Document 1

From:	Scott Wilson
To:	Spiros Nikolakopoulos
Cc:	Hayden Kerr; Raymond Horan (Raymond.Horan@solgm.org.nz); Michael Summers; Marguerite Delbet; Andrew Stephen; Joanne Knight
Subject:	RE: Talking the Department of Internal Affairs
Date:	Thursday, 29 November 2018 4:01:50 PM
Attachments:	image001.gif

Hi Spiros
Thanks for making someone available at short notice.
Friday morning at 9am should work for us.
The number to call will be +6444947317. Otherwise we are happy to call Mike.
The purpose will be for us to get a greater understanding of the authentication and vote verification aspects of the system.
Kind regards

Scott Wilson | Senior Policy Analyst | Policy Group
The Department of Internal Affairs Te Tari Taiwhenua
Direct Dial: +64 4 495 9463 | Extn: 5463
45 Pipitea Street | PO Box 805, Wellington 6140, New Zealand | www.dia.govt.nz

From: Spiros Nikolakopoulos [9(2)(a)]
Sent: Thursday, 29 November 2018 2:53 PM
To: Marguerite Delbet
Cc: Scott Wilson; Hayden Kerr; Raymond Horan (Raymond.Horan@solgm.org.nz); Michael Summers
Subject: Re: Talking the Department of Internal Affairs

Hi Marguerite,
No problems we can organise.
Mike Summers is the person that can help. He is in London.
Window for connecting would be Friday Morning NZ time between 08:30 AM and 10:30 AM.
That would make it Thursday night 07:30 to 09:30 PM in London.
I will check with Mike in a few hours when he wakes up that he is available.
Who should Mike ring and what is the contact number ?
--

Best Regards,
Spiros Nikolakopoulos
Country Manager - ANZ
Smartmatic Australia Pty Ltd
Phone: 9(2)(a)
www.smartmatic.com

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From: Marguerite Delbet <Marguerite.Delbet@aucklandcouncil.govt.nz>
Date: Thursday, 29 November 2018 at 12:32 pm
To: Spiros Nikolakopoulos <spiros.n@smartmatic.com>
Cc: Scott Wilson <Scott.Wilson@dia.govt.nz>, "'Hayden.Kerr@dia.govt.nz'" <Hayden.Kerr@dia.govt.nz>, "Raymond Horan (Raymond.Horan@solgm.org.nz)"

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<.@..>

Subject: Talking the Department of Internal Affairs

Hello Spiros,

When we talked last week I mentioned to you that the Department of Internal Affairs, which is working on the online voting regulations, would like one of your technical gurus to talk to their Government Chief Digital Officers' staff about the authentication and vote verification aspects of the system.

They would like this discussion to happen this week given some of the constraints they are facing. Would you be able to make this happen asap?

I will leave you to deal directly with Scott who is copied to this email.

Many thanks in advance

Kind regards

Marguerite

Marguerite Delbet ¦ General Manager Democracy Services
Phone 09 890 8138 ¦ Extension (46) 8138 ¦ Mobile 9(2)(a)
Auckland Council, Level 25 135 Albert St, Private Bag 92300, Auckland 1142
Championing engaged, open and innovative democracy and decision-making for the diverse communities of Tamaki Makaurau
Visit our website: www.aucklandcouncil.govt.nz

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Document 2

SMARTMATIC

Online voting trial for 2019 local authority elections

Presentation by Smartmatic

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29th November 2018

SMARTMATIC

- Pre registration and authentication
- Vote verification

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SMARTMATIC

Online voting trial for 2019 local authority elections

Pre registration and authentication

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Distribution of access code

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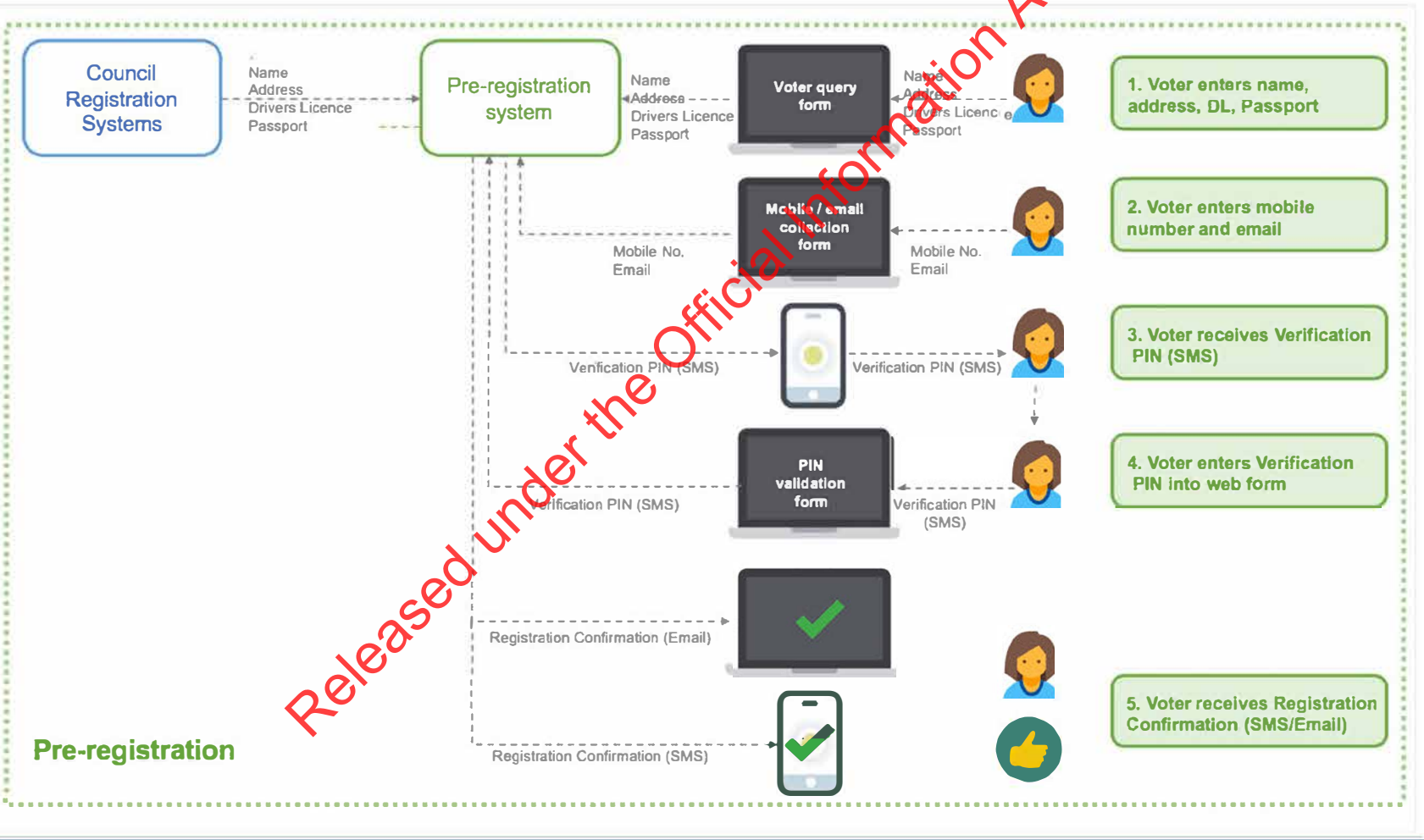
Pre-registration



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Authentication

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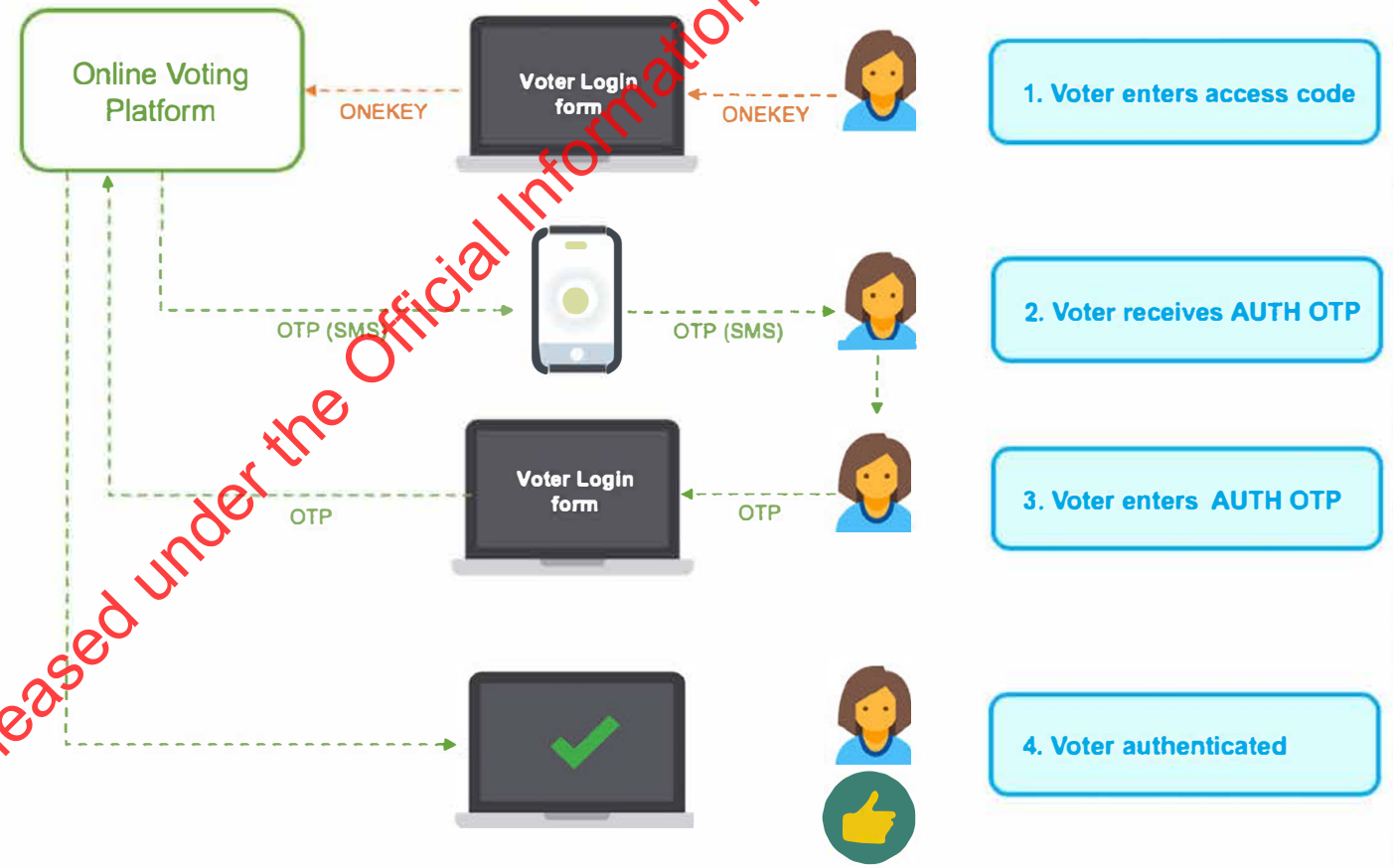

Authentication

SMARTMATIC

Online voting trial for 2019 local authority elections

Vote verification

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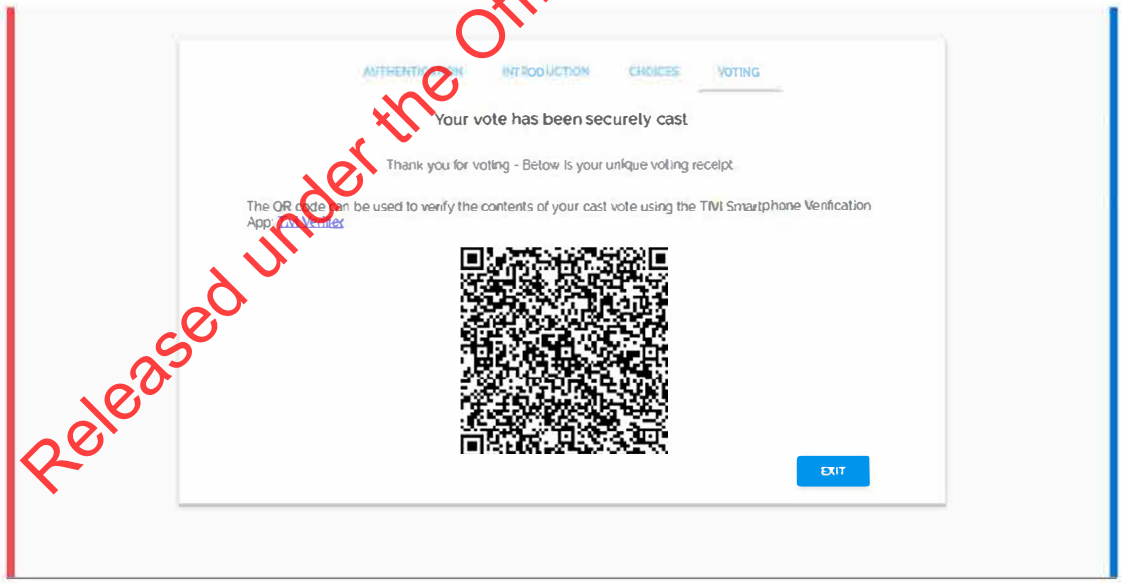
Vote verification

- Voter verifiability proves to voters that their vote was ‘cast-as-intended’ and was not manipulated on their device or in transit to the vote server
- Voter verifiability extends the transparency of online voting above and beyond that of traditional paper based voting



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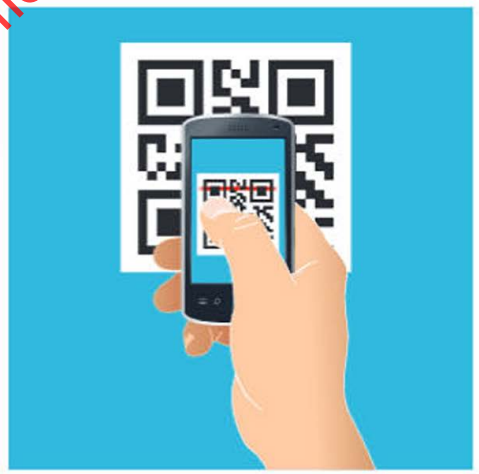
Smartphone based vote verification

- Two options
  - Council based
  - Voter based



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1. Candidate selection and vote creation

List of candidates

1. Sven
2. Mike
3. Sonya

Voting application

Public key

2. Mike

928628472933

- The voter selects candidate "2. Mike"
- The voting device generates a random number (token)
- The selection and token are encrypted with the election public key
- The resulting 'cryptogram' is digitally signed by the voter

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2. Vote casting

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- The digitally signed cryptogram is sent to the voter server
- The vote server generates a unique ‘session code’ (“1357”) which is returned to the voter

3. QR Receipt code generation

- The token (“92862847293”) and session code (“1357”) are displayed in the voting application as a QR-code
- Using the verification app, the smartphone reads the information in the QR code using the device’s camera

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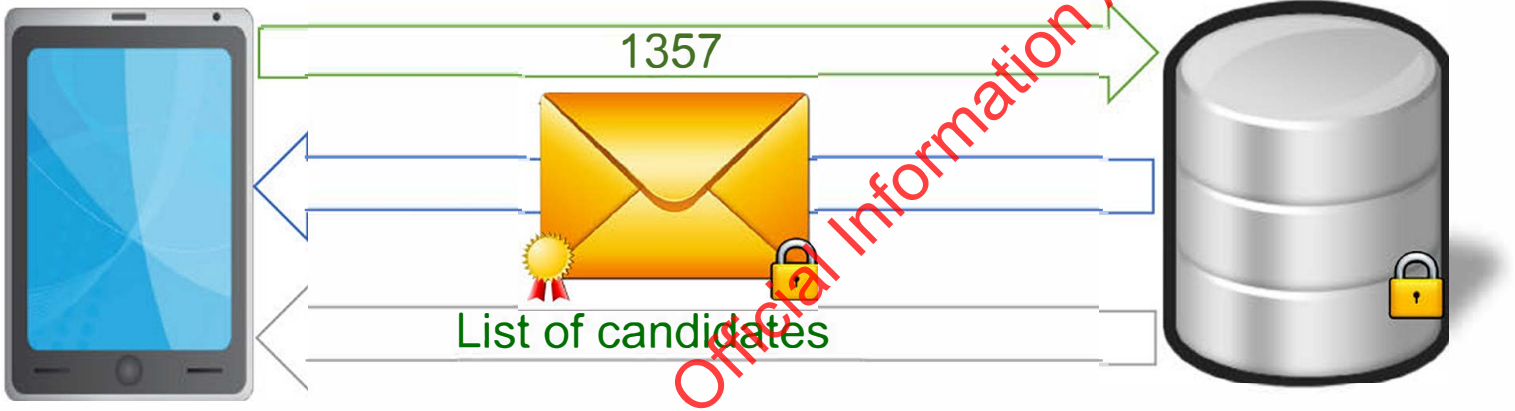
4. Vote retrieval and return



- The verification app sends the session code (“1357”) to the vote server
- The vote server identifies vote being verified and returns the digitally signed vote to the voters device – The voters identity is determined from the digital signature
- The vote server sends the list of candidates to the verification app

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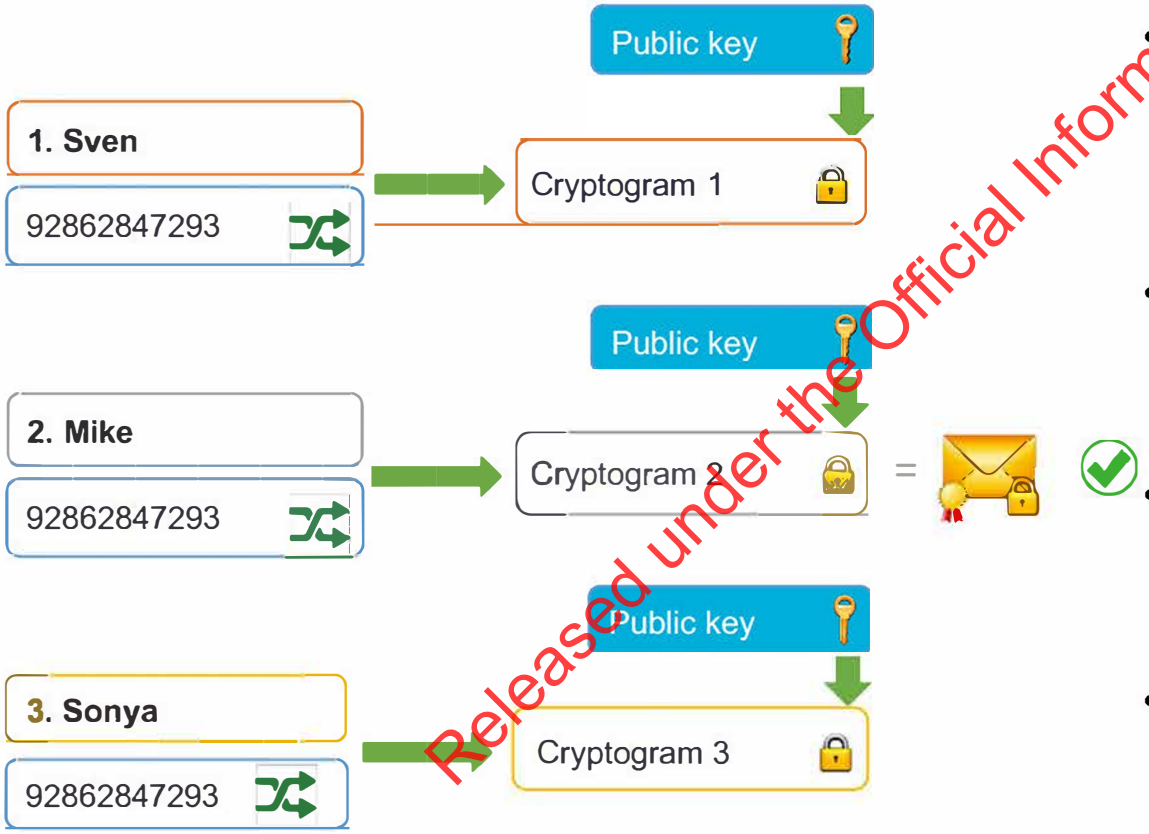
5. Cryptogram creation and confirmation



- The verification app cannot decrypt the vote but it knows the token and the public-key value that encrypted the vote
- The verification app creates cryptograms of all the candidates on the ballot using the token.
- The app searches for the cryptogram that matches the vote received from the server
- The matching cryptogram is shown on the app ("2. Mike")

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Document 3

From:	Michael Summers
To:	Scott Wilson
Cc:	Spiros Nikolakopoulos
Subject:	Re: Online voting system - authentication
Date:	Friday, 30 November 2018 3:51:45 AM
Attachments:	NZ - DIA Presentation Smartmatic.pdf

Opps…wrong presentation!

From: Michael Summers <9(2)(a)>

Date: Thursday, 29 November 2018 at 14:50

To: "Scott.Wilson@dia.govt.nz" <Scott.Wilson@dia.govt.nz>

Cc: Spiros Nikolakopoulos 9(2)(a)

Subject: Re: Online voting system - authentication

Hi Scott,

I've prepared the following few slides to help explain the authentication and vote verification process.

Kindest regards,

Mike

From: Scott.Wilson@dia.govt.nz

When: 20:00 - 21:00 30 November 2018

Subject: Online voting system - authentication

Location: 45PS_M11.02

Purpose

To get a greater understanding of the authentication and vote verification aspects of the system.

Michael – We can call you if you provide your number.

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Document 4

From: Michael Summers
To: Scott Wilson
Cc: Spiros Nikolakopoulos
Subject: Re: Online voting system - authentication
Date: Friday, 30 November 2018 8:57:07 PM

Hi Scott,
My pleasure – It's good that we discussed key elements of the process and in particular the authentication options and the risks/advantages of the different approaches. As discussed I think a meeting with all stakeholders around the options would make sense.
If you require follow up discussions please don't hesitate to let me or Spiros (copied) know.
Kindest regards,
Mike

From: Scott Wilson <Scott.Wilson@dia.govt.nz>
Date: Thursday, 29 November 2018 at 21:44
To: Michael Summers <9(2)(a) >
Subject: RE: Online voting system - authentication

Hi Mike
Thanks again for the discussion, even if it got a bit robust at times.
Thanks
Scott

From: Michael Summers [9(2)(a)]
Sent: Friday, 30 November 2018 8:27 AM
To: Scott Wilson
Subject: Re: Online voting system - authentication

Hi Scott - Absolutely. No problems.
KR,
Mike

From: Scott Wilson <scott.wilson@dia.govt.nz>
Sent: Thursday, November 29, 2018 7:24 pm
To: Michael Summers
Subject: RE: Online voting system - authentication

Hi Michael
Do you mind if I give you a call before the meeting to ensure there are no issues with the connection?
Thanks
Scott

From: Michael Summers [mailto:9(2)(a)]
Sent: Friday, 30 November 2018 3:51 AM
To: Scott Wilson
Cc: Spiros Nikolakopoulos
Subject: Re: Online voting system - authentication

Opps…wrong presentation!

From: Michael Summers <9(2)(a) >
Date: Thursday, 29 November 2018 at 14:50
To: "Scott.Wilson@dia.govt.nz" <Scott.Wilson@dia.govt.nz>
Cc: Spiros Nikolakopoulos <9(2)(a) >
Subject: Re: Online voting system - authentication

Hi Scott,

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I've prepared the following few slides to help explain the authentication and vote verification process.
Kindest regards,
Mike

From: .@..

When: 20:00 - 21:00 30 November 2018

Subject: Online voting system - authentication

Location: 45PS_M11.02

Purpose

To get a greater understanding of the authentication and vote verification aspects of the system.
Michael – We can call you if you provide your number.

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From: Scott Wilson
To: Spiros Nikolakopoulos
Subject: RE: Meeting today
Date: Friday, 7 December 2018 11:33:39 AM
Attachments: image001.jpg
image002.gif

Hi Spiros
Sorry about that.
We will use that.
Cheers
Scott

From: Spiros Nikolakopoulos 9(2)(a)
Sent: Friday, 7 December 2018 11:32 AM
To: Scott Wilson
Subject: Re: Meeting today
Hi Scott.
Apologies – I misunderstood.
The presentation you sent me (from Mike) through is fine, we can just use that.
--

Best Regards,
Spiros Nikolakopoulos
Country Manager - ANZ
Smartmatic Australia Pty Ltd
Phone: 9(2)(a)
www.smartmatic.com

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From: Scott Wilson <Scott.Wilson@dia.govt.nz>
Date: Friday, 7 December 2018 at 9:28 am
To: Spiros Nikolakopoulos 9(2)(a)
Subject: RE: Meeting today
Hi Spiros
I am following up on the email below.
Could you please let me know by **10am today (your time)** if you have any material to send to participants in this afternoon's meeting about authentication and online voting.
I need to get the agenda circulated shortly.
Thanks
Scott Wilson | Senior Policy Analyst | Policy Group
The Department of Internal Affairs Te Tari Taiwhenua
Direct Dial: +64 4 495 9463 | Extn: 5463
45 Pipitea Street | PO Box 805, Wellington 6140, New Zealand | www.dia.govt.nz

From: Scott Wilson
Sent: Thursday, 6 December 2018 4:21 PM
To: 'Spiros Nikolakopoulos'
Cc: 'Marguerite Delbet'

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Subject: RE: Meeting tomorrow

Hi Spiros

Attached is the agenda for tomorrow's meeting.

Please let me know by tomorrow morning if you want me to send out the presentation with it.

Thanks

Scott

From: Scott Wilson
Sent: Thursday, 6 December 2018 2:25 PM
To: 'Spiros Nikolakopoulos'
Cc: 'Marguerite Delbet'
Subject: Meeting tomorrow

Hi Spiros

As discussed, it would be great if you could talk through the authentication solution (including the pre-registration step).

Here is the presentation that Michael Summers gave to us recently if that is helpful.

We can send this presentation (or another one) to participants along with the agenda to the meeting.

Thanks

Scott Wilson | Senior Policy Analyst | Policy Group
The Department of Internal Affairs Te Tari Taiwhenua
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