## **EN BANC**

# [G.R. No. 189546, September 21, 2010]

### CENTER FOR PEOPLE EMPOWERMENT IN GOVERNANCE, PETITIONER, VS. COMMISSION ON ELECTIONS, RESPONDENT.

### DECISION

#### ABAD, J.:

This case concerns the duty of the Commission on Elections (COMELEC) to disclose the source code for the Automated Election System (AES) technologies it used in the 2010 national and local elections.

On May 26, 2009 petitioner Center for People Empowerment in Governance (CenPEG), a non-government organization,<sup>[1]</sup> wrote respondent COMELEC, requesting a copy of the source code of the Precinct Count Optical Scan (PCOS) programs, the Board of Canvassers Consolidation/Canvassing System (BOC CCS) programs for the municipal, provincial, national, and congressional canvass, the COMELEC server programs, and the source code of the in-house COMELEC programs called the Data Capturing System (DCS) utilities.

CenPEG invoked the following pertinent portion of Section 12 of Republic Act (R.A.) 9369, which provides:

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Once an AES technology is selected for implementation, the Commission shall promptly make the source code of that technology available and open to any interested political party or groups which may conduct their own review thereof.

Section 2(12) of R.A. 9369 describes the source code as the "human readable instructions that define what the computer equipment will do." This has been explained in an article:

Source code is the human readable representation of the instructions that control the operation of a computer. Computers are composed of hardware (the physical devices themselves) and software (which controls the operation of the hardware). The software instructs the computer how to operate; without software, the computer is useless. Source code is the human readable form in which software is written by computer programmers. Source code is usually written in a programming language that is arcane and incomprehensible to non-specialists

but, to a computer programmer, <u>the source code is the master</u> <u>blueprint that reveals and determines how the machine will</u> <u>behave</u>.

Source code could be compared to a recipe: just as a cook follows the instructions in a recipe step-by-step, so a computer executes the sequence of instructions found in the software source code. This is a reasonable analogy, but it is also imperfect. While a good cook will use her discretion and common sense in following a recipe, a computer follows the instructions in the source code in a mechanical and unfailingly literal way; thus, while errors in a recipe might be noticed and corrected by the cook, errors in source code can be disastrous, because the code is executed by the computer exactly as written, whether that was what the programmer intended or not  $x \times x$ .

The source code in voting machines is in some ways analogous to the procedures provided to election workers. Procedures are instructions that are provided to people; for instance, the procedures provided to poll workers list a sequence of steps that poll workers should follow to open the polls on election morning. Source code contains instructions, not for people, but for the computers running the election; for instance, the source code for a voting machine determines the steps the machine will take when the polls are opened on election morning.<sup>[2]</sup> (Underscoring supplied)

On June 24, 2009 the COMELEC granted the request<sup>[3]</sup> for the source code of the PCOS and the CCS, but denied that for the DCS, since the DCS was a "system used in processing the Lists of Voters which is not part of the voting, counting and canvassing systems contemplated by R.A. 9369." According to COMELEC, if the source code for the DCS were to be divulged, unscrupulous individuals might change the program and pass off an illicit one that could benefit certain candidates or parties.

Still, the COMELEC apparently did not release even the kinds of source code that it said it was approving for release. Consequently, on July 13, 2009, CenPEG once more asked COMELEC for the source code of the PCOS, together with other documents, programs, and diagrams related to the AES. CenPEG sent follow-up letters on July 17 and 20 and on August 24, 2009.

On August 26, 2009 COMELEC replied that the source code CenPEG wanted did not yet exist for the reasons: 1) that it had not yet received the baseline source code of the provider, Smartmatic, since payment to it had been withheld as a result of a pending suit; 2) its customization of the baseline source code was targeted for completion in November 2009 yet; 3) under Section 11 of R.A. 9369, the customized source code still had to be reviewed by "an established international certification entity," which review was expected to be completed by the end of February 2010; and 4) only then would the AES be made available for review under a controlled environment.