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# RSIS COMMENTARIES

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## Indonesian Elections: Emulating India's e-Voting

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### Synopsis

*India's 2014 elections far surpass those of Indonesia in terms of scale and voters, yet holds out lessons for Jakarta in the efficient management of the election process.*

### Commentary

INDONESIA WILL hold its presidential elections on 9 July 2014, three months after its legislative elections in April. As with past elections, Indonesia faces technical challenges, such as ballot printing, circulation, counting and disposal. Indonesia should consider opting for the electronic voting (e-voting) mechanism to alleviate such problems and eliminate the logistical nightmare that occurs in every election year.

As the largest democracy in the world and one of the earliest adapters of e-voting, India serves as a fine example for Indonesia. India first introduced an e-voting system in 1982 for the local state elections, and subsequently for the national elections in 2003. So far, India has implemented e-voting for two national elections, garnering roughly 400 million votes each – a turnout rate of about 60 per cent. India is currently experimenting with a remote voting system via the internet so that in the future, voters will not be required to queue at polling booths. This system will be better able to accommodate overseas Indians.

### India's e-Elections

Developing a robust e-voting system is a difficult task due to the time and economic resources needed to prepare the physical and digital infrastructure. India's e-voting machines (EVM) cost roughly US\$200 each, considerably cheaper compared to the machines used by the United States. However, the huge number of voters requires India to procure about 1.7 million EVMs, with a total cost of US\$340 million. Despite the hefty costs, e-voting will eliminate the perpetual need for ballot printing, distribution and disposal; hence, it is more sustainable, both in the environmental and economic sense.

Besides the high initial cost, other challenges facing e-voting include the possibility of tampering (both digitally and physically), the difficulty of establishing an integrated citizenship database and the need of ensuring secrecy. India tackled the first challenge by employing layers of both digital and physical security measures, including an isolated network, embedded indigenous secure software and an auto-shutdown function in the event that the system is mechanically tampered with. In addition, India has managed to develop an integrated database, including a biometric repository.

## Indonesia's manual elections

Based on numbers alone, Indonesia's elections are on a smaller scale than those of India. Indonesia has 190 million voters – one quarter of India's, and its elections are held in a single day, whereas India's elections are conducted in nine days over five weeks. However, Indonesia faces similar challenges to those of India, not least the geographical constraints, and the circulation and collection of ballot slips are a logistical nightmare.

Currently, the entire process of voting and vote-counting is done manually. Eligible voters would have to puncture (*mencoblos*) at least three different paper ballots at the polling stations, and deposit them into the ballot box. As proof that they have cast their vote, voters are required to dip one finger into specialised ink. Local ballot counting will start after the closing of the polls. The cast ballots will be transferred upward along a chain of administrative hierarchy in the Election Commission, i.e. sub-districts to districts or counties to province to national level, and recounted on each level.

Ballot counting recapitulation is necessary to ensure that the number of votes has not changed from one level of the chain to the next. This manual process of voting and counting is prone to tampering and fraud.

Cases of tampering, such as access denial to voting booths and swapping of ballot boxes, suggest that this manual process requires substantial manpower to recount and safeguard the ballot boxes to prevent fraud and tampering. The practice of double-voting is also rampant as the ink used to mark the voter's finger can be washed away with soap or acetone. Hence, there is little guarantee that paper-based voting is tamper-proof.

On the economic side, the Indonesian government has set aside a budget of US\$16 billion for the 2014 elections. However, nearly 60 per cent of the budget is utilised for staff recruitment and honoraria alone, which is inefficient whereas the manpower to count the ballots would be reduced by adopting e-voting. Using India's EVM as a benchmark, Indonesia's election budget is sufficient for a shift from paper ballots to electronic ballots. In other words, Indonesia has the financial capacity to transform its election procedure.

## Lessons for future Indonesian elections

Indonesia has rolled out an e-voting pilot project in Jembrana Regency, Bali. To date, there have been 20 successful village head elections done through e-voting, and the electronic system has been able to reduce the election budget by 40 per cent. Although the legal basis of e-voting was granted by Indonesia's Constitutional Court in 2010, national implementation still faces obstacles.

One reason why Indonesia is unable to adopt e-voting is the sluggish progress in creating a nation-wide integrated citizenship database. While India has been successful in establishing an integrated citizen database, Indonesia's database remains un-integrated despite efforts to issue electronic identity cards (*e-KTP*). This was largely evident in the case of database disparity between the Ministry of Home Affairs and the Election Commission, with a glaring difference of three million eligible voters. An integrated database would ease the voting process by eliminating the possibility of double-voting.

Another reason that hampers Indonesia's readiness to implement e-voting is that its efficacy relies on several other factors that first have to be addressed. These include enhancing the Election Commission's skills to set up and maintain the e-voting technology, building voters' awareness of e-voting platforms and technological literacy, as well as providing a stronger legal basis through e-voting stipulation within the Election Law.

Indonesia could learn from India in addressing elements that could impede the success of e-voting. These include the disparity in urban-rural literacy levels and the deficiency in electricity infrastructure. India also constantly upgrades its voting machine's software and verification method to reduce election fraud.

India's continuous efforts to innovate have been noted by other countries, including Nepal, Bhutan and Namibia which recently procured Indian-made EVMs. Indonesia has a long way to catch up with India in terms of e-voting platforms. However, with strong determination, a positive mindset and a willingness to learn from others, potential exists to improve the country's election processes.

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