. placed the number "1" against more than 1 candidate, the system will automatically send the ballot paper image for review by a person known as an Adjudicator.

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

If a ballot paper does not pass the IT system checks, the scanned image is sent to an Adjudicator. This person views the ballot paper image 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 needs reviewed when it looks clear. This is because e.g. what might look like a "1" to a person might also look a bit like a "7" to an IT system. The IT system is set up to send anything doubtful 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 and in accordance with the STV rules. Where the voter's intentions are not clear e.g. because they have not marked "1" on their ballot paper, or they have marked "1" against more than one candidate, the Adjudicator has to refer the ballot paper to the Returning Officer. Adjudicators cannot reject a ballot paper and neither can the electronic counting system. It is the Returning Officer's responsibility 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 if someone puts in fake ballot papers?

Security is a priority in every polling station and at the count centres. Incidences of attempted fraud are very rare. In the unlikely event that someone did try to introduce a fake ballot paper, it would be detected by the system. Every ballot paper has a unique code and the IT system has to find a match for it from a list of valid codes for the ward. If there is no match, this means the ballot paper may be a fake and the system will send it direct to the RO for investigation. If the same code is found on more than one ballot paper, e.g. it has been photocopied, all the duplicated ballot paper images are sent by the system to the RO. The RO will inspect the actual paper ballots where election fraud is suspected.

## Can the electronic counting system be hacked?

The IT system cannot be hacked from outside the Count Centre or be subject to an external cyber attack since each Count Centre is completely separate from the others and there is no connection between the electronic counting system and the internet. The IT system has several special checks built into it to ensure that nothing has been tampered with in situ. These checks are undertaken immediately before the Count starts and are validated by Council staff.

Further information can be found at: http://www.electionsscotland.info/emb





