

**PVC**



# ***Protecting Democracy Voting Fraud Prevention Immune Voting Cards***

***Presented by:***

***Cryptocodex Ltd.***

***Encryption beyond imagination***

**Paper**



# **Common Voting Frauds**

- ***False identity***
- ***Voting multiple times***
- ***Voting in alternate ballot stations***

***Counter-Fight blocks them all***

***Optional: Activate voting envelopes***

**The only democracy**  
**In the Middle East...**



**CRYPTOCODEX**

# Paper version – Post card size NFC adhesive label (optional)

בחירות לכנסת התשע-עשרה  
התשע"ג-2013

שולח  
P.P.  
7093

State of Israel – Voting card

השולח:  
משרד הפנים  
ירושלים

נא להחזיר ל-א.ד. הפצות,  
רחוב היצירה 11,  
קרית אריה, מתח-תקווה

לשימוש רשות הדואר

☐ לא ידוע  
☐ עזב  
☐ מען בלתי מספיק

אחר  
תאריך  
שם הדואר  
חתימה  
אזור

שם האב  
398744

השם הפרטי  
HAIFA

שם המשפחה  
51, Herzl Street

שם הרחוב ומס' הבית  
מס' הדירה  
שם הישוב  
מיקוד

4000 455.0 0004

מס' סדורי בקלפי  
מס' הקלפי  
סמל הישוב

גן ילדים עירוני "אשל"  
80  
רבין אסתר  
חיפה

9595 306-091-000

NFC

Note:  
NFC is available  
on paper version  
using an adhesive sticker

## Read me! Using any 2D-Barcode reader

**Barcode Content:**

<http://2cq.co/vc/?DA4AEA8DAC80623214C3C59609A77585913A050285252B35ABE7AB2D9EDACF0B885D>





**Card version**  
**PVC – Credit card size**

***Voter's Card – Face***

***Voter's Card - Back***  
***NFC - Optional***



**Barcode Content:**

<http://2cq.co/vc/?DA4AEA8DAC80623214C3C59609A77585913A050285252B35ABE7AB2D9EDACF0B885D>



# **Read with ANY** **2D-Barcode application**



***Alternatively,***  
***Read using the **NFC** option,***  
***included in modern smartphones***  
***No application required,***  
***Just put the card on phone's back***

**Barcode Content:**

<http://2cq.co/vc/?DA4AEA8DAC80623214C3C59609A77585913A050285252B35ABE7AB2D9EDACF0B885D>

## State of Israel - Voting Card



ID: 049595776

Name: Moshe Rabenu

Address: 51, Herzl St.

Haifa, 398744

Knesset 2019 Elections



www.cryptocodex.com

# **AUTHENTICATION** **RESPONSE** **(BARCODE or NFC)**

## Voting Card



STATE OF ISRAEL



ID	049595776
Name	Moshe Rabenu
Address	51, Herzl Street. Haifa
Polling Station	455.0
City Code	4000
Station Serial No.	0304
Powered By Cryptocodex	

**WEB SERVER**

### **Barcode Content:**

<http://2cq.co/vc/?DA4AEA8DAC80623214C3C59609A77585913A050285252B35ABE7AB2D9EDACF0B885D>



# **Important**

- Voter's details are **encrypted** (military grade)
- Result embedded in the QR-CODE (2D-Barcode)
- NFC is optional for **both** paper and plastic cards
- No voter's database on the WEB (immune to hacking)  
all data, required for the authentication,  
is embedded in the card device (QR-Code or NFC alike)
- WEB service - 24/7 availability
- Authentication using a desktop, or a mobile phone
- **Voter's data provided from the card**



# Optional: Activated envelopes

- ***Cheaters may prepare false envelopes and drop more than one envelope in the ballot-box (held together tightly)***
- ***Using NFC cards (or adhesive labels) enables envelope activation, prior to ballot-box dropping***



NFC  
BY  
CRYPTOCODEX



# **Added Value**

Statistical information, usually provided to the public during the voting day, is constantly available from the Counter-Fight server

## **Important**

***Server contains data about who voted in which ballot station***

***The server does **NOT** contain voting results***