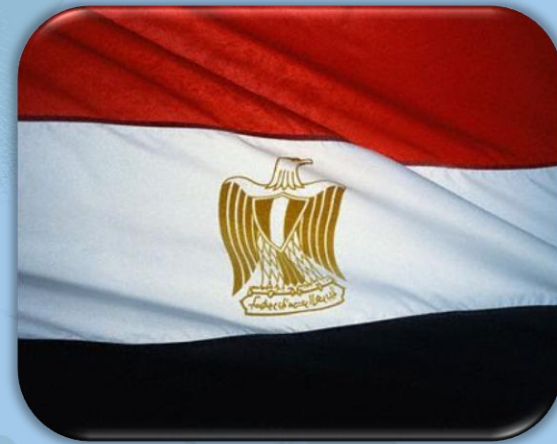


# ICT and Elections

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## Democratic Transition

### The Case of Egypt's Elections 2011-2012

### Leveraging the Civil Registry for Voter Registration



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## About Egypt

- Situation before the Revolution
- The Revolution
- Legislations



## Parliamentary Elections 2011

- Voter Registration
- Out-of-Country Registration



## Inquiry Services



## The Way Forward



# Egypt

## Facts & Challenges

- Population: **85+ M**
  - 50% **below 25**
  - Young large nation
- Voters: **50.4 M**
- Landline penetration: **12%**
- Mobile penetration: **99.5%**
- Households with PC's: **48%**
- Internet penetration: **33%**
- Illiteracy rate: **30%**



Source: [EgyptICTIndicators.gov.eg](http://EgyptICTIndicators.gov.eg), September 2011



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# Situation before the Revolution

## Voter Registration

- **Opt-in** registration (active)
  - Compulsory voting
- Only available for **3 months/year**
  - November, December, & January
- Done at **police stations**
- Can be **registered** at:
  - Birthplace, residence, workplace



# Situation before the Revolution

## Voter Registration

- **No unique identifier** for voters
- Voters received **voting cards**
- Voting card indicated:
  - Constituency
  - Neighborhood
  - Polling station location
- **No out-of-country** registration/voting





# Voter Registration & Assignment

**Mortalities**  
(Ministry of Health)

**Elections Department**

**Citizens**  
(born after 1982)

**Governorate Police Directorate**

**Governorate Police Directorate**

**Police Stations**

**Police Stations**

**Citizen – Polling Stations – Parties**

**Citizen**

Downstream

Upstream



# Situation before the Revolution

## Constituencies

- Set in an **un-uniform manner**
  - Some consisted of un-joined territories
- Not based on any **clear criteria**
- Consisted of **partial administrative blocks**



# Situation before the Revolution

## Voting: Authentication

- Voter registers were **not in alphabetical order**
- There was **no unique identifier** for voters
- Polling stations **differed** from those on voting cards





# Situation before the Revolution

## Civil Registry

- Database created in **1990**
- Covers **100%** of the population
  - Since **1900**
- **88%** issued ID cards (over 16 years)
- Production rate: **~9M** cards/year
- Main **ID** accepted in government
- Renewal frequency: **7 years**



# Situation before the Revolution

## National ID

1982-08-15 ← Date of Birth



Century of birth

Date of birth (YYMMDD)

Birth governorate code

Serial # for day of birth

Check-sum digit





# January 25, 2011



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# February 11, 2011



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# Legislations

## Exercise of Political Rights

- Voter Registry is to be **based on Civil Registry**
- Year-round **updating** of VR
- Voting at **current address** only
- VDB to be accessible **online** to voters
- **NID card** is the only accepted form of authentication





## Parliamentary 2011-2012

- **2 Houses** of Parliament
- **New electoral system**
  - **People's Assembly:**
    - 83 individual constituencies
    - 46 PL constituencies
  - **Shoura Council:**
    - 30 individual/PL constituencies
- **Out-of-country voters** to participate



# Voter Registration

## Non-Technical Challenges

- First elections after the **#Jan25** revolution
  - High expectations
  - High scrutiny
- History of bad experience
- First time to hold **out-of-country voter registration/voting**



# Voter Registration

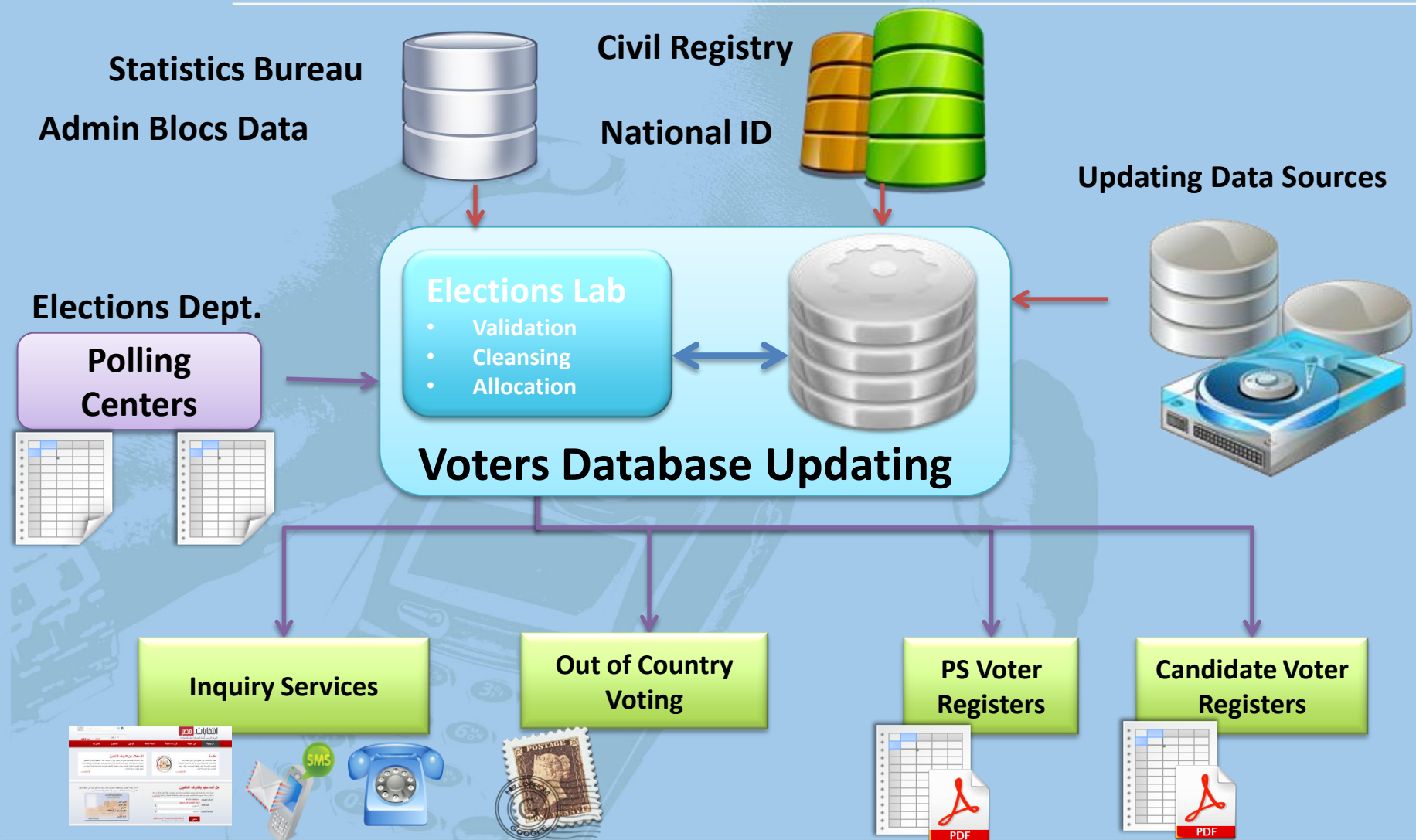
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## Technical Challenges

- New registration method
- Over **50 million voters**
- **Very limited** time period
- **Address data** is not structured
- **Unrecorded mortalities** in civil registry



# Voter Registration



# Voter Registration

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## Citizen Data

- Name
- National ID number
- Address
- Eligibility status
- OCV status





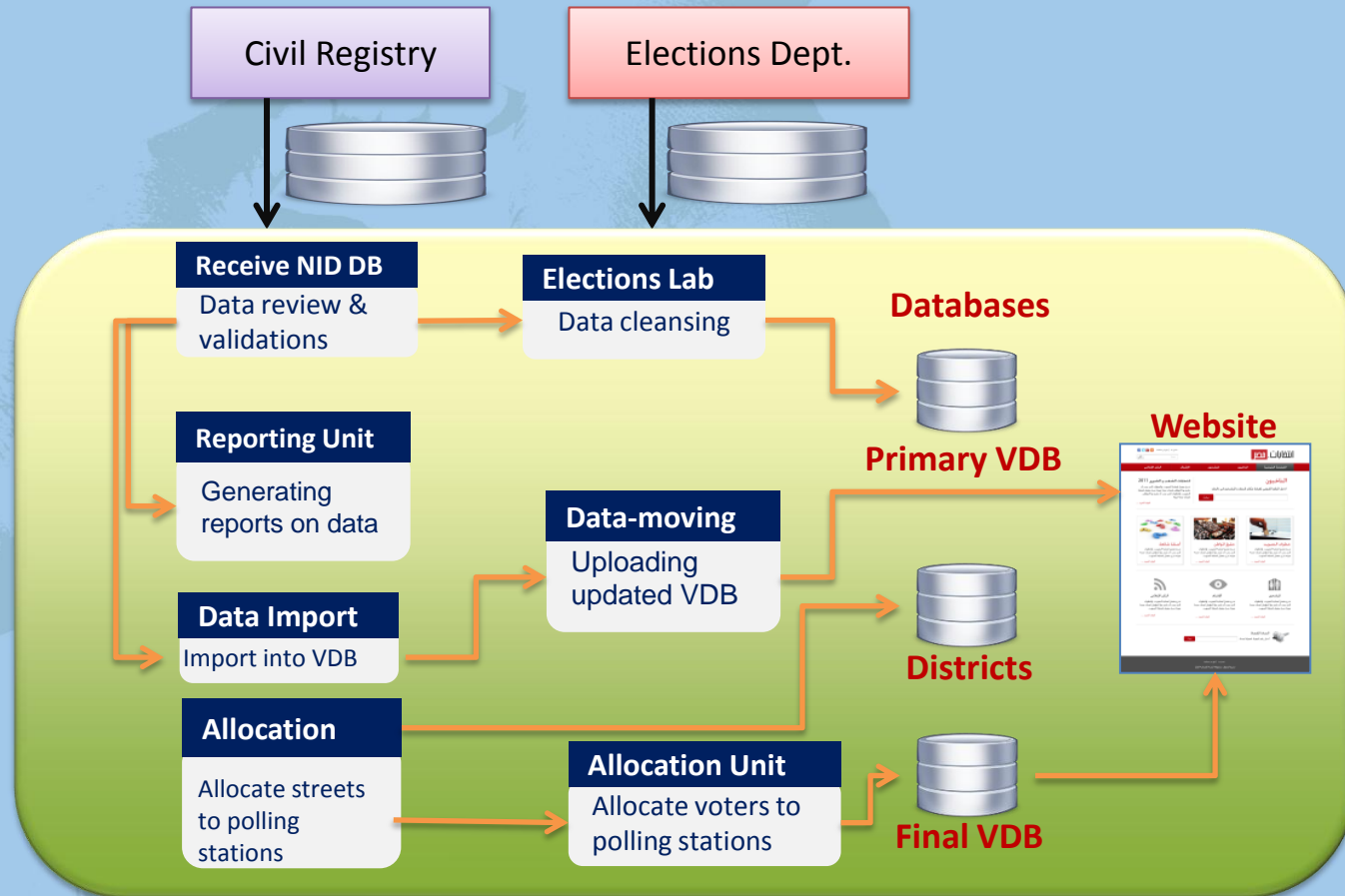
# Voter Registration

## Voting Location Data

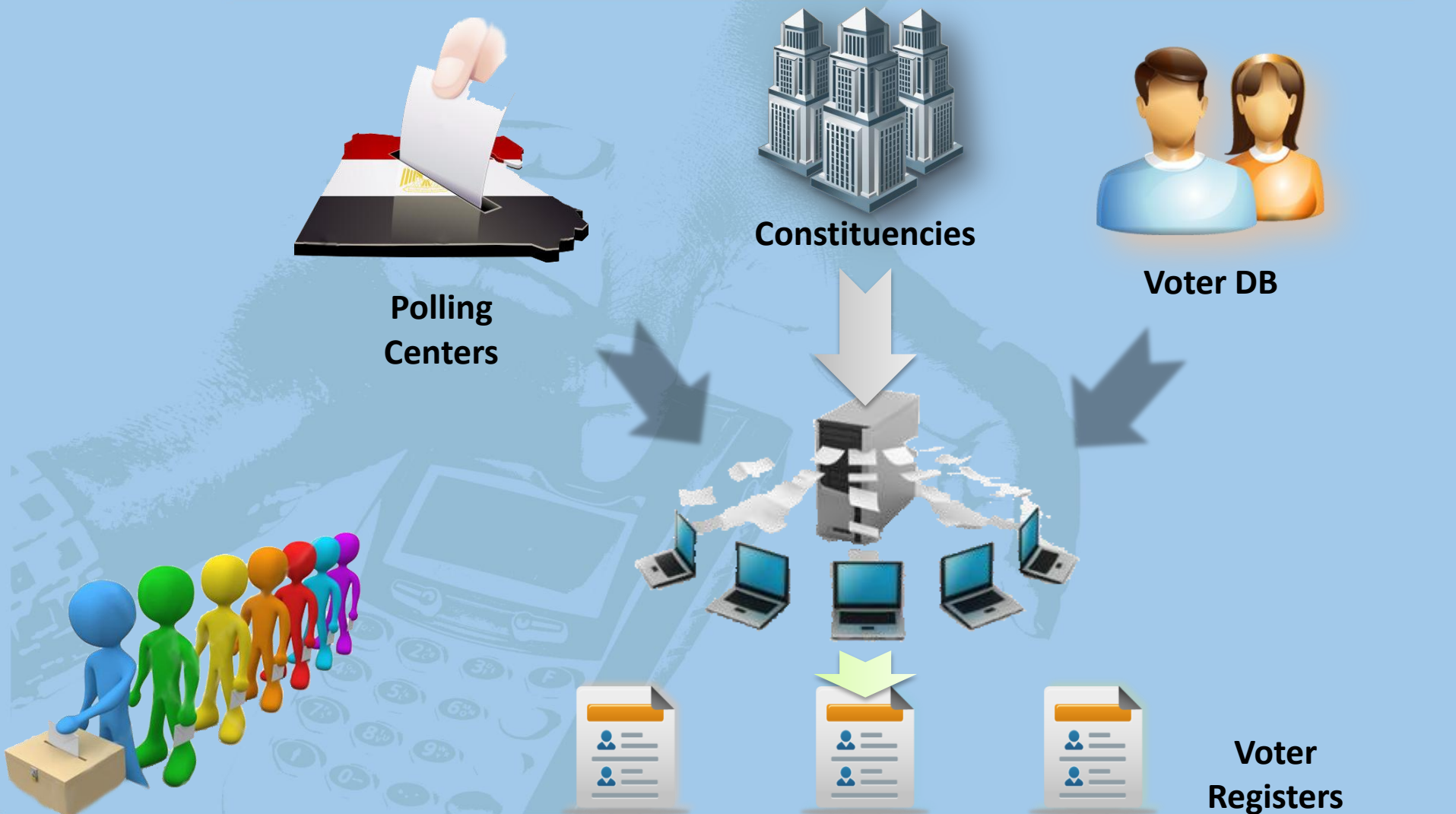
- Voting **center address**
- Polling **station number**
- Voter **number** in register
  - 1,000 voters/polling station
  - Speed up voting process



# Voter Registration



# Voter Assignment



# Voter Registration

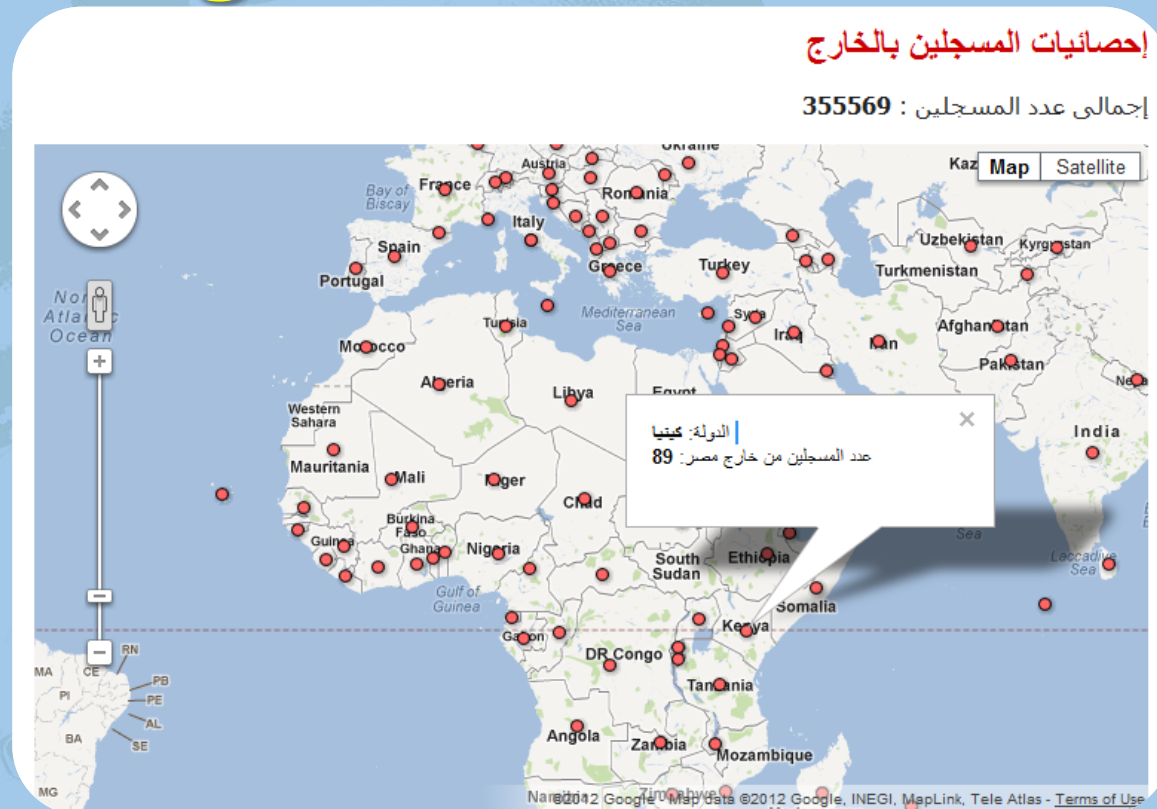
## Output

- **50,392,892** voters
- **53,733** polling stations
  - Max # of voters/PS: **1,000**
- **11,180** polling centers
- **355,569** registered out-of-country voters



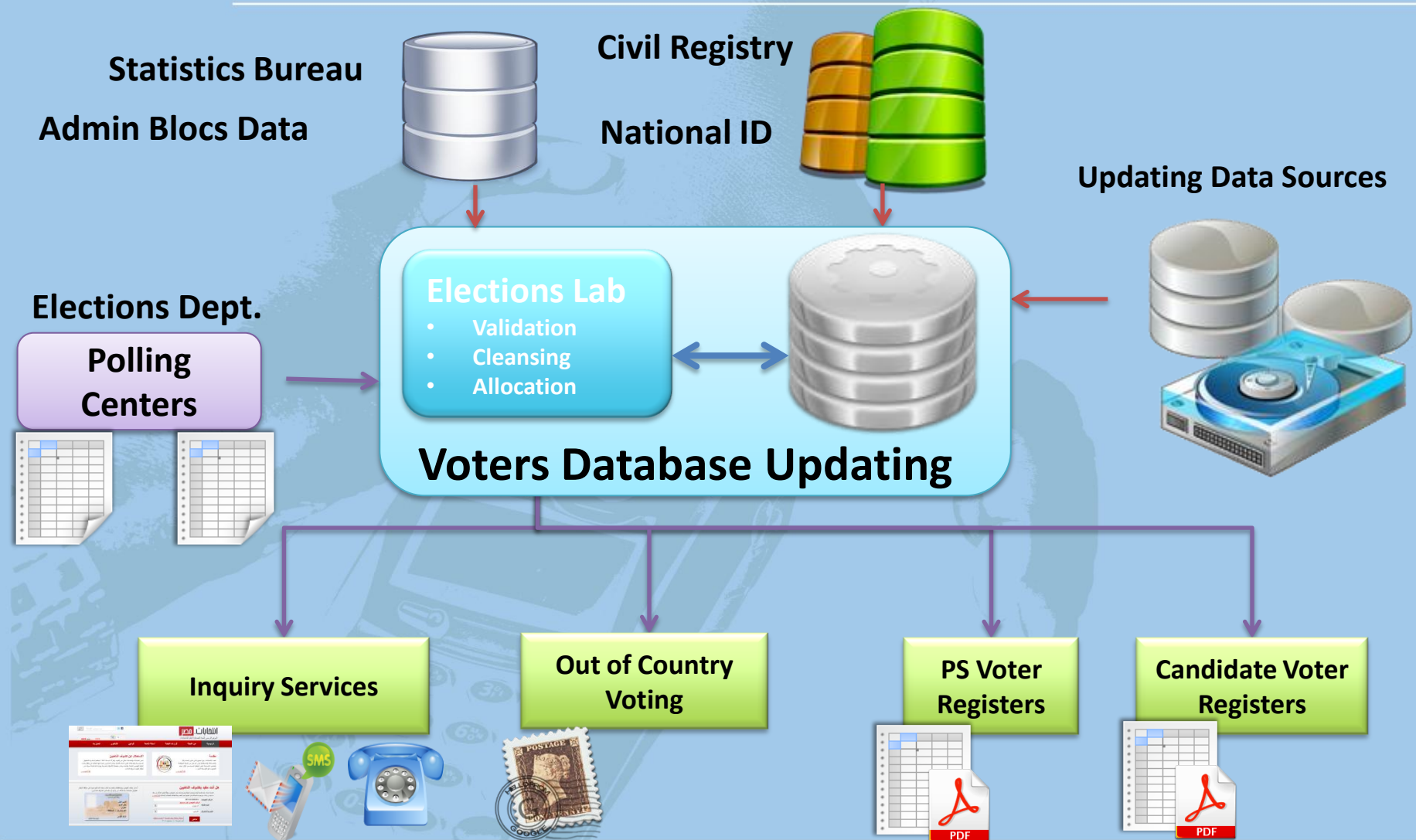
# Voter Registration

## OCV Registration





# Voter Registration



# Voter Registration

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## Voter Information

- **Registration** as a voter
- **Constituencies**
  - 4 different ones for each voter
- **Candidates**
  - Up to 200 candidates/constituency
- **Polling station**

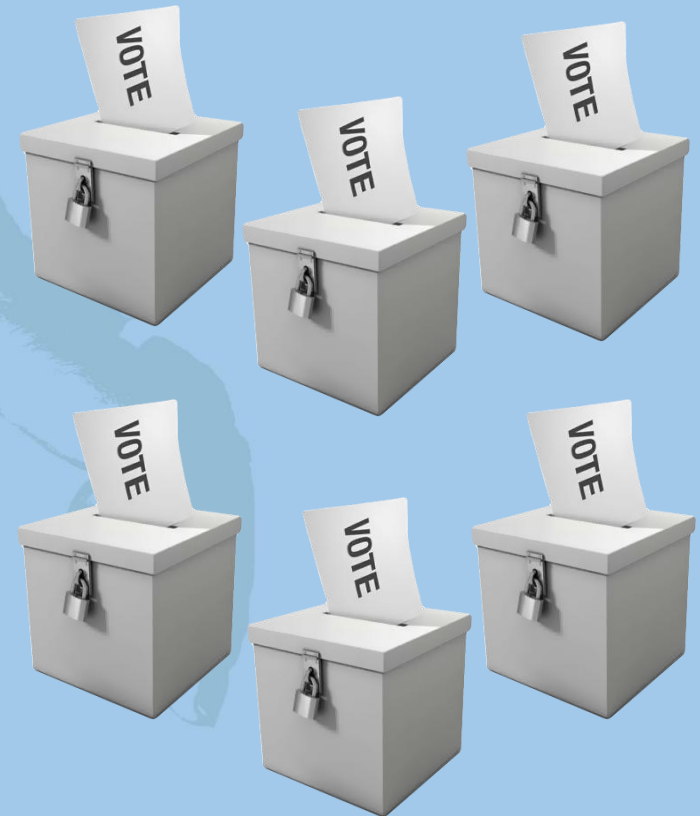


# Voter Registration

## Challenge



**50.4 million voters**



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# Inquiry Services

## Traditional Channels

- Police stations
- Courts



# Inquiry Services

## Elections Website

- Registration as a voter
- Constituencies
- Candidates
- Polling station
- 19 M inquiries

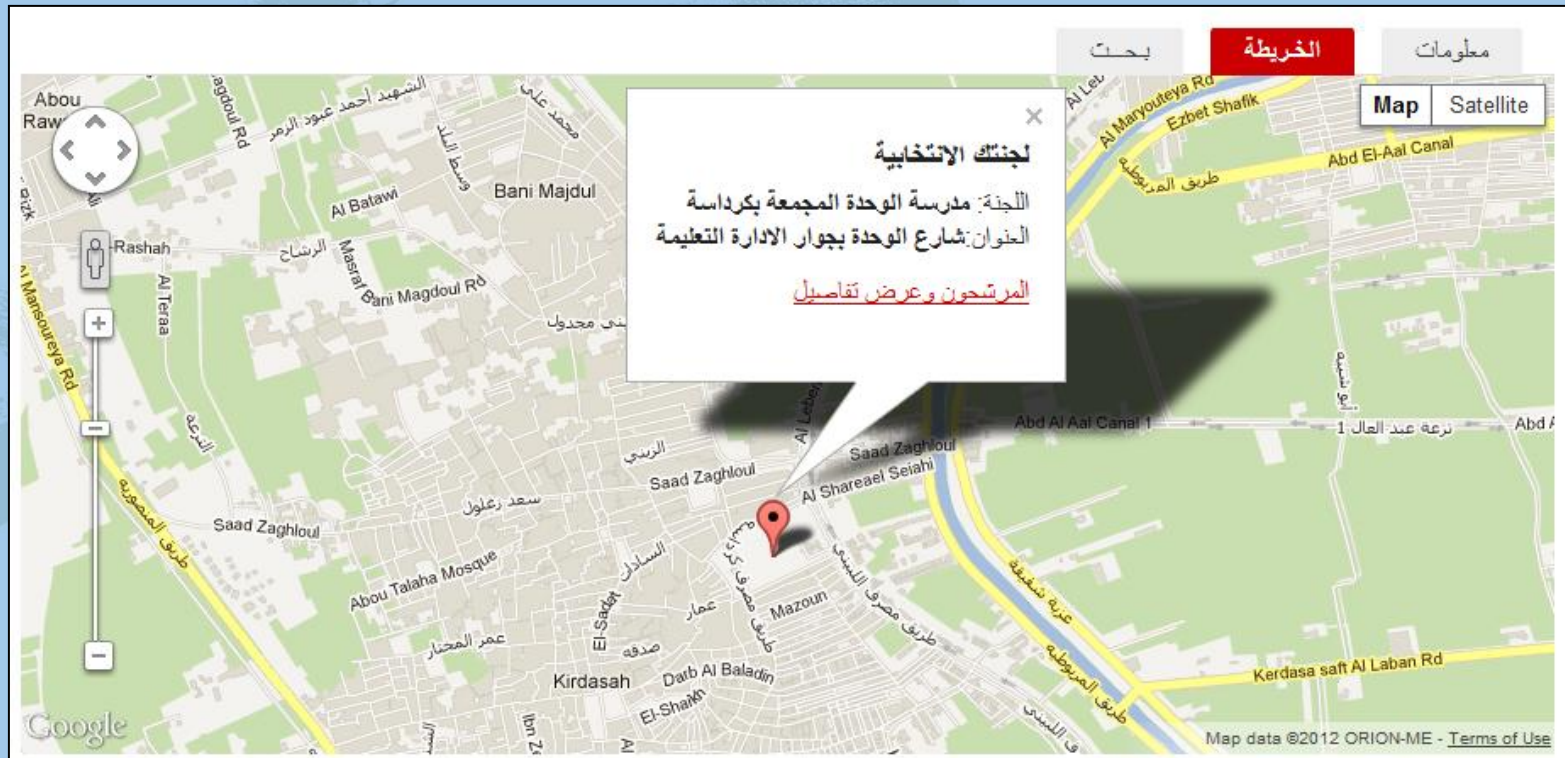


[www.elections2011.eg](http://www.elections2011.eg)



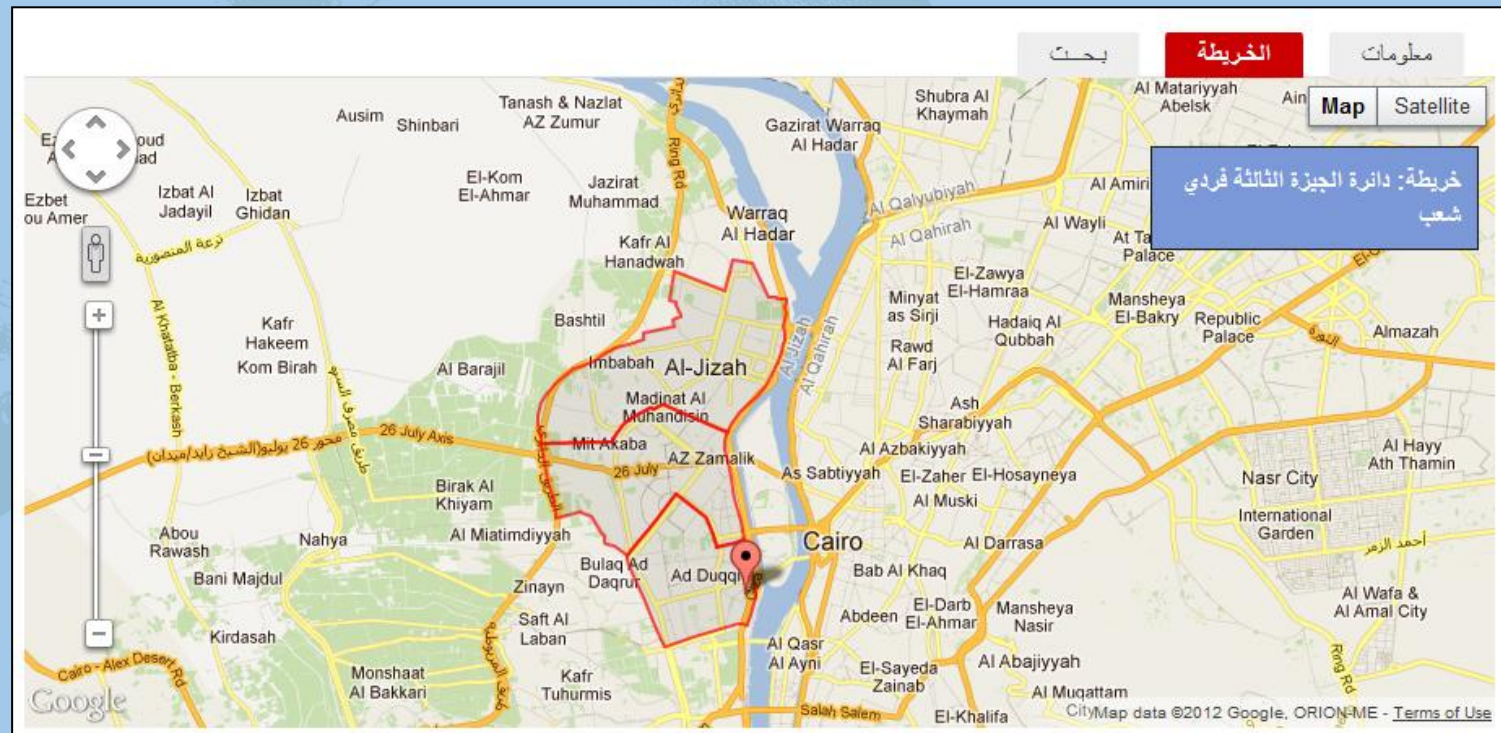


# Polling Center Locations



# Inquiry Services

## Constituencies



# Inquiry Services

## SMS

- **Polling station location**
  - Polling center name/address
  - Polling station number
  - Voter number in register
- **12 M inquiries**





# Inquiry Services

## Call Center

- **Telecom Egypt**
  - Information service
  - **1,300** seats
- **3.7 M calls**





# Inquiry Services

## Popular Websites

- Gadget

- 4.9 M inquiries



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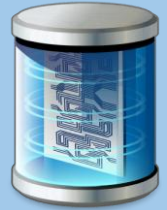


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# The Way Forward

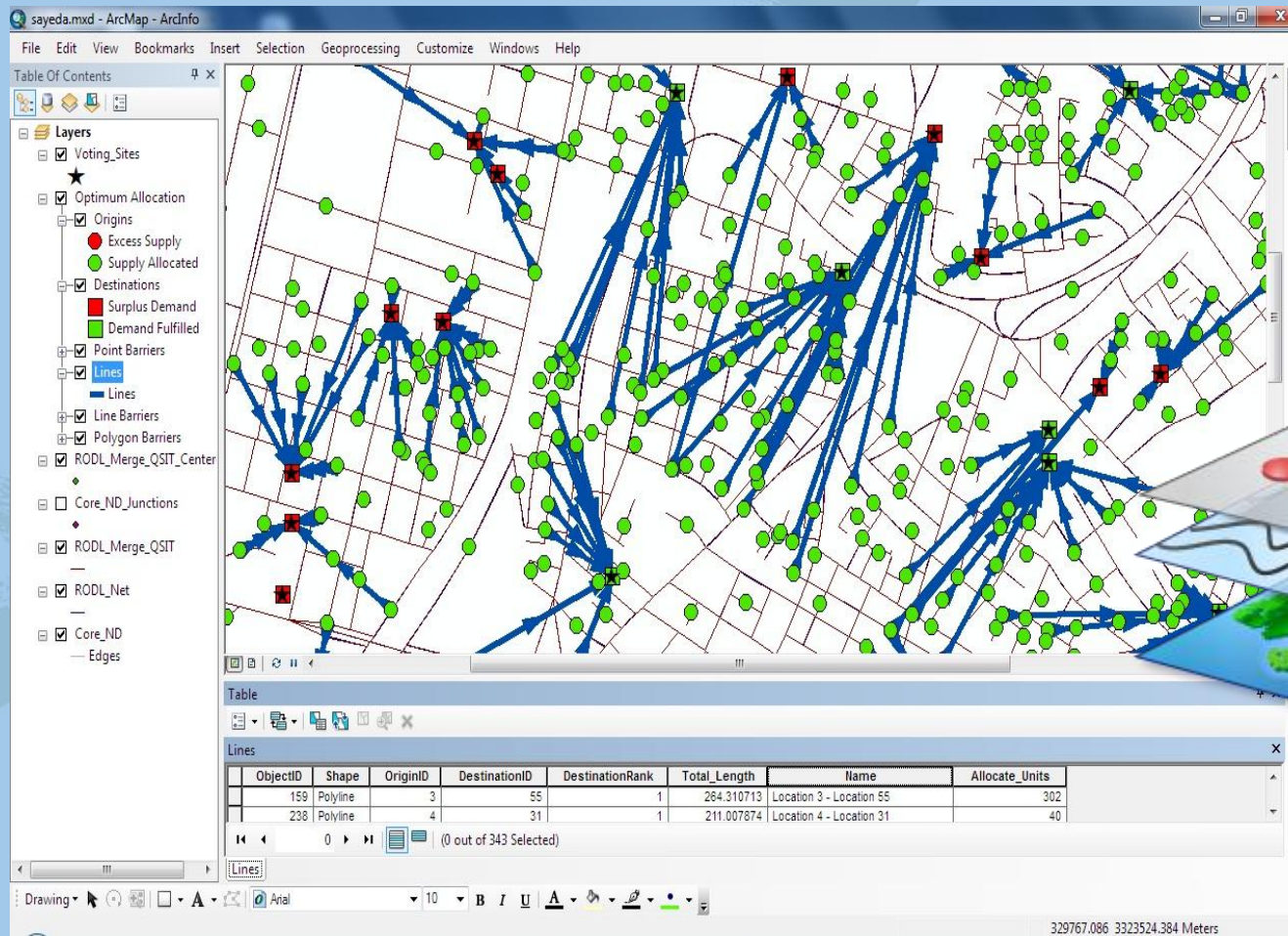


## Improvements

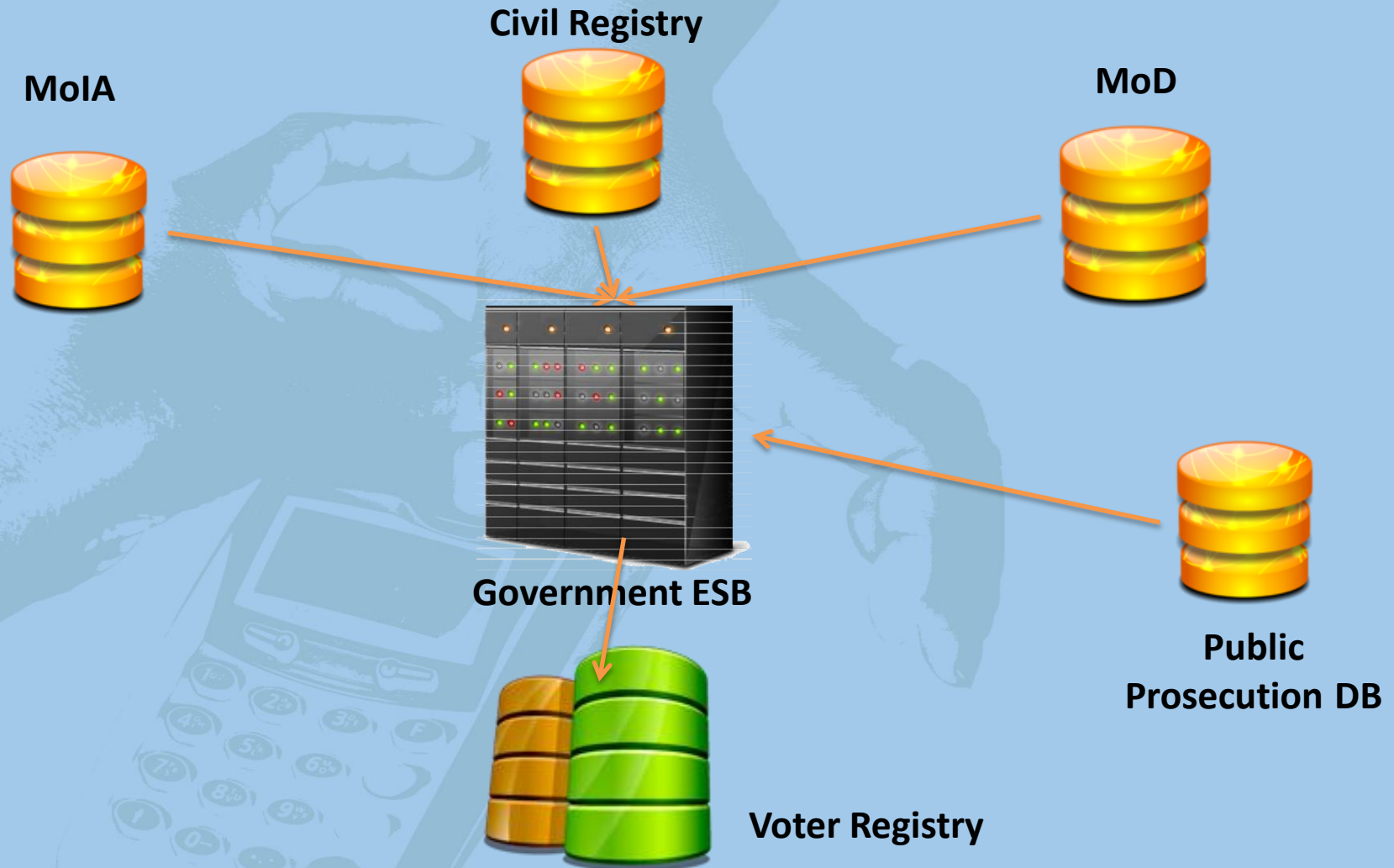
- Using **GIS** for voter assignment
- **Automating the updating** of the Voter Registry
- Improving the **quality of data** in Civil Registry
- Further measures to ensure **election integrity**



# GIS for Voter Assignment



# Auto-Update of Voter Registry



# Measures to Ensure Integrity

(نموذج رقم ٨، منش فردي)

## اللجنة القضائية العليا للانتخابات

### المحافظة: الغربية

كشف بأسماء الناخبين في انتخابات اعضاء مجلس الشعب

المركز الانتخابي: مدرسة طنطا الثانوية بنات/شارع حامد صلاح

التابع للدائرة الانتخابية رقم (٠١) ومقرها قسم/مركز طنطا اول

رقم المقر (١) لجنة الانتخاب الفرعية رقم (١)

م	الاسم و اللقب بالكامل	الرقم القومي	توقيع الناخب او بصمه ابهامه	توقيع امين اللجنة الفرعية
١	ابنسام هاتم أبوالمجد حسن	٢٧٠٠٧٢٥٢٧٠٠٠		
٢	احسان السيد على الجماله	٢٣٢١١٢١١٦٠٠٢		
٣	احسان حسن احمد حجازي	٢٨٤١٠٢٢١٦٠٠٥		
٤	احسان عبدالقاصود الدسوقي ابوطالب	٢٦٧٠٤٢١١٦٠١٣		
٥	احسان على محمود موسى	٢٣٧١١٠٢١٦٠٠٠		





# The Way Forward

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## More IT?

- **e-Transmission of results** over a secure N/W
  - Announcing PS results as they come in
- Use of **2D barcode scanners** to read NID cards
  - to speed up authentication process



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# Thank you for your attention



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