

## Quick Guide

#### WELCOMING

The following guide describes a platform for the vote-tracking platform.

## How it Works

#### **POLLING STATIONS**

After polling stations close, vote-trackers will periodically send SMS messages from registered phone numbers to a designated short code or long number using a special SMS syntax to update election results as the votes are counted.

## TELECOMMUNICATION SERVICE PROVIDERS

SMS messages sent to the short code or long number are received by the telecommunication service provider and routed to the database and application system in the "cloud" for processing.

### DATABASE AND APPLICATION SYSTEM

All messages and communications sent and received by the system are stored in the system logs for record keeping. For a full report of all data, contact the system administrator.

Messages deemed valid are stored in the database and handled by the application. These messages can be managed and downloaded directly from the administration interface.

For a message to be valid, it must meet a set of criteria, mainly that it originates from a registered agent and is in the correct syntax, as described in detail below. When the necessary criteria are met, the news or results information in the message is saved to the database. This information is also available for download through the administration interface.

If the necessary criteria are not fully met, the application will attempt to correct the agent's mistake. For example, in certain circumstances, the application will accept a candidate party code instead of a candidate code. The application will also attempt to process as much of the message as possible. For example, if multiple candidate results are reported in the same SMS, those results that can be processed will be accepted and the others rejected.

Information about the message processing is stored in the database along with the message and is available for download through the administrative interface.

# How to Use the System

#### **ROLES**

There are three basic roles for users of the system:

- Administrators: These are system users, capable of making internal changes to the system; for example, creating elections and channels, registering agents, candidates, political parties, and so forth.
- **Agents:** These are users capable of submitting election news and results through text messages sent to short codes or long numbers.
- Users: These are all users capable of making requests for election news and result summaries and statistics.

#### **ACCESS AND RESTRICTIONS**

The database and application in the "cloud" is designed to handle and process news and results for multiple and possibly concurrent elections at any time for countries and administrative divisions around the world. Therefore, only registered agents, by name and phone number, can submit election news and results and they can only send text messages to short codes and long numbers of which the system is aware.

### SUCCESSES, WARNINGS, AND ERRORS

All messages received by the application system in the "cloud" are processed and checked for validity. The system stores additional information about the message processed in the following manner:

- Success: All data received was processed and accepted. The submission or request was valid and met all access rights and restriction constraints.
- Warning: All data received was processed and accepted. Some or all of the submission or request may was invalid, but was corrected, and met all access rights and restriction constraints.
- Error: Some or all of the data received was not processed or was rejected. The submission or request was not entirely valid or did not meet all access rights and restriction constraints.

It is possible for messages to be accepted with warnings or even errors, if some, but not all, of a message can be processed successfully. This information is available for download from the administrative interface.

# SMS Syntax

#### SUBMITTING NEWS

News can be submitted using the following syntax:

```
NEWS [TEXT]
```

As in the following example:

```
NEWS Nimba County race is far from over. All major political party candidates getting near matching number of votes.
```

For flexibility, the system will correct the mistake of using **NEW** instead of **NEWS** as the keyword and will accept news updates without a keyword. This works because the system assumes that all messages not matching any other syntax to be news updates.

## **SUBMITTING RESULTS**

Results can be submitted using the following syntax:

```
RESULTS [PRECINCT] [CANDIDATE] [VOTES]
{[CANDIDATE2] [VOTES]...} {+[INVALID_VOTES]}
```

As in the following example:

```
RESULTS 1000 MRBMN 8 MSGWM 27 FFFDW 5 +10
```

Notice in the example above, how the candidate code and number of votes for each result tally are repeatable, allowing agents to submit results for multiple candidates in one SMS message.

Also take notice of the special plus symbol (+) and numbers following, which is used to specify invalid votes. This is a special value that captures votes not capable of being counted.

Similar to news, for flexibility, the system will correct the mistake of using **RESULT** instead of **RESULTS** as the keyword and will accept results without a keyword.

In addition, since candidate codes may be more difficult to remember than political party codes, the system allows reports to use political party codes instead. This works only if there is one candidate for that party competing in the precinct for which the agent is submitting results, otherwise, the system will respond with an error. The following example is acceptable:

```
1000 UDC 8 CP 27 IND 5 +10
```