Dokumentresumé:

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Bestilt af :     DEPCLH den 13-02-2013 11:36:34
Dokumentnr.:     5887
Titel:           Scytl_Cost_Estimations_final
Dokumenttype:    I
Dokumentdato:
Kontor/enhed:    VALG-ENH, Valgenheden
Sagsmedarb.:     Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:     1
Reg.dato:        14-09-2012
Registreret af:  DEPNNM - Nicoline Nyholm Miller
```

Emneord:

Tekst:

Modtagere:

Oplysninger:

Datoer:

Erindringer:

Scytl

Innovating Democracy

Danish Økonomi- og

Indenrigsministeriet

Price Estimation Scenarios for

introducing e-voting in the Country

Version History

Date	Updated by	Description
13-Sep-12	Jose Gorchs	Initial draft created
14-Sep-12	Gerard C	First version reviewed and ready for delivery

Contents

Scytl

Introduction

This document is Scytl's reply to the Danish Ministry of Interior ("*Økonomi-* og *Indenrigsministeriet*") request for a price estimation for two different scenarios in order to introduce e-voting in the country:

- Scenario 1: An estimation of the total price for three polling stations of varying sizes for 1 election in a Municipality, assuming a contract over a period of 10 years which includes 7 different elections.
- Scenario 2: An estimation of the price for a pilot project in a Municipality, based on the participation of 10 Municipalities with 2 polling stations each.

A range of prices is provided in each case. These prices are not binding, and are offered to the Ministry "as is". Scytl has tried to be as much accurate as possible based on the information available provided by the Ministry and its own experience in this field. In both cases we have made some assumptions, which are specified below.

1   Scenario 1 Estimation

This scenario considers the potential price per polling station in a situation where the whole country has embraced e-voting. The scenario considers three different types of polling stations, depending on the number of electors allocated to them.

For the pricing estimation presented below, we have used several assumptions described below:

- A contract of 10 years.
- The whole country (4 million voters, all Municipalities) participates in the project.
- Seven (7) elections executed during this period.
- 90% of participation in each election.
- A global voting period of 3.2 minutes per voter (authentication, candidate selection, validation, ballot casting, and the time required to move within the polling station).
- Polling stations open 11 hours.
- We assume 100% of voters will validate the vote in the validation terminal.
- Voting system customized to fit into Danish elections (language, electoral model, etc.).
- COTS hardware and software is covered by the warranty offered by their manufacturers.
- Voting Terminals, Smart Ballot Boxes and voting software has a warranty of 10 years (the duration of the contract).
- No shipping within Denmark is included. The shipping of all the materials to a central place in Denmark is included.
- No on-site support (on polling stations) is included for the different elections.
- No storage of equipment in between elections.
- Training and support to the Ministry and the Municipalities during every election.

- Centralized configuration of the election using an Election Management System provided by us.
- Integration with legacy systems to interchange information.
- Provision of the hardware and software (units) listed in the table below (the current version of the system demonstrated to the Ministry):

Element	SMALL Poll. Stat. (1,500)	MEDIUM Poll. Stat. (5,000)	LARGE Poll. Stat. (10,000)
Voting Terminal	3	7	14
Ballot Boxes	1	3	5
Pollbook terminals	2	4	7
Verification terminal	1	3	7
Smart cards	150	350	700
Paper Rolls	7	15	30
USB Sticks	3	8	13
Printer for reports	1	1	1
Headphones	3	7	14
Seals	12	32	58
UPS units	3	8	15

Based on the previous assumptions, we have estimated a range of prices for each type of polling station, giving an initial purchase price range and then ongoing prices for support, etc. for subsequent years use over the 10 year period. The table below shows these figures:

Investment	SMALL Poll. Stat. (1,500)	MEDIUM Poll. Stat. (5,000)	LARGE Poll. Stat. (10,000)
Initial (first election)			
Maintenance (yearly)			

2   Scenario 2 Estimation

This scenario considers the potential price for each Municipality (10 in total) with two different polling stations.

For the pricing estimation presented below, we have used several assumptions described below:

- A single pilot that encompasses 20 polling stations, 2 per participating municipality.
- Each municipality has a polling station sized for 1,500 electors, and another for 5,000 electors.
- 90% of participation rate.
- A global voting period of 3.2 minutes per voter (authentication, candidate selection, validation, ballot casting, and the time required to move within the polling station).

- Polling stations open 11 hours.
- We assume 100% of voters will validate the vote in the validation terminal.
- No shipping within Denmark is included. The shipping of all the materials to a central place in Denmark is included.
- On-site support in all polling stations is included.
- Global project management.
- Training and support to the Ministry and the Municipalities during the election.
- Centralized configuration of the election using an Election Management System provided by us.
- Integration with legacy systems to interchange information.
- Voting system customized to fit into the Danish election (language, electoral model, etc.).
- Provision of the hardware and software (units) listed in the table below per Municipality (the current version of the system demonstrated to the Ministry):

ELEMENT	UNITS PROVIDED PER MUNICIPALITY
Voting Terminal	10
Ballot Boxes	4
PollBook terminals	6
Verification terminal	6
Smart cards	500
Paper Rolls	21
USB Sticks	6
Printer for reports	3
Headphones	10
Seals	44
UPS units	11

The range of price for this scenario is between ▓▓▓▓▓▓▓▓▓▓ for each participating municipality.

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:36:33
Dokumentnr.:   5886
Titel: Scytl's response to the Request for additional information on
economic consequences
Dokumenttype: I
Dokumentdato: 14-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:
    Afsender   Jose Gorchs ,

Oplysninger:

Datoer:

Erindringer:

Christina Løtzsch Hansen

Fra:	Jose Gorchs <jose.gorchs@scytl.com>
Sendt:	14. september 2012 14:11
Til:	Nicoline Nyholm Miller
Cc:	Andy Tye (Scytl); Gerard Cervelló
Emne:	Scytl's response to the Request for additional information on economic consequences

Dear Nicoline,

Thank you for your patience and flexibility, we really hope the wait was worth it.

We've worked quite hard to provide you with realistic estimations according our best knowledge and we've spend most of the time thinking about the best way to prepare a document that is usable for you and provides you with valuable information not only on the estimations that we've made but on the way we have approached the response. Also, all the prices that leave the company have to be approved by a commission, which could not meet this a few hours ago.

Of course, this information is only for the Ministry, and we understand that you will extract some information for your public report, which will have no links to Scytl.

We'll be looking forward for you feedback. Do you have any idea on when could we expect to hear back from you?

Best regards.

--

Jose R. Gorchs Morillas

E/ jose.gorchs@scytl.com

Scytl   Plaça Gal·la Placídia 1-3   P/ + 34 934 230 324
08006 Barcelona   F/ + 34 933 230 324
Spain   http://www.scytl.com

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:36:46
Dokumentnr.:   5869
Titel: Question Regarding the Request for additional information on
economic consequences
Dokumenttype: I
Dokumentdato: 13-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:
    Afsender   Jose Gorchs ,

Oplysninger:

Datoer:

Erindringer:

Christina Løtzsch Hansen

Dear Nicoline,

We're working on preparing the cost estimations requested in your last email. We already have the answer for scenario number 2, but unfortunately we can't fully understand what you're looking for in scenario nº 1.

Let me be more specific. In your text describing scenario 1:

- **An estimation of the total price for three polling stations of varying sizes (see below) for 1 election in a municipality with respectively:**
  a.   **20,000 voters**
  b.   **50,000 voters**
  c.   **200,000 voters**

  -   Based on a 10 year contract (7 elections) for the whole country (4 mill. voters)

      1.   Price for small polling station of 1,500 voters
      2.   Price for a medium sized polling station of 5,000 voters
      3.   Price for a large polling station of 10,000 voters

The way we understand it: you want to know how much would it be the cost for 1 municipality for 1 election, assuming that you purchase hardware, software and services for 10 year and 7 elections for 4 mill. Voters. Is that correct?

In other words: when you say "*total price for three polling stations of varying sizes (see below) for 1 election in a municipality*" you mean that you are requesting a quote per polling station, per election and per municipality but based on a contract for the whole country?

In that case, it is not clear –for us- how the 20,000, 50,000 and 200,000 voters refers to the sizes of polling stations: if a municipality has –as in your example-20,000 citizens, does that mean that it will require 2 large polling stations or 4 medium sized?? Or any combination of them?

Should that not be the answer that you're looking for, please clarify. We really want our answers to be usable for you, and in order to achieve that goal we have to be sure that we understand what you're expecting from us.

We'll be looking forward for your feedback.

--

Jose R. Gorchs Morillas

E/ jose.gorchs@scytl.com

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:36:47
Dokumentnr.:   5837
Titel: SVar fra Everyone Counts videresendt til Aarhus - Indicative
Pricing for electronic voting
Dokumenttype: U
Dokumentdato: 14-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:
     Afsender   Nicoline Nyholm Miller ,
Modtager   jel@aarhus.dk ,
Modtager   Aarhus Kommune , Rådhuspladsen 2

Oplysninger:

Datoer:

Erindringer:

Christina Løtzsch Hansen

Svar fra Everyone Counts – det var den sidste. Har ikke modtaget noget fra Scytl, og Assembly Voting havde på forhånd som sagt meddele, at de ikke vil levere mere, men deres priser kender I nok også i forvejen fra ungevalget?

Vh og god weekend, når du når så langt.

Nicoline

Dear Nicoline,

As requested, please find enclosed indicative pricing from Everyone Counts to the two scenarios proposed for electronic voting

1. Prices are inclusive of all hardware, software, consumables, services requested

2. Prices are quoted in Euros and are exclusive of local taxes

- **An estimation of the total price for three polling stations of varying sizes (see below) for 1 election in a municipality with respectively:**

    a. **20,000 voters**

    b. **50,000 voters**

    c. **200,000 voters**

    - Based on a 10 year contract (7 elections) for the whole country (4 mill. voters)

        1. Price for small polling station of 1,500 voters

        2. Price for a medium sized polling station of 5,000 voters

        3. Price for a large polling station of 10,000 voters

    Indicative Pricing: (Quoted in Euros) – Exclusive of taxes

    20,000 voters –
    50,000 voters –
    200,000 voters

- **An estimation of the price for a pilot project in a municipality**

    - Based on the participation of 10 municipalities with 2 polling stations each; one of 5,000 voters and one of 1,500 voters

Indicative Pricing: (Quoted in Euros) – Exclusive of taxes

If you require any further information please don't hesitate to contact me. As the information is commercially sensitive I would be most grateful if the data can be 'anonymized' prior to publication and/or sharing in the public domain.

Many thanks and kindest regards,

Mike Summers
Director of Sales, Worldwide
Everyone Counts, Inc.
Tel: +44 (0) 2076177407
Mobile: +44 (0) 7585800950
Email: mike.summers@everyonecounts.com
Web: www.everyonecounts.com

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:36:51
Dokumentnr.:   5835
Titel: Price Detail Commnunication_20120913
Dokumenttype: U
Dokumentdato:
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:

Oplysninger:

Datoer:

Erindringer:

Økonomi og Indenrigsministeriet
Slotsholmsgade 10-12
1216 København K

Att.: Chief Election Officer Nicoline Nyholm Miller

September 14, 2012

To the Ministry of Economic Affairs and the Interior

Hereby Smartmatic and KMD answer to the Request for additional information on economic consequences of implementing an e-voting solution in Denmark submitted by the Ministry.

In the respect and understanding of the purpose, we have estimated figures as asked, but please note the prices must be considered very rough estimates, given the extremely short notice of the request.

Please note, that even though you have given some requirements as to how to generalize the estimates, the prices will still very much depend on the end requirements for Danish e-voting. Thus for example – extensive soft- or hardware adaptions to standardized equipment, specific requirements for education or similar issues, can influence the pricing. These given prices do therefore not preclude modifications of these prices given a tender process for the procurement of a system for e-voting in Denmark.

Additional information requested 1:
-   An estimation of the total price for three polling stations of varying sizes (see below) for 1 election in a municipality with respectively:
     o   Based on a 10 year contract (7 elections) for the whole country (4 mill. voters)
         1.   Price for small polling station of 1,500 voters
         2.   Price for a medium sized polling station of 5,000 voters
         3.   Price for a large polling station of 10,000 voters

Smartmatic + KMD response:
Given the following assumptions:
-   4.000.000 voters
-   11 hours of polling station voting
-   4 voting machines per smart ballot box
-   2 hours peak time per polling station receiving 30% of the voters
-   7 elections within 10 years

We estimate that the following equipment per type of polling station will be required:

Equipment quantity	Small Polling Station	Medium Polling Station	Large Polling Station
Voter card activation machine	1	3	6
Voting machine	4	11	21
Verification machine	1	3	5

Smart Ballot box	1	3	6

Using the quantity of equipment above we obtain the following rough prices for election. Please note that the price for the first election differs from the price for subsequent elections this is due to 2 mayor points:

- Equipment and software will be acquired for the first election
- Training for this first election will require a bigger effort for been the first electronic election in Denmark.

Totals for first election

Item	Per polling station	Quantity	Total
Small polling station (equipment and consumables)	■■■	889	■■■
Medium polling station (equipment and consumables)	■■■	267	■■■
Large polling station (equipment and consumables)	■■■	134	■■■
Election preparation system	■■■	1	■■■
Municipality Tally systems	■■■	98	■■■
Equipment total			■■■
Software			■■■
Software total			■■■
Small polling station (training, service and logistic)	■■■	889	■■■
Medium polling station (training, service and logistic)	■■■	267	■■■
Large polling station (training, service and logistic)	■■■	134	■■■
Services base cost			■■■
Training, service and logistic total			
Nationwide price			■■■

Totals for subsequent elections

Item	Per polling station	Quantity	Total
Small polling station (training, service and logistic)	■■■	889	■■■
Medium polling station (training, service and logistic)	■■■	267	■■■
Large polling station (training, service and logistic)	■■■	134	■■■
Services base cost			■■■
Nationwide price			■■■

Additional information requested 1:
- An estimation of the price for a pilot project in 10 municipalities with 1 small and 1 medium polling station

Smartmatic + KMD response:
Using the same quantity of equipment for polling station calculated for the previous exercise, the following price for a pilot in 10 municipalities is based on a price as a first election.

Prices for pilot			
Item	**Per polling station**	**Quantity**	**Total**
Small polling station (equipment and consumables)	▮▮▮▮	10	▮▮▮▮
Medium polling station (equipment and consumables)	▮▮▮▮	10	▮▮▮▮
Small polling station (training, service and logistic)	▮▮▮▮	10	▮▮▮▮
Medium polling station (training, service and logistic)	▮▮▮▮	10	▮▮▮▮
Election preparation system	▮▮▮▮	1	▮▮▮▮
Municipality Tally systems	▮▮▮▮	10	▮▮▮▮
Pilot price			▮▮▮▮

We do accept that you include the prices in the report, provided that the information is detached from the names of KMD and SmartMatic, and also are included in a price range from other participants.

On behalf of KMD and Smartmatics,

Kind Regards

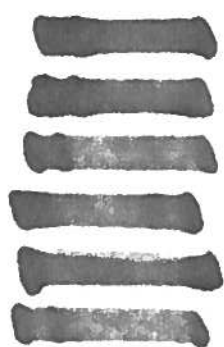**Mette Helmer,** Area Director

■ **KMコ** Lovbaserede software-løsninger

Lautrupparken 42, DK-2750 Ballerup
E-mail meh@kmd.dk Web www.kmd.dk
Direkte +45 44604414

C.c: Mr Fernando Hernandez – Smartmatic

    Mr Frans Gunnink – Smartmatic

    Mr. Leif Hernø

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:36:49
Dokumentnr.:   5834
Titel: Videresendt svar fra Smartmatic/KMD til Aarhus - Request for
additional information on economic consequences of implementing an e-voting
solution in Denmark
Dokumenttype: U
Dokumentdato: 14-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:
    Modtager   Aarhus Kommune , Rådhuspladsen 2

Oplysninger:

Datoer:

Erindringer:

Fra:	Nicoline Nyholm Miller
Sendt:	14. september 2012 11:31
Til:	jel@aarhus.dk
Emne:	VS: Smartmatic/KMD - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Materiale fra KMD/Smartmatic,

Vh Nicoline

Fra: Helmer.Mette MEH [mailto:MEH@kmd.dk]
Sendt: 14. september 2012 08:29
Til: Nicoline Nyholm Miller
Cc: Frans Gunnink; Fernando Hernández; Hernø.Leif LFH
Emne: SV: Smartmatic/KMD - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Dear Nicoline,

Please find attached our answer to your request, given according to your specifications, and as rough estimates.

I do hope you will submit the report when it is ready for publishing later on today ?

Kind regards

Mette Helmer, Area Director

KMD Lovbaserede software-løsninger

Lautrupparken 42, DK-2750 Ballerup
E-mail meh@kmd.dk   Web www.kmd.dk
Direkte +45 44604414

KMD CHALLENGE we are triathlon! **KMD** 4:18:4

Fra: Nicoline Nyholm Miller [mailto:nnm@oim.dk]
Sendt: 12. september 2012 11:55
Til: Helmer.Mette MEH
Cc: Hernø.Leif LFH
Emne: Smartmatic/KMD - Request for additional information on economic consequences of implementing an e-voting solution in Denmark
Prioritet: Høj

Dear Mette,

Thank you again for Smartmatic's and KMD's participation in the technical dialogue at the Ministry of Economic Affairs and the Interior on 3 September 2012 re. an e-voting solution for statutory elections in Denmark.

One of the issues discussed during the technical dialogue was the matter of the economic implications of e-voting, including the costs of conducting an e-voting pilot project, as the municipalities require information on this aspect in order to make a decision on whether they are willing to commit themselves to a future pilot project for a statutory election.

After going over the information imparted by the economic operators on this issue, the Ministry finds that it is necessary to acquire additional information in order to be able to properly appraise the price range for implementing e-voting solutions, as the data received so far during the technical dialogue is very difficult to process into numbers that will give an indication hereof to the municipalities.

You are therefore kindly asked to provide additional information before **Friday morning 13 September 2012 at 8:00 a.m.** stating a <u>rough</u> estimate of a total price for your solution for two different scenarios based on the following assumptions:

- **An estimation of the total price for three polling stations of varying sizes (see below) for 1 election in a municipality with respectively:**

    a. **20,000 voters**

    b. **50,000 voters**

    c. **200,000 voters**

    - Based on a 10 year contract (7 elections) for the whole country (4 mill. voters)

        1. Price for small polling station of 1,500 voters

        2. Price for a medium sized polling station of 5,000 voters

        3. Price for a large polling station of 10,000 voters

- **An estimation of the price for a pilot project in a municipality**

    - Based on the participation of 10 municipalities with 2 polling stations each; one of 5,000 voters and one of 1,500 voters

Price should include (if applicable according to the solution demonstrated):
- **Hardware**, including: voting cards activation, voting ballot generators, optical ballot scanner, smart ballot boxes, machine for initialization of tokens, voter verification functionality, printers for polling reports, UPS, etc. – assuming the hardware is purchased and not licenced

- **Tokens** for initialization of ballot generator

- **Software** for voting ballot generators, ballot boxes, smartcard readers, election management and interfaces

- **Paper rolls** for ballots (if used)

- **Services and logistics**, including central configuration and testing of equipment, delivery to polling stations, deployment, configuration and test of hard- and software at polling stations before election day, dismounting after elections and storage between elections, maintenance of equipment, change and repair of equipment in case of malfunction

- **Support** before and during election day in call centre and in polling stations

- **Training** of election officials and municipal IT-workers in deployment of election hardware

We understand that this estimate would only be tentative, probably will be calculated on the basis of solutions delivered for other comparable customers and does not preclude the actual pricing in the event of a tender process for the procurement of a system for e-voting in Denmark.

Also, we would like to ask if you have any objections to the inclusion in the report (in depersonalized form) of the information re. the economic implications, among these some of the price examples stated. We will not be stating specific prices, but are considering whether we could indicate a price range for some of the hardware components in particular and the software to the extent possible.

I apologize for the tight deadline. Please do not hesitate to contact me if you have any questions to this inquiry. Thank you very much for your cooperation, which is much appreciated.

Best regards,

Valgkonsulent, Kommunaljura
Nicoline Nyholm Miller

økonomi og indenrigsministeriet

Slotsholmsgade 10-12
1216 København K
Telefon 72 28 25 22
Fax 72 28 24 01
valg.im.dk

Tænk på miljøet, inden du skriver denne mail ud.

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:39:32
Dokumentnr.:   5833
Titel: Svar fra DRS videresend til Aarhus - Request for additional
information on economic consequences of implementing an e-voting solution in
Denmark
Dokumenttype: U
Dokumentdato: 14-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:
    Modtager   Aarhus Kommune , Rådhuspladsen 2

Oplysninger:

Datoer:

Erindringer:

Christina Løtzsch Hansen

Kom til at sende en mail uden talmateriale – den rigtige mail fra DRS kommer her.
Vh Nicoline

Fra: John Hancock [mailto:john.hancock@drs.co.uk]
Sendt: 14. september 2012 08:01
Til: Nicoline Nyholm Miller
Cc: Gary Butler
Emne: RE: DRS - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Dear Nicoline,

All rough estimates are based on an Image Cast Precinct (ICP) voting machine to voter ratio of 1:1250. All prices listed have included the cost of the ICP Hardware, Tokens, Software, Services and logistics, as well as support and training which on average increases the price point, ▮▮▮▮▮▮▮▮▮▮ Ballot printing is not included, however DRS would welcome the opportunity to provide costs for ballot printing. All figures are in US Dollars (USD). Answers to the okonomi og indenrigsministeriet's questions are listed below.

An estimation of the total price for three polling stations of varying sizes (see below) for 1 election in a municipality with respectively:

a. 20,000 voters = 16x ICPs plus support: ▮▮▮▮▮▮
b. 50,000 voters = 40x ICPs plus support: ▮▮▮▮▮▮
c. 200,000 voters = 160x ICPs plus support: ▮▮▮▮▮▮

Based on a 10 year contract (7 elections) for the whole country   (4 million voters)
1.   Price for small polling station of 1,500 voters
        2x ICPs per polling station plus support = ▮▮▮▮▮
2.   Price for a medium sized polling station of 5,000 voters
        4x ICPs per polling station plus support = ▮▮▮▮▮
3.   Price for a large polling station of 10,000 voters
        8x ICPs per polling station plus support = ▮▮▮▮▮

Total Price: The rough price for the whole country of a 10 year contract including 7 elections would be ▮▮▮▮▮ USD.

Note ▮▮▮▮▮▮ over 7 elections with a voter base of 4 million equals ▮▮▮▮▮ per election.

An estimation of the price for a pilot project in a municipality
Based on the participation of 10 municipalities with 2 polling stations each; one of 5,000 voters and one of 1,500 voters:

1x 5000 voter polling station = 4x ICPs plus support ▮▮▮▮▮
1x 1500 voter polling station = 2x ICPs plus support ▮▮▮▮▮

Total cost for 1x municipality = 6x ICPs plus support ███████████

Total cost for 10x municipalities = 60x ICPs plus support ██████████

I understand that you will be sharing cost information as part of the on going reporting. I ask that if our costs are shared that they cannot be linked back to our proposed hardware. Pricing information is very sensitive and your help in maintaining confidentiality would be very much appreciated.

I look forward to hearing from you in due course.

Best Wishes,

John

From: Nicoline Nyholm Miller [mailto:nnm@oim.dk]
Sent: 12 September 2012 12:47
To: John Hancock
Subject: SV: DRS - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Thanks, John, I appreciate your help.

Best wishes,
Nicoline

Fra: John Hancock [mailto:john.hancock@drs.co.uk]
Sendt: 12. september 2012 12:27
Til: Nicoline Nyholm Miller
Cc: Gary Butler
Emne: RE: DRS - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Dear Nicoline,

Thank you very much for your enquiry. I will contact colleagues immediately to gather the information that you need. Timescales are tight and if there are any issues in achieving this, I will let you know.

Best Wishes,

John

From: Nicoline Nyholm Miller [mailto:nnm@oim.dk]
Sent: 12 September 2012 11:16
To: John Hancock
Cc: Gary Butler
Subject: DRS - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Dear John,

Thank you again for your participation in the technical dialogue at the Ministry of Economic Affairs and the Interior on 3 September 2012 re. an e-voting solution for statutory elections in Denmark.

One of the issues discussed during the technical dialogue was the matter of the economic implications of e-voting, including the costs of conducting an e-voting pilot project, as the municipalities require information on this aspect in

order to make a decision on whether they are willing to commit themselves to a future pilot project for a statutory election.

After going over the information imparted by the economic operators on this issue, the Ministry finds that it is necessary to acquire additional information in order to be able to properly appraise the price range for implementing e-voting solutions, as the data received so far during the technical dialogue is very difficult to process into numbers that will give an indication hereof to the municipalities.

You are therefore kindly asked to provide additional information before **Friday morning 13 September 2012 at 8:00 a.m.** stating a <u>rough</u> estimate of a total price for your solution for two different scenarios based on the following assumptions:

- **An estimation of the total price for three polling stations of varying sizes (see below) for 1 election in a municipality with respectively:**

  a. **20,000 voters**

  b. **50,000 voters**

  c. **200,000 voters**

  - Based on a 10 year contract (7 elections) for the whole country (4 mill. voters)

    1. Price for small polling station of 1,500 voters

    2. Price for a medium sized polling station of 5,000 voters

    3. Price for a large polling station of 10,000 voters

- **An estimation of the price for a pilot project in a municipality**

  - Based on the participation of 10 municipalities with 2 polling stations each; one of 5,000 voters and one of 1,500 voters

Price should include (if applicable according to the solution demonstrated):
- **Hardware**, including: voting cards activation, voting ballot generators, optical ballot scanner, smart ballot boxes, machine for initialization of tokens, voter verification functionality, printers for polling reports, UPS, etc. – assuming the hardware is purchased and not licenced

- **Tokens** for initialization of ballot generator

- **Software** for voting ballot generators, ballot boxes, smartcard readers, election management and interfaces

- **Paper rolls** for ballots (if used)

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- **Support** before and during election day in call centre and in polling stations

- **Training** of election officials and municipal IT-workers in deployment of election hardware

We understand that this estimate would only be tentative, probably will be calculated on the basis of solutions delivered for other comparable customers and does not preclude the actual pricing in the event of a tender process for the procurement of a system for e-voting in Denmark.

Also, we would like to ask if you have any objections to the inclusion in the report (in depersonalized form) of the information re. the economic implications imparted during the technical dialogue, among these some of the price

examples stated. We will not be stating specific prices, but are considering whether we could indicate a price range for some of the hardware components in particular and the software to the extent possible.

I apologize for the tight deadline. Please do not hesitate to contact me if you have any questions to this inquiry. Thank you very much for your cooperation, which is much appreciated.

Kindest regards,

Chief Electoral Officer
Nicoline Nyholm Miller

økonomi og indenrigsministeriet

Slotsholmsgade 10-12
1216 Copenhagen K
Tel. direct: +45 72 28 25 22
Fax: + 45 72 28 24 01
valg.im.dk

Think of the environment before printing this mail.

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:39:35
Dokumentnr.:   5832
Titel: Denmark rough Estimate of costs v4 fra Opt2Vote
Dokumenttype: U
Dokumentdato:
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:

Oplysninger:

Datoer:

Erindringer:

Estimation 3 polling stations for 1 election for NON-REMOTE Internet Voting

	Unit Price	Number of Days	Number of Days	Small Polling Station - 1500 voters (based on 2 servers and 12 voting stations, 2 print and display for Non Remote Voting only)	Medium Polling Station - 5000 voters (based on 2 servers and 40 voting stations, 2 print and display for Non Remote Voting only)	Large Polling Station - 10000 voters (based on 3 servers and 83 voting stations, 3 print and display for Non Remote Voting only)
Hardware - HIRED						
Customisation			5 (this is an estimate)			
Software						
Paper Rolls						
Services and Logistics						
Central config and testing		6	5			
Delivery to PS		3	2			
Deployment, Config and test at PS			1			
Maintenance			1			
Change and repair						
Support		3	2			
Training - 3 days		3	2			
Total						

Estimation 2 polling stations for 10 Municipalities for NON REMOTE Internet voting

	1 Municipality	10 Municipalites
Small Polling Station – 1500 voters	10	
Medium Polling Station – 5000 voters	10	
TOTAL		

Assumptions

Delivery prices are an estimate and these may fluctuate

Depending on customisation requirements these prices will vary

Travel expenses will be charged at cost

Estimation 3 polling stations for 1 election for REMOTE Internet Voting

	Small Polling Station - 1500 voters 1200 voting remotely 300 voting at polling station	Medium Polling Station - 5000 voters 4000 voting remotely 1000 at polling station	Large Polling Station - 10000 voters 8000 voting remotely 2000 voting at polling station	Unit Price	Number of Days	Number of Days
	based on 2 servers and 3 voting stations, 2 print and display for Non Remote Voting only	based on 2 servers and 8 voting stations, 2 print and display for Non Remote Voting only	based on 2 servers and 16 voting stations, 2 print and display for Non Remote Voting only			
Hardware – HIRED						5 (this is an estimate)
Customisation						
Software						
Paper Rolls						
Services and Logistics						
Central config and testing					6	5
Delivery to PS					3	2
Deployment, Config and test at PS						1
Maintenance						1
Change and repair						
Support per day					3	2
Training – 3days					3	2
Total						

Estimation 3 polling stations for 10 Municipalities for REMOTE Internet voting

	1 Municipality	10 Municipalities
Small Polling Station – 1500 voters		10
Medium Polling Station – 5000 voters		10
TOTAL		

Assumptions

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Depending on customisation requirements these prices will vary

Travel expenses will be charged at cost

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:39:34
Dokumentnr.:   5831
Titel: VS: Opt2vote - Request for additional information on economic
consequences of implementing an e-voting solution in Denmark
Dokumenttype: U
Dokumentdato: 14-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:
    Afsender   Nicoline Nyholm Miller ,
Modtager   jel@aarhus.dk ,
Modtager   Aarhus Kommune , Rådhuspladsen 2

Oplysninger:

Datoer:

Erindringer:

Christina Løtzsch Hansen

Har også fået noget fra Opt2vote, kommer her.
Vh Nicoline

Fra: Carmel Quigg [mailto:cquigg@opt2vote.com]
Sendt: 13. september 2012 17:36
Til: Nicoline Nyholm Miller
Cc: Stella Coyle; Siobhan Donaghy
Emne: RE: Opt2vote - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Hello Nicoline

Siobhan and Stella are travelling today and they asked me to attach costs that you requested as per your email below.

Please note that these costs are only a 'rough estimate'.

If you have any questions please let me know.

Thanks

Regards
Carmel Quigg
Product Manager

OPT2VOTE
an Idox company
25d Bishop Street, Londonderry, Northern Ireland, BT48 6PR
M   07515576083
T   028 7137 1111
F   028 7137 8869
E   cquigg@opt2vote.com
W   www.opt2vote.com

From: Nicoline Nyholm Miller [mailto:nnm@oim.dk]
Sent: 12 September 2012 11:13
To: Siobhan Donaghy
Cc: Stella Coyle
Subject: Opt2vote - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Dear Siobhan,

Thank you again for your participation in the technical dialogue at the Ministry of Economic Affairs and the Interior on 21 August 2012 re. an e-voting solution for statutory elections in Denmark.

One of the issues discussed during the technical dialogue was the matter of the economic implications of e-voting, including the costs of conducting an e-voting pilot project, as the municipalities require information on this aspect in order to make a decision on whether they are willing to commit themselves to a future pilot project for a statutory election.

After going over the information imparted by the economic operators on this issue, the Ministry finds that it is necessary to acquire additional information in order to be able to properly appraise the price range for implementing e-voting solutions, as the data received so far during the technical dialogue is very difficult to process into numbers that will give an indication hereof to the municipalities.

You are therefore kindly asked to provide additional information before **Friday morning 13 September 2012 at 8:00 a.m.** stating a <u>rough</u> estimate of a total price for your solution for two different scenarios based on the following assumptions:

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    a. **20,000 voters**

    b. **50,000 voters**

    c. **200,000 voters**

    - Based on a 10 year contract (7 elections) for the whole country (4 mill. voters)

        1. Price for small polling station of 1,500 voters

        2. Price for a medium sized polling station of 5,000 voters

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    - Based on the participation of 10 municipalities with 2 polling stations each; one of 5,000 voters and one of 1,500 voters

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Also, we would like to ask if you have any objections to the inclusion in the report (in depersonalized form) of the information re. the economic implications imparted during the technical dialogue, among these some of the price examples stated. We will not be stating specific prices, but are considering whether we could indicate a price range for some of the hardware components in particular and the software to the extent possible.

I apologize for the tight deadline. Please do not hesitate to contact me if you have any questions to this inquiry. Thank you very much for your cooperation, which is much appreciated.

Kindest regards,

Chief Electoral Officer
Nicoline Nyholm Miller

økonomi og indenrigsministeriet

Slotsholmsgade 10-12
1216 Copenhagen K
Tel. direct: +45 72 28 25 22
Fax: + 45 72 28 24 01
valg.im.dk

Think of the environment before printing this mail.

Please consider the environment before printing this e-mail.

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:39:54
Dokumentnr.:   5830
Titel: Denmark rough Estimate of costs v4
Dokumenttype: I
Dokumentdato:
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
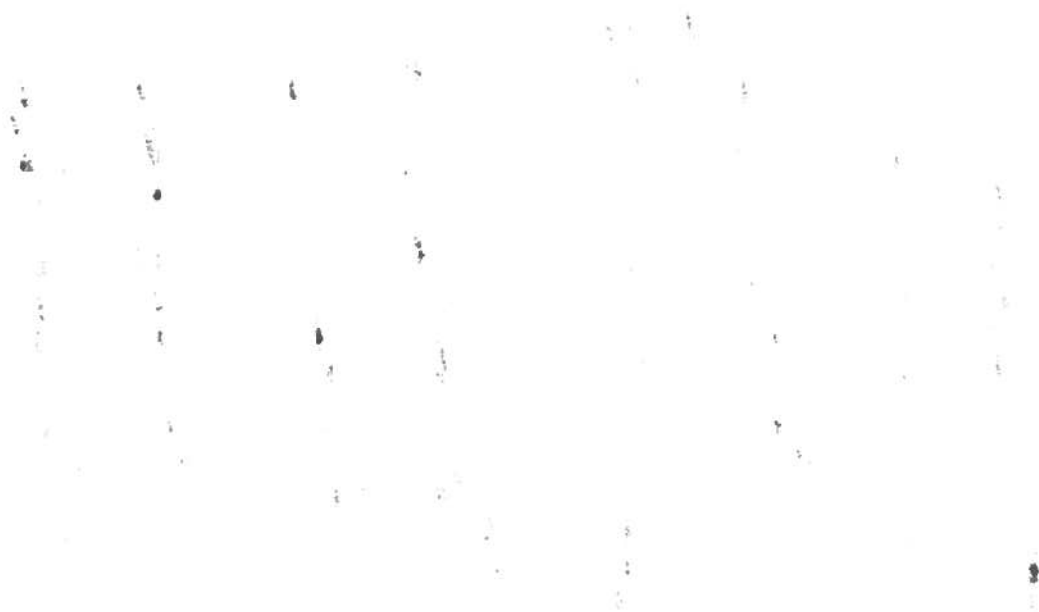Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:

Oplysninger:

Datoer:

Erindringer:

Estimation 3 polling stations for 1 election for NON-REMOTE Internet Voting

	Unit Price	Number of Days	Number of Days	Small Polling Station - 1500 voters	Medium Polling Station - 5000 voters	Large Polling Station - 10000 voters
				based on 2 servers and 12 voting stations, 2 print and display for Non Remote Voting only	based on 2 servers and 40 voting stations, 2 print and display for Non Remote Voting only	based on 3 servers and 83 voting stations, 3 print and display for Non Remote Voting only
Hardware - HIRED						
Customisation		5 (this is an estimate)				
Software						
Paper Rolls						
Services and Logistics						
Central config and testing		5	6			
Delivery to PS		2				
Deployment, Config and test at PS		1	3			
Maintenance		1				
Change and repair						
Support		2	3			
Training - 3 days		2	3			
Total						

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TOTAL			

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Hardware – HIRED		5 (this is an estimate)				
Customisation						
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Paper Rolls						
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	1 Municipality	10 Municipalities
Small Polling Station – 1500 voters		10
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Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:39:53
Dokumentnr.:   5829
Titel: Svar fra Opt2vote - Request for additional information on
economic consequences of implementing an e-voting solution in Denmark
Dokumenttype: I
Dokumentdato: 13-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:
    Afsender   Carmel Quigg ,

Oplysninger:

Datoer:

Erindringer:

Christina Løtzsch Hansen

Fra:	Carmel Quigg <cquigg@opt2vote.com>
Sendt:	13. september 2012 17:36
Til:	Nicoline Nyholm Miller
Cc:	Stella Coyle; Siobhan Donaghy
Emne:	RE: Opt2vote - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Hello Nicoline

Siobhan and Stella are travelling today and they asked me to attach costs that you requested as per your email below.

Please note that these costs are only a 'rough estimate'.

If you have any questions please let me know.

Thanks

Regards
Carmel Quigg
Product Manager

OPT2VOTE
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25d Bishop Street, Londonderry, Northern Ireland, BT48 6PR
M 07515576083
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F 028 7137 8869
E cquigg@opt2vote.com
W www.opt2vote.com

From: Nicoline Nyholm Miller [mailto:nnm@oim.dk]
Sent: 12 September 2012 11:13
To: Siobhan Donaghy
Cc: Stella Coyle
Subject: Opt2vote - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Dear Siobhan,

Thank you again for your participation in the technical dialogue at the Ministry of Economic Affairs and the Interior on 21 August 2012 re. an e-voting solution for statutory elections in Denmark.

One of the issues discussed during the technical dialogue was the matter of the economic implications of e-voting, including the costs of conducting an e-voting pilot project, as the municipalities require information on this aspect in order to make a decision on whether they are willing to commit themselves to a future pilot project for a statutory election.

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Kindest regards,

Chief Electoral Officer

Nicoline Nyholm Miller

økonomi og indenrigsministeriet

Slotsholmsgade 10-12
1216 Copenhagen K
Tel. direct: +45 72 28 25 22
Fax: + 45 72 28 24 01
valg.im.dk

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:40:04
Dokumentnr.:   5828
Titel: Costs Model-Technical Dialogue Denmark v1
Dokumenttype: U
Dokumentdato:
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:

Oplysninger:

Datoer:

Erindringer:

indra

Elections Processes

COST MODEL FOR ELECTORAL MODERNISATION

Approach to pilots and full implementation

September, 2012

ELECTION MODERNISATION FROM A MUNICIPALITY PERSPECTIVE

- When it comes to election modernisation our experiences with municipalities all over the world consistently drive us to the same conclusions:

  - Municipalities have limited budgets for elections

  - They want technology because it simplifies many aspects of the work they are responsible for but ....

  - They cannot justify a considerable investment in technology particularly if there are no mayor issues with the current election system

  - Even if they could, it does not mean they would be able to get the extra funding to finance it

- For municipalities to engage into a Ministry-driven mordernisation process, they need solid arguments such us:

  - Zero risk: ensured by choosing a technology partner with proven experience and delivery capability

  -

INDRA PERSPECTIVE

- We are conscious of the cost of technology and the difficulties it posses onto our customers

- In electoral modernisation what we want to see is 100% of municipalities **fast adopting** the new system together with a long term commitment to use it:

  - This contributes to market growth (i.e. "success stories built up the market")

  - It allows us to apply the cost models used in other mature industries/sectors such as in the outsourcing business

- Again, the driving requirements to achieve all this are "zero risk" and "limited budgeting effort"

Hele siden er undtaget fra aktindsigt.

ASSUMPTIONS IN INDRA PROPOSAL FOR FULL IMPLEMENTATION

- 10 year contract (7 elections)

- Calculation of the cost of the manual election in each polling station should include **all incurred costs**. For instance, cost of ballot papers should include production, QA, packaging and distribution costs

- We assume that municipalities are able to provide the staff for the "automated" election the same way as they provide the staff for the manual elections. Indra will provide the training programme for that staff and the call centre for technical support

- Indra will provide all the equipment required and all the services as per your email dated 12/09/2012

ASSUMPTIONS IN INDRA PROPOSAL FOR FULL IMPLEMENTATION

Estimated number of machines per polling station size	Units	Comments
Small polling station	4	1.500 voters/polling station
Electronic Bbox	1	
Ballot Generator	3	
Medium polling station	14	5.000 voters/polling station
Electronic Bbox	4	
Ballot Generator	10	
Large polling station	27	10.000 voters/polling station
Electronic Bbox	7	
Ballot Generator	20	

Hele siden er undtaget fra aktindsigt.

ASSUMPTIONS IN INDRA PROPOSAL FOR PILOTS

- Calculation of the cost of the manual election in each polling station should include **all incurred costs.** For instance, cost of ballot papers should include production, QA, packaging and distribution costs

- We assume that municipalities are able to provide the staff for the "automated" pilot election the same way as they provide the staff for the manual elections. Indra will provide the training programme for that staff and the call centre for technical support

- Indra will provide all the equipment required and all the services as per your email dated 12/09/2012

ASSUMPTIONS IN INDRA PROPOSAL FOR PILOTS

PILOTS NUMBERS	
Municipalities	10
Polling stations	20
Ballot Generators	130
Electronic Bbox	50
Card Activator	50
Smartcards	700
Paper rolls	260
Printers	50

indra

Cristina Frutos
Senior Manager

Avda. de Bruselas 35
28108 Alcobendas,
Madrid España
T +34 91 480 90 15
M +34 669 76 66 39

cfrutos@indra.es
www.indracompany.com

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:40:03
Dokumentnr.:   5827
Titel: Svar fra Indra sendt til Aarhus - Request for additional
information on economic consequences of implementing an e-voting solution in
Denmark
Dokumenttype: U
Dokumentdato: 14-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:
        Aarhus Kommune , Rådhuspladsen 2

Oplysninger:

Datoer:

Erindringer:

Christina Løtzsch Hansen

Fra:	Nicoline Nyholm Miller
Sendt:	14. september 2012 11:27
Til:	jel@aarhus.dk
Emne:	VS: Indra - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Kære Jesper
Her er Indras tal. Tal følger fra Everyone Counts, DRS og KMD/Smartmatic. Som nævnt i telefonen er det vigtigt, at man ikke kan føre nogen af tallene tilbage til enkelte leverandører, heller ikke indirekte.
Vh Nicoline

Fra: Frutos López, Cristina [mailto:cfrutos@indra.es]
Sendt: 13. september 2012 23:18
Til: Nicoline Nyholm Miller
Emne: RE: Indra - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Dear Nicoline,
Attached is our proposal for the costs model for the pilots and full implementation.
The rationale behind it is that success can only be achieved if the e-election implementation is affordable for the municipalities. We acknowledge that this way of presenting the pricing scheme is innovative and may not be in line with what you where looking for, but please discuss it with the municipalities because I am sure this approach will be of interest to them.
Please do not hesitate to contact me should you wish to discuss or require any clarifications.
Kind regards
Cristina

De: Nicoline Nyholm Miller [mailto:nnm@oim.dk]
Enviado el: miércoles, 12 de septiembre de 2012 12:04
Para: Frutos López, Cristina
Asunto: Indra - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Dear Cristina,

Thank you again for your participation in the technical dialogue at the Ministry of Economic Affairs and the Interior on 21 August 2012 re. an e-voting solution for statutory elections in Denmark.

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    - Based on the participation of 10 municipalities with 2 polling stations each; one of 5,000 voters and one of 1,500 voters

Price should include (if applicable according to the solution demonstrated):

- **Hardware**, including: voting cards activation, voting ballot generators, optical ballot scanner, smart ballot boxes, machine for initialization of tokens, voter verification functionality, printers for polling reports, UPS, etc. – assuming the hardware is purchased and not licenced

- **Tokens** for initialization of ballot generator

- **Software** for voting ballot generators, ballot boxes, smartcard readers, election management and interfaces

- **Paper rolls** for ballots (if used)

- **Services and logistics**, including central configuration and testing of equipment, delivery to polling stations, deployment, configuration and test of hard- and software at polling stations before election day, dismounting after elections and storage between elections, maintenance of equipment, change and repair of equipment in case of malfunction

- **Support** before and during election day in call centre and in polling stations

- **Training** of election officials and municipal IT-workers in deployment of election hardware

We understand that this estimate would only be tentative, probably will be calculated on the basis of solutions delivered for other comparable customers and does not preclude the actual pricing in the event of a tender process for the procurement of a system for e-voting in Denmark.

Also, we would like to ask if you have any objections to the inclusion in the report (in depersonalized form) of the information re. the economic implications imparted during the technical dialogue, among these some of the price examples stated. We will not be stating specific prices, but are considering whether we could indicate a price range for some of the hardware components in particular and the software to the extent possible.

I apologize for the tight deadline. Please do not hesitate to contact me if you have any questions to this inquiry. Thank you very much for your cooperation, which is much appreciated.

Kindest regards,

Chief Electoral Officer
Nicoline Nyholm Miller

økonomi og indenrigsministeriet

Slotsholmsgade 10-12
1216 Copenhagen K
Tel. direct: +45 72 28 25 22
Fax: + 45 72 28 24 01
valg.im.dk

Think of the environment before printing this mail.

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:40:16
Dokumentnr.:   5766
Titel: Price Detail Commnunication_20120913
Dokumenttype: I
Dokumentdato:
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:

Oplysninger:

Datoer:

Erindringer:

Økonomi og Indenrigsministeriet
Slotsholmsgade 10-12
1216 København K

Att.: Chief Election Officer Nicoline Nyholm Miller

September 14, 2012

To the Ministry of Economic Affairs and the Interior

Hereby Smartmatic and KMD answer to the Request for additional information on economic consequences of implementing an e-voting solution in Denmark submitted by the Ministry.

In the respect and understanding of the purpose, we have estimated figures as asked, but please note the prices must be considered very rough estimates, given the extremely short notice of the request.

Please note, that even though you have given some requirements as to how to generalize the estimates, the prices will still very much depend on the end requirements for Danish e-voting. Thus for example – extensive soft- or hardware adaptions to standardized equipment, specific requirements for education or similar issues, can influence the pricing. These given prices do therefore not preclude modifications of these prices given a tender process for the procurement of a system for e-voting in Denmark.

Additional information requested 1:
- An estimation of the total price for three polling stations of varying sizes (see below) for 1 election in a municipality with respectively:
  - o Based on a 10 year contract (7 elections) for the whole country (4 mill. voters)
    1. Price for small polling station of 1,500 voters
    2. Price for a medium sized polling station of 5,000 voters
    3. Price for a large polling station of 10,000 voters

Smartmatic + KMD response:
Given the following assumptions:
- 4.000.000 voters
- 11 hours of polling station voting
- 4 voting machines per smart ballot box
- 2 hours peak time per polling station receiving 30% of the voters
- 7 elections within 10 years

We estimate that the following equipment per type of polling station will be required:

Equipment quantity	Small Polling Station	Medium Polling Station	Large Polling Station
Voter card activation machine	1	3	6
Voting machine	4	11	21
Verification machine	1	3	5

Smart Ballot box	1	3	6

Using the quantity of equipment above we obtain the following rough prices for election. Please note that the price for the first election differs from the price for subsequent elections this is due to 2 mayor points:

- Equipment and software will be acquired for the first election
- Training for this first election will require a bigger effort for been the first electronic election in Denmark.

Totals for first election

Item	Per polling station	Quantity	Total
Small polling station (equipment and consumables)	▮	889	▮
Medium polling station (equipment and consumables)	▮	267	▮
Large polling station (equipment and consumables)	▮	134	▮
Election preparation system	▮	1	▮
Municipality Tally systems	▮	98	▮
Equipment total			▮
Software			▮
Software total			▮
Small polling station (training, service and logistic)	▮	889	▮
Medium polling station (training, service and logistic)	▮	267	▮
Large polling station (training, service and logistic)	▮	134	▮
Services base cost			▮
Training, service and logistic total			▮
Nationwide price			▮

Totals for subsequent elections

Item	Per polling station	Quantity	Total
Small polling station (training, service and logistic)	▮	889	▮
Medium polling station (training, service and logistic)	▮	267	▮
Large polling station (training, service and logistic)	▮	134	▮
Services base cost			▮
Nationwide price			▮

Additional information requested 1:

- An estimation of the price for a pilot project in 10 municipalities with 1 small and 1 medium polling station

Smartmatic + KMD response:

Using the same quantity of equipment for polling station calculated for the previous exercise, the following price for a pilot in 10 municipalities is based on a price as a first election.

Prices for pilot			
Item	Per polling station	Quantity	Total
Small polling station (equipment and consumables)	███████	10	███████
Medium polling station (equipment and consumables)	███████	10	███████
Small polling station (training, service and logistic)	███████	10	███████
Medium polling station (training, service and logistic)	███████	10	███████
Election preparation system	███████	1	███████
Municipality Tally systems	███████	10	███████
Pilot price			███████

We do accept that you include the prices in the report, provided that the information is detached from the names of KMD and SmartMatic, and also are included in a price range from other participants.

On behalf of KMD and Smartmatics,

Kind Regards

Mette Helmer, Area Director

■**KMD** Lovbaserede software-løsninger

Lautrupparken 42, DK-2750 Ballerup
E-mail meh@kmd.dk Web www.kmd.dk
Direkte +45 44604414

C.c: Mr Fernando Hernandez – Smartmatic

Mr Frans Gunnink – Smartmatic

Mr. Leif Hernø

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:40:15
Dokumentnr.:   5765
Titel: Reply from Smartmatic/KMD - Request for additional information
on economic consequences of implementing an e-voting solution in Denmark
Dokumenttype: I
Dokumentdato: 14-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:
    Afsender   KMD Valg , Lautrupparken 40-42

Oplysninger:

Datoer:

Erindringer:

Fra:	Helmer.Mette MEH <MEH@kmd.dk>
Sendt:	14. september 2012 08:29
Til:	Nicoline Nyholm Miller
Cc:	Frans Gunnink; Fernando Hernández; Hernø.Leif LFH
Emne:	SV: Smartmatic/KMD - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Dear Nicoline,

Please find attached our answer to your request, given according to your specifications, and as rough estimates.

I do hope you will submit the report when it is ready for publishing later on today ?

Kind regards

Mette Helmer, Area Director

KMD Lovbaserede software-løsninger

Lautrupparken 42, DK-2750 Ballerup
E-mail meh@kmd.dk Web www.kmd.dk
Direkte +45 44604414

KMD *CHALLENGE* *we are triathlon!* **KMD** 4:18:4

Fra: Nicoline Nyholm Miller [mailto:nnm@oim.dk]
Sendt: 12. september 2012 11:55
Til: Helmer.Mette MEH
Cc: Hernø.Leif LFH
Emne: Smartmatic/KMD - Request for additional information on economic consequences of implementing an e-voting solution in Denmark
Prioritet: Høj

Dear Mette,

Thank you again for Smartmatic's and KMD's participation in the technical dialogue at the Ministry of Economic Affairs and the Interior on 3 September 2012 re. an e-voting solution for statutory elections in Denmark.

One of the issues discussed during the technical dialogue was the matter of the economic implications of e-voting, including the costs of conducting an e-voting pilot project, as the municipalities require information on this aspect in order to make a decision on whether they are willing to commit themselves to a future pilot project for a statutory election.

After going over the information imparted by the economic operators on this issue, the Ministry finds that it is necessary to acquire additional information in order to be able to properly appraise the price range for implementing e-voting solutions, as the data received so far during the technical dialogue is very difficult to process into numbers that will give an indication hereof to the municipalities.

You are therefore kindly asked to provide additional information before **Friday morning 13 September 2012 at 8:00 a.m.** stating a rough estimate of a total price for your solution for two different scenarios based on the following assumptions:

- **An estimation of the total price for three polling stations of varying sizes (see below) for 1 election in a municipality with respectively:**

    a. **20,000 voters**

    b. **50,000 voters**

    c. **200,000 voters**

    - Based on a 10 year contract (7 elections) for the whole country (4 mill. voters)

        1. Price for small polling station of 1,500 voters

        2. Price for a medium sized polling station of 5,000 voters

        3. Price for a large polling station of 10,000 voters

- **An estimation of the price for a pilot project in a municipality**

    - Based on the participation of 10 municipalities with 2 polling stations each; one of 5,000 voters and one of 1,500 voters

Price should include (if applicable according to the solution demonstrated):

- **Hardware**, including: voting cards activation, voting ballot generators, optical ballot scanner, smart ballot boxes, machine for initialization of tokens, voter verification functionality, printers for polling reports, UPS, etc. – assuming the hardware is purchased and not licenced

- **Tokens** for initialization of ballot generator

- **Software** for voting ballot generators, ballot boxes, smartcard readers, election management and interfaces

- **Paper rolls** for ballots (if used)

- **Services and logistics**, including central configuration and testing of equipment, delivery to polling stations, deployment, configuration and test of hard- and software at polling stations before election day, dismounting after elections and storage between elections, maintenance of equipment, change and repair of equipment in case of malfunction

- **Support** before and during election day in call centre and in polling stations

- **Training** of election officials and municipal IT-workers in deployment of election hardware

We understand that this estimate would only be tentative, probably will be calculated on the basis of solutions delivered for other comparable customers and does not preclude the actual pricing in the event of a tender process for the procurement of a system for e-voting in Denmark.

Also, we would like to ask if you have any objections to the inclusion in the report (in depersonalized form) of the information re. the economic implications, among these some of the price examples stated. We will not be stating specific prices, but are considering whether we could indicate a price range for some of the hardware components in particular and the software to the extent possible.

I apologize for the tight deadline. Please do not hesitate to contact me if you have any questions to this inquiry. Thank you very much for your cooperation, which is much appreciated.

Best regards,

Valgkonsulent, Kommunaljura
Nicoline Nyholm Miller

økonomi og indenrigsministeriet

Slotsholmsgade 10-12
1216 København K
Telefon 72 28 25 22
Fax 72 28 24 01
valg.im.dk

Tænk på miljøet, inden du skriver denne mail ud.

økonomi og indenrigsministeriet

Slotsholmsgade 10-12
1216 København K
Telefon 72 28 25 22
Fax 72 28 24 01
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Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:40:33
Dokumentnr.:   5764
Titel: Reply from DRS - Request for additional information on economic
consequences of implementing an e-voting solution in Denmark
Dokumenttype: I
Dokumentdato: 14-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:
    Afsender   'john.hancock@drs.co.uk' ,

Oplysninger:

Datoer:

Erindringer:

Christina Løtzsch Hansen

Dear Nicoline,

All rough estimates are based on an Image Cast Precinct (ICP) voting machine to voter ratio of 1:1250. All prices listed have included the cost of the ICP Hardware, Tokens, Software, Services and logistics, as well as support and training which on average increases the price point ▓▓▓▓▓▓▓▓▓▓▓▓▓▓ Ballot printing is not included, however DRS would welcome the opportunity to provide costs for ballot printing. All figures are in US Dollars (USD). Answers to the okonomi og indenrigsministeriet's questions are listed below.

An estimation of the total price for three polling stations of varying sizes (see below) for **1** election in a municipality with respectively:

a. 20,000 voters = 16x ICPs plus support: ▓▓▓▓▓▓▓▓▓▓
b. 50,000 voters = 40x ICPs plus support: ▓▓▓▓▓▓▓▓▓▓
c. 200,000 voters = 160x ICPs plus support: ▓▓▓▓▓▓▓▓▓▓

Based on a 10 year contract (7 elections) for the whole country   (4 million voters)
1.   Price for small polling station of 1,500 voters
        2x ICPs per polling station plus support = ▓▓▓▓▓▓▓▓
2.   Price for a medium sized polling station of 5,000 voters
        4x ICPs per polling station plus support = ▓▓▓▓▓▓▓▓
3.   Price for a large polling station of 10,000 voters
        8x ICPs per polling station plus support = ▓▓▓▓▓▓▓▓

Total Price: The rough price for the whole country of a 10 year contract including 7 elections would be ▓▓▓▓▓▓▓▓ USD.

Note: ▓▓▓▓▓▓▓ over 7 elections with a voter base of 4 million equals ▓▓▓▓▓▓▓▓ per election.

An estimation of the price for a pilot project in a municipality
Based on the participation of 10 municipalities with 2 polling stations each; one of 5,000 voters and one of 1,500 voters:

1x 5000 voter polling station = 4x ICPs plus support: ▓▓▓▓▓▓▓
1x 1500 voter polling station = 2x ICPs plus support: ▓▓▓▓▓▓▓

Total cost for 1x municipality = 6x ICPs plus support: ▓▓▓▓▓▓▓

Total cost for 10x municipalities = 60x ICPs plus support ▓▓▓▓▓▓▓

I understand that you will be sharing cost information as part of the on going reporting. I ask that if our costs are shared that they cannot be linked back to our proposed hardware. Pricing information is very sensitive and your help in maintaining confidentiality would be very much appreciated.

I look forward to hearing from you in due course.

Best Wishes,

John

From: Nicoline Nyholm Miller [mailto:nnm@oim.dk]
Sent: 12 September 2012 12:47
To: John Hancock
Subject: SV: DRS - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Thanks, John, I appreciate your help.

Best wishes,
Nicoline

Fra: John Hancock [mailto:john.hancock@drs.co.uk]
Sendt: 12. september 2012 12:27
Til: Nicoline Nyholm Miller
Cc: Gary Butler
Emne: RE: DRS - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Dear Nicoline,

Thank you very much for your enquiry. I will contact colleagues immediately to gather the information that you need. Timescales are tight and if there are any issues in achieving this, I will let you know.

Best Wishes,

John

From: Nicoline Nyholm Miller [mailto:nnm@oim.dk]
Sent: 12 September 2012 11:16
To: John Hancock
Cc: Gary Butler
Subject: DRS - Request for additional information on economic consequences of implementing an e-voting solution in Denmark

Dear John,

Thank you again for your participation in the technical dialogue at the Ministry of Economic Affairs and the Interior on 3 September 2012 re. an e-voting solution for statutory elections in Denmark.

One of the issues discussed during the technical dialogue was the matter of the economic implications of e-voting, including the costs of conducting an e-voting pilot project, as the municipalities require information on this aspect in order to make a decision on whether they are willing to commit themselves to a future pilot project for a statutory election.

After going over the information imparted by the economic operators on this issue, the Ministry finds that it is necessary to acquire additional information in order to be able to properly appraise the price range for implementing e-voting solutions, as the data received so far during the technical dialogue is very difficult to process into numbers that will give an indication hereof to the municipalities.

You are therefore kindly asked to provide additional information before **Friday morning 13 September 2012 at 8:00 a.m.** stating a <u>rough</u> estimate of a total price for your solution for two different scenarios based on the following assumptions:

- **An estimation of the total price for three polling stations of varying sizes (see below) for 1 election in a municipality with respectively:**

    a. **20,000 voters**

    b. **50,000 voters**

    c. **200,000 voters**

    - Based on a 10 year contract (7 elections) for the whole country (4 mill. voters)

        1. Price for small polling station of 1,500 voters

        2. Price for a medium sized polling station of 5,000 voters

        3. Price for a large polling station of 10,000 voters

- **An estimation of the price for a pilot project in a municipality**

    - Based on the participation of 10 municipalities with 2 polling stations each; one of 5,000 voters and one of 1,500 voters

Price should include (if applicable according to the solution demonstrated):

- **Hardware**, including: voting cards activation, voting ballot generators, optical ballot scanner, smart ballot boxes, machine for initialization of tokens, voter verification functionality, printers for polling reports, UPS, etc. – assuming the hardware is purchased and not licenced

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- **Software** for voting ballot generators, ballot boxes, smartcard readers, election management and interfaces

- **Paper rolls** for ballots (if used)

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- **Training** of election officials and municipal IT-workers in deployment of election hardware

We understand that this estimate would only be tentative, probably will be calculated on the basis of solutions delivered for other comparable customers and does not preclude the actual pricing in the event of a tender process for the procurement of a system for e-voting in Denmark.

Also, we would like to ask if you have any objections to the inclusion in the report (in depersonalized form) of the information re. the economic implications imparted during the technical dialogue, among these some of the price examples stated. We will not be stating specific prices, but are considering whether we could indicate a price range for some of the hardware components in particular and the software to the extent possible.

I apologize for the tight deadline. Please do not hesitate to contact me if you have any questions to this inquiry. Thank you very much for your cooperation, which is much appreciated.

Kindest regards,

Chief Electoral Officer

Nicoline Nyholm Miller

økonomi og indenrigsministeriet

Slotsholmsgade 10-12
1216 Copenhagen K
Tel. direct: +45 72 28 25 22
Fax: + 45 72 28 24 01
valg.im.dk

Think of the environment before printing this mail.

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:40:35
Dokumentnr.:   5763
Titel: Reply from Everyone Counts: Indicative Pricing for electronic
voting
Dokumenttype: I
Dokumentdato: 14-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller
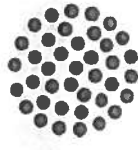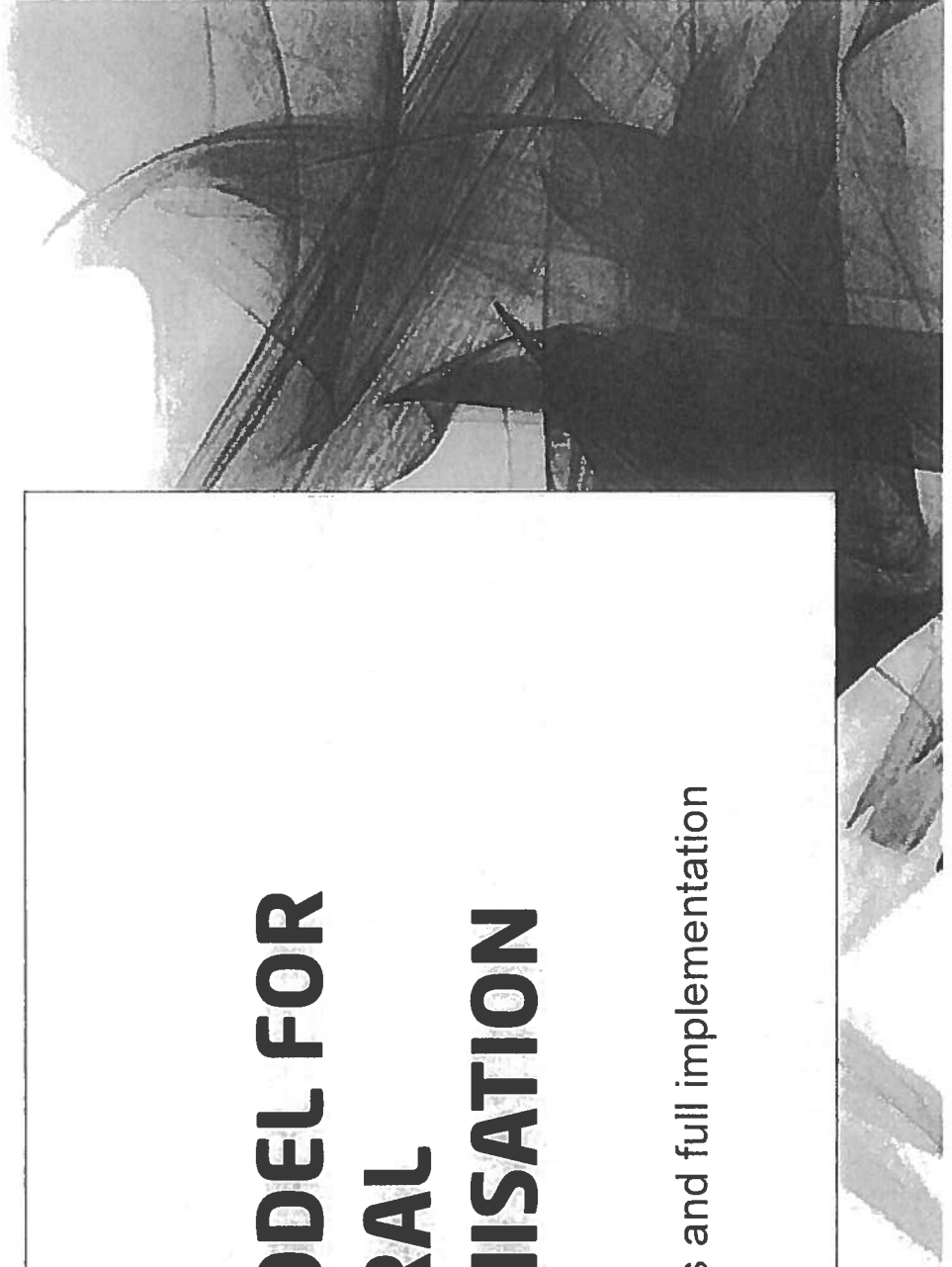
Emneord:

Tekst:

Modtagere:
    Afsender   Mike Summers, Everyone Counts

Oplysninger:

Datoer:

Erindringer:

Christina Løtzsch Hansen

Dear Nicoline,

As requested, please find enclosed indicative pricing from Everyone Counts to the two scenarios proposed for electronic voting

1. Prices are inclusive of all hardware, software, consumables, services requested

2. Prices are quoted in Euros and are exclusive of local taxes

- **An estimation of the total price for three polling stations of varying sizes (see below) for 1 election in a municipality with respectively:**

    a. **20,000 voters**

    b. **50,000 voters**

    c. **200,000 voters**

    - Based on a 10 year contract (7 elections) for the whole country (4 mill. voters)

        1. Price for small polling station of 1,500 voters

        2. Price for a medium sized polling station of 5,000 voters

        3. Price for a large polling station of 10,000 voters

    Indicative Pricing: (Quoted in Euros) – Exclusive of taxes

    20,000 voters — ▉▉▉▉▉▉▉
    50,000 voters — ▉▉▉▉▉▉▉
    200,000 voters — ▉▉▉▉▉▉▉

- **An estimation of the price for a pilot project in a municipality**

    - Based on the participation of 10 municipalities with 2 polling stations each; one of 5,000 voters and one of 1,500 voters

    Indicative Pricing: (Quoted in Euros) – Exclusive of taxes

    ▉▉▉▉▉▉▉▉

If you require any further information please don't hesitate to contact me. As the information is commercially sensitive I would be most grateful if the data can be 'anonymized' prior to publication and/or sharing in the public domain.

Many thanks and kindest regards,

Mike Summers
Director of Sales, Worldwide
Everyone Counts, Inc.
Tel: +44 (0) 2076177407
Mobile: +44 (0) 7585800950
Email: mike.summers@everyonecounts.com
Web: www.everyonecounts.com

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:40:37
Dokumentnr.:   5762
Titel: Costs Model-Technical Dialogue Denmark v1
Dokumenttype: I
Dokumentdato:
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:

Oplysninger:

Datoer:

Erindringer:

Elections Processes

COST MODEL FOR ELECTORAL MODERNISATION

Approach to pilots and full implementation

September, 2012

indra

indra

ELECTION MODERNISATION FROM A MUNICIPALITY PERSPECTIVE

- When it comes to election modernisation our experiences with municipalities all over the world consistently drive us to the same conclusions:

  - Municipalities have limited budgets for elections

  - They want technology because it simplifies many aspects of the work they are responsible for but …

  - They cannot justify a considerable investment in technology particularly if there are no mayor issues with the current election system

  - Even if they could, it does not mean they would be able to get the extra funding to finance it

- For municipalities to engage into a Ministry-driven mordenisation process, they need solid arguments such us:

  - Zero risk: ensured by choosing a technology partner with proven experience and delivery capability

  -

INDRA PERSPECTIVE

- We are conscious of the cost of technology and the difficulties it posses onto our customers

- In electoral modernisation what we want to see is 100% of municipalities **fast adopting** the new system together with a long term commitment to use it:

  - This contributes to market growth (i.e. "success stories built up the market")

  - It allows us to apply the cost models used in other mature industries/sectors such as in the outsourcing business

- Again, the driving requirements to achieve all this are "zero risk" and "limited budgeting effort"

Hele siden er undtaget fra aktindsigt

indra

ASSUMPTIONS IN INDRA PROPOSAL FOR FULL IMPLEMENTATION

- 10 year contract (7 elections)

- Calculation of the cost of the manual election in each polling station should include **all incurred costs.** For instance, cost of ballot papers should include production, QA, packaging and distribution costs

- We assume that municipalities are able to provide the staff for the "automated" election the same way as they provide the staff for the manual elections. Indra will provide the training programme for that staff and the call centre for technical support

- Indra will provide all the equipment required and all the services as per your email dated 12/09/2012

ASSUMPTIONS IN INDRA PROPOSAL FOR FULL IMPLEMENTATION

Estimated number of machines per polling station size	Units	Comments
Small polling station	4	1.500 voters/polling station
Electronic Bbox	1	
Ballot Generator	3	
Medium polling station	14	5.000 voters/polling station
Electronic Bbox	4	
Ballot Generator	10	
Large polling station	27	10.000 voters/polling station
Electronic Bbox	7	
Ballot Generator	20	

Hele siden er undtaget fa aktindsigt.

Indra

ASSUMPTIONS IN INDRA PROPOSAL FOR PILOTS

- Calculation of the cost of the manual election in each polling station should include **all incurred costs**. For instance, cost of ballot papers should include production, QA, packaging and distribution costs

- We assume that municipalities are able to provide the staff for the "automated" pilot election the same way as they provide the staff for the manual elections. Indra will provide the training programme for that staff and the call centre for technical support

- ▪

- Indra will provide all the equipment required and all the services as per your email dated 12/09/2012

ASSUMPTIONS IN INDRA PROPOSAL FOR PILOTS

PILOTS NUMBERS	
Municipalities	10
Polling stations	20
Ballot Generators	130
Electronic Bbox	50
Card Activator	50
Smartcards	700
Paper rolls	260
Printers	50

indra

Cristina Frutos
Senior Manager

Avda. de Bruselas 35
28108 Alcobendas,
Madrid España
T +34 91 480 90 15
M +34 669 76 66 39

cfrutos@indra.es
www.indracompany.com

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:40:36
Dokumentnr.:   5761
Titel: Reply from Indra - Request for additional information on
economic consequences of implementing an e-voting solution in Denmark
Dokumenttype: I
Dokumentdato: 13-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 14-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:
    Afsender   'cfrutos@indra.es' ,

Oplysninger:

Datoer:

Erindringer:

Christina Løtzsch Hansen

Dear Nicoline,
Attached is our proposal for the costs model for the pilots and full implementation.
The rationale behind it is that success can only be achieved if the e-election implementation is affordable for the municipalities. We acknowledge that this way of presenting the pricing scheme is innovative and may not be in line with what you where looking for, but please discuss it with the municipalities because I am sure this approach will be of interest to them.
Please do not hesitate to contact me should you wish to discuss or require any clarifications.
Kind regards
Cristina

Dear Cristina,

Thank you again for your participation in the technical dialogue at the Ministry of Economic Affairs and the Interior on 21 August 2012 re. an e-voting solution for statutory elections in Denmark.

One of the issues discussed during the technical dialogue was the matter of the economic implications of e-voting, including the costs of conducting an e-voting pilot project, as the municipalities require information on this aspect in order to make a decision on whether they are willing to commit themselves to a future pilot project for a statutory election.

After going over the information imparted by the economic operators on this issue, the Ministry finds that it is necessary to acquire additional information in order to be able to properly appraise the price range for implementing e-voting solutions, as the data received so far during the technical dialogue is very difficult to process into numbers that will give an indication hereof to the municipalities.

You are therefore kindly asked to provide additional information before **Friday morning 13 September 2012 at 8:00 a.m.** stating a <u>rough</u> estimate of a total price for your solution for two different scenarios based on the following assumptions:

- **An estimation of the total price for three polling stations of varying sizes (see below) for 1 election in a municipality with respectively:**

    a. **20,000 voters**

    b. **50,000 voters**

    c. **200,000 voters**

  - Based on a 10 year contract (7 elections) for the whole country (4 mill. voters)

1. Price for small polling station of 1,500 voters

2. Price for a medium sized polling station of 5,000 voters

3. Price for a large polling station of 10,000 voters

- **An estimation of the price for a pilot project in a municipality**

    - Based on the participation of 10 municipalities with 2 polling stations each; one of 5,000 voters and one of 1,500 voters

Price should include (if applicable according to the solution demonstrated):
- **Hardware**, including: voting cards activation, voting ballot generators, optical ballot scanner, smart ballot boxes, machine for initialization of tokens, voter verification functionality, printers for polling reports, UPS, etc. – assuming the hardware is purchased and not licenced

- **Tokens** for initialization of ballot generator

- **Software** for voting ballot generators, ballot boxes, smartcard readers, election management and interfaces

- **Paper rolls** for ballots (if used)

- **Services and logistics**, including central configuration and testing of equipment, delivery to polling stations, deployment, configuration and test of hard- and software at polling stations before election day, dismounting after elections and storage between elections, maintenance of equipment, change and repair of equipment in case of malfunction

- **Support** before and during election day in call centre and in polling stations

- **Training** of election officials and municipal IT-workers in deployment of election hardware

We understand that this estimate would only be tentative, probably will be calculated on the basis of solutions delivered for other comparable customers and does not preclude the actual pricing in the event of a tender process for the procurement of a system for e-voting in Denmark.

Also, we would like to ask if you have any objections to the inclusion in the report (in depersonalized form) of the information re. the economic implications imparted during the technical dialogue, among these some of the price examples stated. We will not be stating specific prices, but are considering whether we could indicate a price range for some of the hardware components in particular and the software to the extent possible.

I apologize for the tight deadline. Please do not hesitate to contact me if you have any questions to this inquiry. Thank you very much for your cooperation, which is much appreciated.

Kindest regards,

Chief Electoral Officer
Nicoline Nyholm Miller

Think of the environment before printing this mail.

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:40:48
Dokumentnr.:   5739
Titel: Henvendelse fra KMD vedrørende studiebesøg til belgisk e-valg i
oktober
Dokumenttype: I
Dokumentdato: 10-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 13-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:
    Afsender   KMD Valg , Lautrupparken 40-42

Oplysninger:

Datoer:

Erindringer:

Christina Løtzsch Hansen

Fra:	Hernø.Leif LFH <LFH@kmd.dk>
Sendt:	10. september 2012 08:50
Til:	Nicoline Nyholm Miller
Cc:	Helmer.Mette MEH
Emne:	Studiebesøg til belgisk e-valg i oktober

Kære Nicoline

I oktober i år afholdes valg i den flamsktalende del af Belgien, hvortil Smartmatic har leveret e-valgs-udstyr. Smartmatic har spurgt os, om der kunne være interesse i ministeriet og eventuelt også i kommunerne for besøge Belgien i dagene omkring valget for at se, hvordan en bredt implementeret e-valgs-løsning fungerer. Mulige emner kunne være besøg på et digitaliseret valgsted, på et centralt call-center, dialogmøde med de valgansvarlige myndigheder.

Smartmatic er meget bevidst om, at et besøg ikke må kollidere med den nuværende dialog-proces og give konkurrenceretslige fordele i forbindelse med et muligt kommende dansk udbud. Smartmatic foreslår derfor, at et besøg arrangeres som et myndighed-til-myndighed-besøg, hvor Smartmatic alene bidrager med navne på kontaktpersoner i den belgiske valgadministration - personer, som ministeriet vil kunne kontakte, hvis der er interesse for at gennemføre et studiebesøg. Smartmatic har fået accept fra de pågældende personer på, at der kan komme henvendelser.

Hvis ministeriet er interesseret, eller hvis du mener, at en eller flere af kommunerne er interesseret i et studiebesøg, ligger vi inde med flere informationer. Da jeg selv er på kursus i den kommende uge, vil jeg bede dig om at tage kontakt til Mette Helmer, der er Cc på denne mail.

Venlig hilsen

Leif Hernø, Domænechef

KMD Lovbaserede software-løsninger

Lautrupparken 42, DK-2750 Ballerup
E-mail lfh@kmd.dk   Web www.kmd.dk
Direkte +4544606617 Mobil +4525291791

KMD CHALLENGE we are triathlon! KMD 4:18:4

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:40:50
Dokumentnr.:   5737
Titel: svar på opklarende spørgsmål til KMD/Smartmatic
Dokumenttype: I
Dokumentdato: 04-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 13-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:
    Afsender   KMD Valg , Lautrupparken 40-42

Oplysninger:

Datoer:

Erindringer:

Fra:	Nørgaard.Claus Vedel XCN <XCN@kmd.dk>
Sendt:	4. september 2012 17:23
Til:	Nicoline Nyholm Miller
Emne:	SV: Teknisk dialog - opklarende spørgsmål

Kære Nicoline

I det, du citerer mig for, ligger der, så vidt jeg kan se, 3 spørgsmål med hvert sit svar:
Ja, løsningen kan skaleres fra stemmekasse- til nationalt niveau,
Ja, det vil være forholdsmæssigt dyrere at anvende løsningen på nogle få valgsteder end at anvende den på mange,
Nej, løsningen kan ikke erstatte det nuværende indberetningssystem, medmindre der opbygges et nyt parallelt system med tilsvarende infrastruktur og tilsvarende funktionalitet på kommune-, kreds- og landsplan, herunder hører bl.a. den specifikke resultatberegning, afstemningsbog, valgbog, resultatformidling etc.

Regards / Med venlig hilsen

Claus Vedel Nørgaard
KMD Consultant
Tel. mobile: +45 50503969

Fra: Nicoline Nyholm Miller [mailto:nnm@oim.dk]
Sendt: 3. september 2012 22:02
Til: Nørgaard.Claus Vedel XCN
Emne: Teknisk dialog - opklarende spørgsmål

Kære Claus
Tak for jeres deltagelse i den tekniske dialog tidligere i dag. Jeg har lige et opklarende spørgsmål: under gennemgangen af spørgsmålet om "scalability" nævnte du noget om, at optællingsløsning ("tally") ville blive fordyret af, at man i starten kun anvendte den på nogle få valgsteder, fordi (hvis jeg forstod det korrekt) man ville skulle køre et andet system (det nuværende indberetningssystem) sideløbende – er det rigtigt forstået? Eller var det noget andet, du mente?

Er det muligt at få jeres power point præsentation tilsendt? På forhånd tak ☺

Mange hilsener

Valgkonsulent, Kommunaljura
Nicoline Nyholm Miller

økonomi og indenrigsministeriet

Slotsholmsgade 10-12
1216 København K
Telefon 72 28 25 22
Fax 72 28 24 01
valg.im.dk

Tænk på miljøet, inden du skriver denne mail ud.

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:41:19
Dokumentnr.:   5718
Titel: Summary meeting with Everyone Counts - draft
DOK1028484-MJ-MS-Edits
Dokumenttype: I
Dokumentdato:
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 13-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:

Oplysninger:

Datoer:

Erindringer:

Enhed
Kommunaljura

Sagsbehandler
MP

Koordineret med
[INI]

Sagsnr.

Doknr.

Dato
04.09.2012

Summary of technical dialogue meeting with Everyone Counts on 28 August 2012

FOR INTERNAL USE ONLY

The purpose of the meeting was to give the Ministry an overview of existing technical solutions and the foreseeable economic implications of holding trials with electronic voting in Denmark, thus giving the Ministry a better ground for drawing up the requirements for a future e-voting system.

1. **Presentation of**

Representing Everyone Counts were Mr. Mike Summers and Mr. Mike Joyce.

Mr. Mike Summers gave a general introduction to Everyone Counts and their experience with electronic solutions for voting and counting. Everyone Counts is an election technology company that helps election officials deliver reliable and cost-effective universal access to the ballot. Everyone Counts was established in 1996 with headquarters in San Diego and corporate offices in Australia, Canada, UK and India. The company employs 60 people.

Everyone Counts has enabled voters in over 160 countries to participate independently and privately in local, state and national elections by means of an accessible, secret ballot, securely delivered utilizing the proven and secure eLect™ election platform.

Everyone Counts is not only a technology company but also a consultant company that advises its customers on the requirements and processes necessary for the implementation of new voting technologies, legislative changes and election technology project management. Consultancy is provided on demand independent of whether the customer also requires the company's electronic-solutions.

For Everyone Counts each project is a project of delivering successful elections -- not a technology project. Each solution is particularly designed for the customer.

Everyone Counts have an unrivalled track record of 100% success with no elections questioned, abandoned or de-certified.

Everyone Counts offers a modular electoral ~~management solution~~platform that covers the whole electoral process from start to end (it is entirely up to the customers to decide which modules they wish to include in the solution) as well as electronic voting solutions.

Everyone Counts is capable of delivering several different solutions including electronic counting of ballot papers (e-counting), remote internet voting, remote telephone voting, and a voting machine and ballot generator solution.

In 2011 Everyone Counts managed the largest dual channel remote electronic voting project in New South Wales, Australia. 48,8640 votes were cast electronically. 91 % of i-Vote registrants cast a ballot.

2. Demonstration of the electronic voting and counting system

The voting machine and ballot generator solution.

Everyone Counts demonstrated a prototype of an electronic voting machine and ballot generator solution; an electronic voting and counting system based on a touch screen unit (tablet) connected to a printer, which prints an encrypted ballot paper. Everyone Counts proposed that the encrypted ballot paper should then to be dropped into an electronic ballot box that reads the encrypted ballot paper (not demonstrated).

The solution recommended for the Danish context contains:
- Voting device (iPad, tablet or other commodity device)
- Printing device
- Authentication Token with ballot style incited (paper with an encrypted (optional) barcode)
- a ballot box with an encrypted barcode reader
- Verification station – where the voter can verify what he/she voted

All components are commercial off the shelf components – no dedicated hardware is employed to make the solution more cost-effective. Everyone Counts believes, based on their recent experiences as well as general technology adoption trends, that there is a trend moving away from the procurement of dedicated hardware to software and services.

The ballot marking device is designed to protect the privacy of the voter and secrecy of the vote, as no data is stored on the hardwareballot marking device. The software-based solution was originally designed for internet voting and therefore initially records the identity of the voter as well as the ballot, but the two are separated using a digital double envelope principle, where the ballot is encrypted and stored in a digital 'envelope' and then stored in a separate envelope with the encrypted ID of the voter. This makes it possible to remove the vote of a specific voter without opening the "envelope" containing the vote if need be. The votes are still encrypted in the digital ballot box. The encrypted votes are protected in the digital ballot box by a quorum of election officials designated by the customer. Everyone Counts nor any other party ever have access to the contents of the digital ballot box.

The encrypted ballots ballot boxes are transported to a central data centerlocation via a secure network for collation, scrutiny, decryption and tabulation. The decryption and counting of the votes is done at a central data centerlocation by a public quorum. All decryption activities and actions of the public quorum occurs offline, disconnected from any network on a tamper proof system. The votes are shuffled before being decrypted to protect the secrecy of the vote.

In order to be able to vote, each voter has to unlock the voting machine with using a printed paper with a 2D barcode (QR Code), which the voter is handed by the appointed elector, when he or she has been identified as a registered voter.

The QR Code data can be encrypted (GUID), tied to a voter record (for auditing purposes) or be anonymous and just contain the ballot style (optional). The barcode

can only be used once and can just be thrown out after use. Preprinted instructions can be placed on the faceplate and voters can be prompted via on-screen instructions or videos on the voting machine (optional)

The voting machine (tablet or similar) is operated by a touch screen. When unlocked, the screen will show a list containing the names of the political parties and independent candidates that run for election and an option to vote blank in the first level and the names of the candidates of each political party in the second level. The voting interface can be adjusted to match any ballot face specified by the customer.

The voter then casts the vote by marking his/her choice on the screen. It is on all levels possible to go back and start over again. When the voter has cast his/her vote he/she has to confirm the vote on the screen. The attached printer (agnostic printing device) then prints a ballot paper containing both the name of the party/candidate or "blank vote" in a human readable format and an encrypted unique 2D barcode, containing the vote. The encrypted ballot paper can be subsequently verified by the voter in a verification station at the polling station, where the voter can scan the barcode and read the content on a screen to check that it corresponds with the text marked on the ballot (optional).

The vote is registered by an encrypted barcode scanner (automated feeder scanner) as it drops into the ballot box. The digital encrypted vote is stored in the ballot box hard drive. The transmission of the result from the ballot box to a central data centerlocation is done via a secure network, but it can also be transmitted by e.g. USB or other storing device if the customer so prefers.

3. Notes on different issues

Accessibility

Available accessibility devices for voters with disabilities:
- refreshable braille displays
- screen readers('read aloud' audio enabling)
- increased font sizes
- quick navigation
- paddle switches
- sip and puff devices
- head and mouth pointers

The disabled voters can bring their own device if they wish to do so.

Benefits of e-voting
Everyone Counts indicated reduction of errors, inclusion of voters with disabilities, increased accuracy of counting process, increased speed of counting, and reduction of costs as the primary advantages of e-voting.

Security
Biggest risk is that you fundamentally change a procedure that has been going on for hundreds of years. There will always be critics. And it is the perception of something going wrong that must be prevented as much as something actually going wrong. If nothing fails but the public think something failed, the election has failed. Public awareness, demos and campaigns etc. are very important.

Audit and further development
The source code is open to individual review and audit.

Training

Everyone Counts provides a training program for election staff and voters including meetings, public demos and television/radio campaigns.

Costs and expenses
It is difficult to give a precise overview of the costs incurred by the proposed solution. However, the estimation of Everyone Counts based on their experience is that costs

Open source and use of proprietary technology
Disclosed source, but open for audit by any stakeholders including independent academics. The customers can hire their own auditor who can go through the source codes.

Time schedule for implementation
The time-schedule for implementation was described as 9-12 months in order to have time to present the system to the voters through campaigns, demonstrations etc.(6 month would be possible, but not recommended).

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:41:18
Dokumentnr.:   5717
Titel: Comments from Everryone Counts to summary of meeting with
Everyone Counts - draft
Dokumenttype: I
Dokumentdato: 06-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 13-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:
    Afsender   Mike Summers, Everyone Counts

Oplysninger:

Datoer:

Erindringer:

Fra:	Mike Summers <mike.summers@everyonecounts.com>
Sendt:	5. september 2012 13:09
Til:	Nicoline Nyholm Miller
Emne:	RE: Summary of meeting with Everyone Counts - draft

Hi Nicoline,

�

Please find enclosed our redlined comments as promised.

�

Many thanks and kindest regards,

�

Mike

�

From: Nicoline Nyholm Miller [mailto:nnm@oim.dk]
Sent: Wednesday, September 05, 2012 9:33 AM
To: 'Mike Summers'
Subject: SV: Summary of meeting with Everyone Counts - draft

�

Absolutely, much appreciated. Have a nice stay in Sarajevo ☺

�

Fra: Mike Summers [mailto:mike.summers@everyonecounts.com]
Sendt: 5. september 2012 10:18
Til: Nicoline Nyholm Miller
Emne: Re: Summary of meeting with Everyone Counts - draft

�

Hi Nicoline,

�

I am in Sarajevo currently but should get the time to review and have this back to you by tomorrow -�I hope that's ok.

�

Kindest regards,

�

Mike

On 5 Sep 2012, at 09:52, Nicoline Nyholm Miller <nnm@oim.dk> wrote:

> Dear Mike,
> Please find enclosed the draft minutes from our technical dialogue with Everyone Counts on the 28th of August. I would appreciate it if you would run it through quickly and get back to me with your comments as soon as possible and preferably this week, as I need to finalise the report on Friday.
> �
> Please feel free to incorporate any changes/amendments directly in the document (if so, please highlight any changes) or to send me the comments by e-mail for our incorporation. Cheers.
> �
> Kind regards,
> �
> Nicoline

> <Summary meeting with Everyone Counts - draft [DOK1028484].doc>

> <fesdPacket.xml>

Dokumentresumé:

Bestilt af :   DEPCLH den 13-02-2013 11:41:27
Dokumentnr.:   5712
Titel: DRS Technical Presentation
Dokumenttype: I
Dokumentdato:
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
Versionsnr.:   1
Reg.dato: 13-09-2012
Registreret af: DEPNNM - Nicoline Nyholm Miller

Emneord:

Tekst:

Modtagere:

Oplysninger:

Datoer:

Erindringer:

Modernising the casting of votes for Denmark

Økonomi og indenrigsministeriet

Introduction to the team

- Gary Butler – International Sales Manager

- John Hancock – Bid Manager

- John Hollins – Vice Chairman of Advisory Board

- Allan Best – Special Advisor

- Masha Boshan- Product Manager

Agenda

- Introduction to the partnership – DRS and Dominion
- Technical approach and elections overview
- Case Study
- Demonstration
- Questions and Answers

The Partnership

- DRS Data Services Limited

  – UK Organisation, established in 1969

  – Specialise in the provision of high volume, mission critical solutions for the capturing of data in education, census and elections

  – Providing election solutions since 1991 – including the provision of voter registration and ballot counting solutions

  – The largest UK supplier of electronic counting technology

  – Recently supplied technology for the largest UK electoral modernisation project – Greater London Authority – electronic counting for the London Region (5.8 million voters, 3 ballot papers each, 3 voting systems, live, dynamic count and vote progress, central results tabulation for regional contests)

Technology Approach

- DRS and Dominion specialise in the provision of technology that enhances the method in which votes are counted – whilst minimising the changes to the way in which votes are cast.

This ensures:

- *Familiarity for all voter demographics*
- *Retention of trust*
- *Transparency*
- *Security*
- *Auditability*

Centralised e-Counting

- High Speed image scanners
- Open paper path
- Scan, authenticate and capture votes or images in real time
- Identify ballot papers where the voters intent is not clear, to be passed for adjudication
- Suitable for large volume, complex centralised counting of ballot papers or absent/postal ballot papers

DRS e-Counting Solution

DOMINION
VOTING

DOMINION VOTING IS PROUD TO ANNOUNCE THE EAC CERTIFICATION OF ITS VOTING SYSTEMS

On May 10, 2012, Dominion officially received the 2005 EAC Certification for its Dominion Voting systems. This certification includes Dominion's EMS, ImageCast Precinct, ImageCast Precinct ADA, ImageCast Evolution, ImageCast Central and Democracy Suite.

This EAC Certification demonstrated that each of these systems were compliant with the following criteria.

1 Compliant With the Most Rigorous Federal Standards

2 Strengthened System Security with Enhanced Auditability

3 Comprehensive Solution: Addresses Accessibility Needs of All Voters

Visit the Our Products section to learn more about Dominion's voting systems.

VVSG 2005 VER 1
EAC CERTIFIED

DOMINION VOTING

DEMOCRACY SUITE 4.0

PDF   To view our press release

Precinct or Polling Station Scanning

IMAGECAST PRECINCT ADA

EAC
CERTIFIED

THE PLATFORM THAT INVENTED AND DEFINES THE ALL-IN-ONE OPTICAL SCAN VOTING SYSTEM

THE WORLD'S FIRST OPTICAL SCAN UNIT WITH BUILT-IN ACCESSIBILITY

PROVEN, PRACTICAL AND SIMPLE

DRS e-Counting Solution
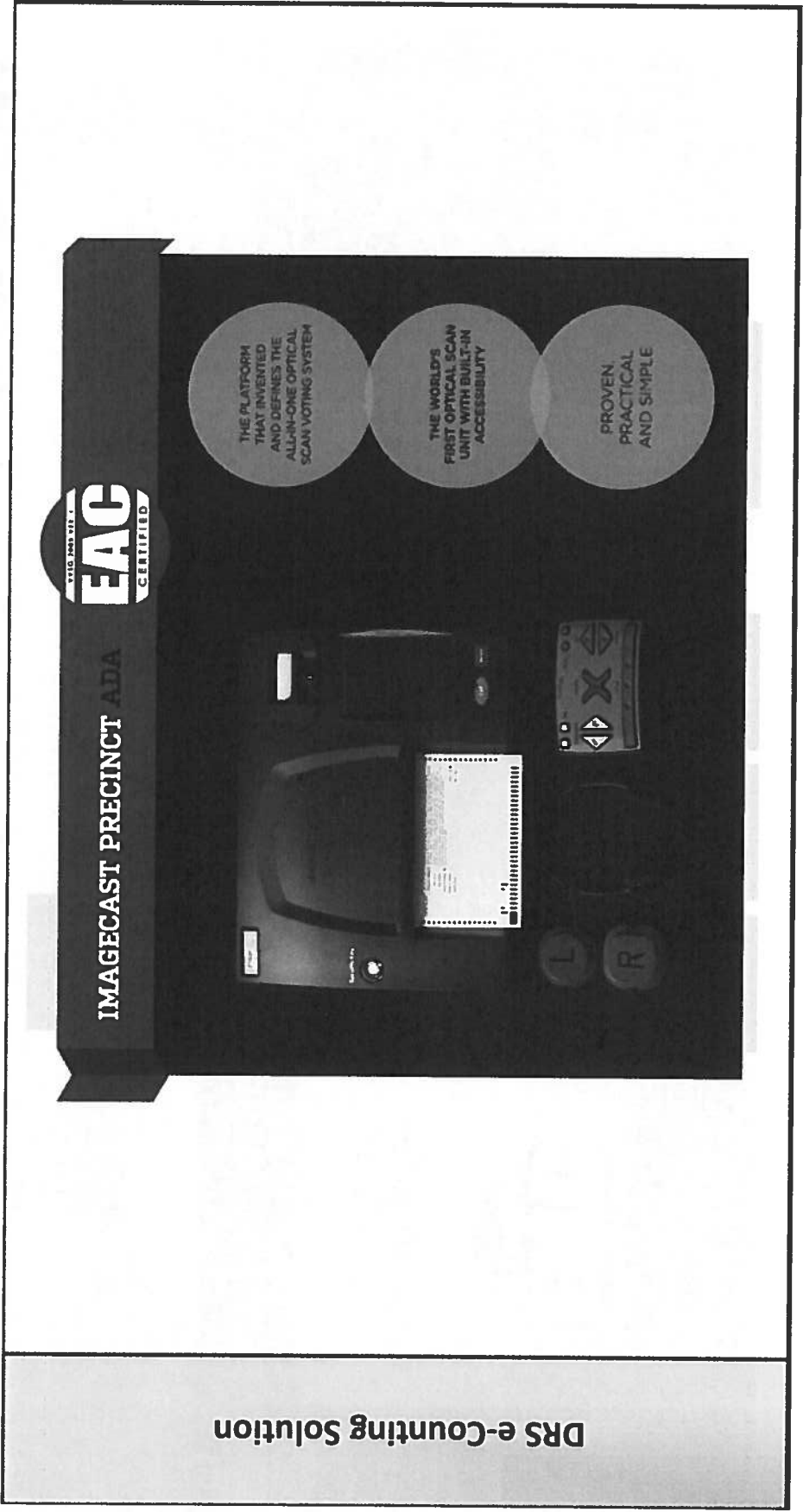
PHILIPPINES
CASE STUDY

BACKGROUND The Philippines has been traditionally viewed as a fragile democracy, experiencing electoral challenges for many years. Elections officials and citizens alike, are often concerned about the potential for electoral fraud. In part because of the long time it takes to manually tabulate and canvass at all levels. In the past, it has taken several weeks to determine victors.

The elections are a test not only of how the citizens would like to see their country governed but also of the system for choosing their government. For the first time in the Country's history, a modernized voting system is being used in an effort to ensure every vote cast securely, accurately and without any misconception as to the voters' intent.

NATIONAL ELECTIONS IN THE PHILIPPINES ARE MAJOR OPERATIONS WITH UP TO **50,000 BALLOT** STYLES, AND THE SAME NUMBER OF CANDIDATES.

3 MILLION
POTENTIAL FIRST TIME VOTERS

PH
PHILIPPINES

MORE THAN
7,000 ISLANDS
MAKE UP THE PHILIPPINES — MAKING LOGISTICAL CONSIDERATIONS PARAMOUNT

ELECTRONIC
VOTING MACHINES USED:

76,347
+
6,000
STANDBY
SPARES

WHAT DOMINION DID.

2010 ELECTION

This was the first nationally computerized/automated election in the country's history. Elections took place in each province, municipality and city – for President, provincial governors, vice governors and board members, city mayors, vice mayors and councilors.

The costs of adopting automated voting systems were justified by the promise of what this change in tabulating ballots would offer the citizens of the Philippines. The decision to go with automated voting helped to change the people's perception of the democratic process in a very positive way.

DOMINION PROVIDED THE TABULATION
TECHNOLOGY WITH THEIR
IMAGECAST PRECINCT TO THE LEAD
VENDOR IN THE PHILIPPINES

Mongolia Country Profile

Mongolia

Nat'l Pop: 3,179,997 (July 2012 est.)

Ulaanbaatar: 949,000 (2009)

Rel: Buddhist Lamaist 50%, Shamanist and Christian 6%, Muslim 4%, none 40%

Lang: Khalkha Mongol 90% (official)

Wkds: Sat & Sun

Literacy: 83%

Political Situation

• Soviet System abandoned in 1991

• 2008 Elections led to multiple deaths, violence, and the imposition of Martial Law

• Former President Nambaryn Enkhbayar arrested 12 Apr 2012

Political Map of Mongolia

© Nations Online Project

2008 Election: Historical Analysis

- **OVERVIEW**: A legislative election in Mongolia was held on June 29, 2008. A total of 356 candidates ran for 76 seats in the State Great Khural. According to official results published on July 14, at least 39 seats went to the ruling Mongolian People's Revolutionary Party (MPRP), and at least 25 seats went to main opposition party, the Democrats (DP). Ten seats remained subject to possible recounts.

Protesters throw bottles during clashes in Ulan Bator July 1, 2008
Credit: REUTERS/Zaw Razan

Protesters clash with riot police in Ulan Bator July 1, 2008
Credit: REUTERS/Zaw Razan

A man walks past the Mongolian People's Revolutionary Party (MPRP) building which was set on fire by protesters during clashes in Ulan Bator, Mongolia July 2, 2008
Credit: REUTERS/Stringer
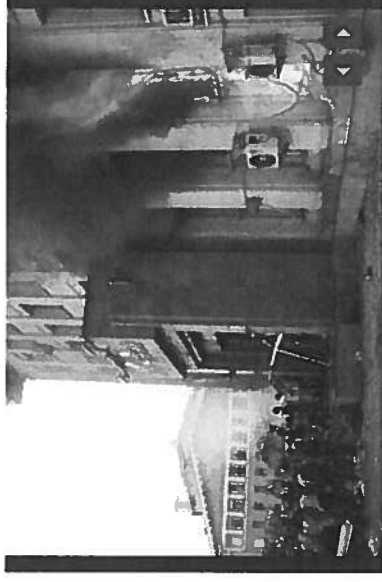
- **AFTERMATH**: After intermediate results published on June 30 showed a clear MPRP victory, DP chairman Elbegdorj declared on July 1 that the elections were rigged and that his party would not accept these results. Protests against the election results turned violent on the evening of July 1, and protesters sacked the MPRP headquarters in downtown Ulaanbaatar. Multiple protesters were killed, and around midnight a four-day state of emergency was declared.
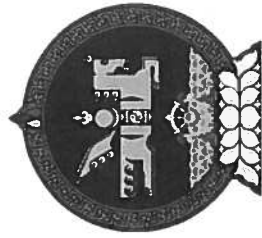
28 June 2012 Results

<u>Mongolia</u>
- 1,833,478 Registered Voters
- 2,512 ICPs deployed
- 80% of results within 4 hrs

76
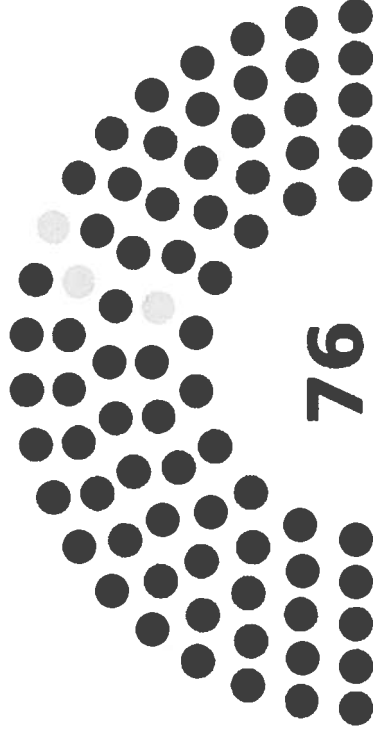
Summary of the 28 June 2012 Mongolian State Great Khural election results

Party	Constituency					Party list					Total seats	+/-
	Votes	%	+/-	Seats	+/-	Votes	%	+/-	Seats	+/-		
Democratic Party				21	-6	399,194	35.32%	+35.32	10	+10	31	+4
Mongolian People's Party				19	-26	353,839	31.31%	+31.31	9	+9	25	-20
Justice Coalition (MPRP and MNDP)				4	+4	252,077	22.31%	+22.31	7	+7	11	+11
Civil Will-Green Party				0	-2	62,310	5.51%	+5.51	2	+2	2	±0
Independents				3	+2	-	-	-	-	-	3	+2
Vacant seats	-	-	-	4'	-	-	-	-	-	-	4'	-
Totals	1,198,086	100%	±0.0	48	±0		100%	±0.0	28	±0	76	±0
Registered voters/turnout	1,833,478	65.24%					65.24%					-

Source: General Election Commission of Mongolia ⬠, UB Post ⬠ Mongolia Today ⬠ News.mn ⬠ Revote (News.mn) ⬠

End-to-End Solution Provider

DRS & Dominion provide an end-to-end election solution, with benefits that have been realized through local, regional and national projects. Our services include:

- The provision of hardware and software

- The provision of ballot papers

- The provision of election peripherals (polling station equipment and materials)

- Technical support

- Project Management and Consultation

- Training and Stakeholder Education

DRS e-Counting Solutions

A Partnership Approach

DRS and Dominion have built their success on understanding the unique

requirements of electoral modernisation projects including their challenges

and objectives.

When the Greater London Returning Officer was asked why DRS had been

so successful in London he said:

DRS provided "professionalism with experience" and was happy to adapt standard systems for specific requirements. DRS scored very highly on the key criteria of understanding project requirements, staff quality, skills and experience, technical solution and price. It was the combination of a highly-professional submission, excellent scores under these criteria and a very competitive price that won them the contract."

DRS e-Counting Solutions

Demonstration

Demonstration

Q&A and Discussion

ImageCast Voting System
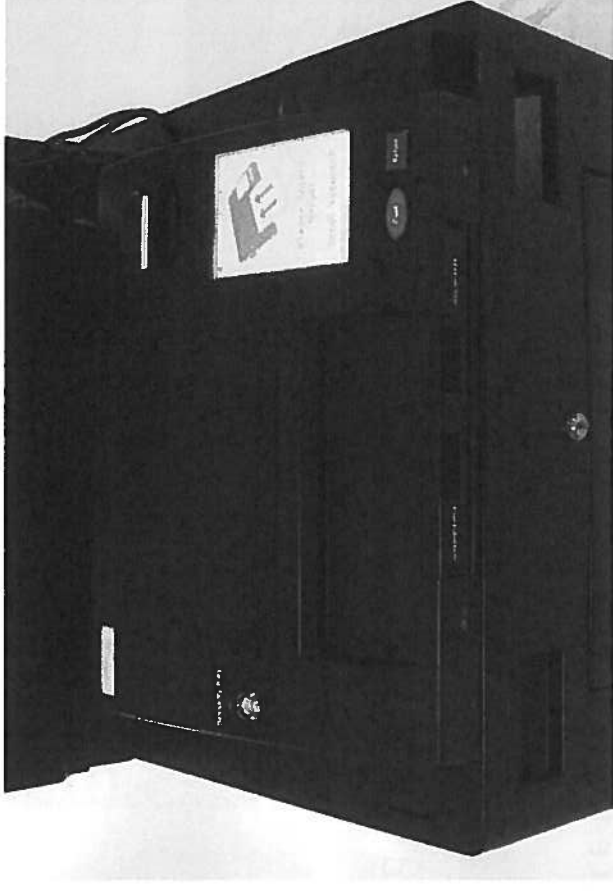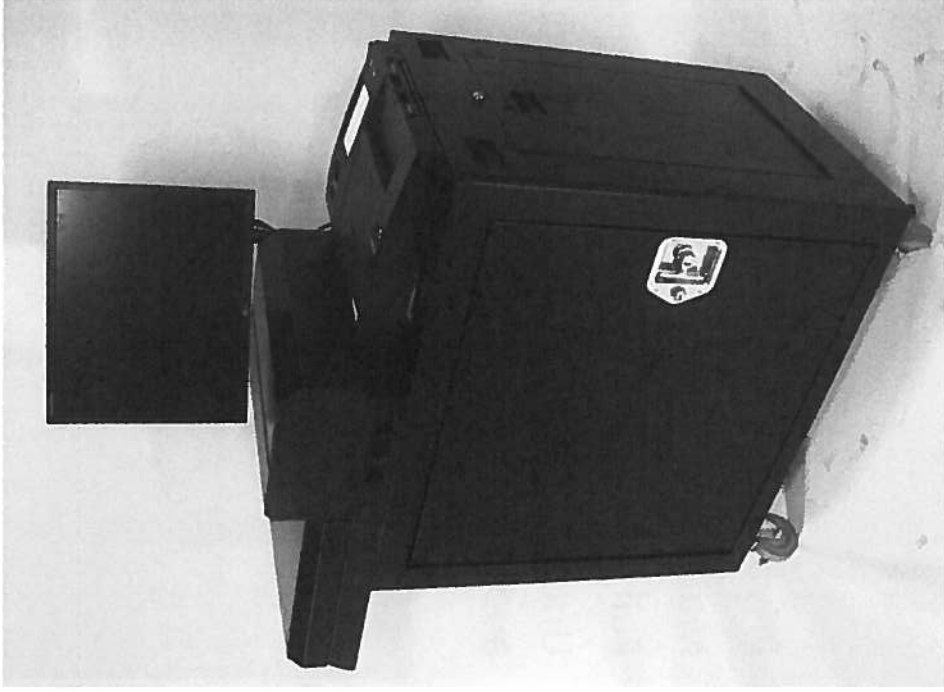
ImageCast LCD Interface

- Private easy to use touch screen interface for Poll Inspectors

- Multi-language support

- Full visual review and audio review

- Under-vote and Over-vote detection and warning – visually and audibly
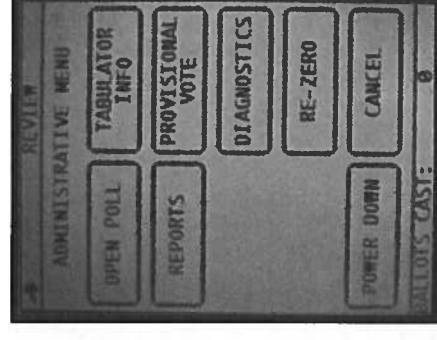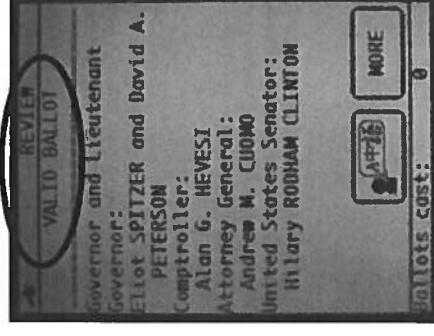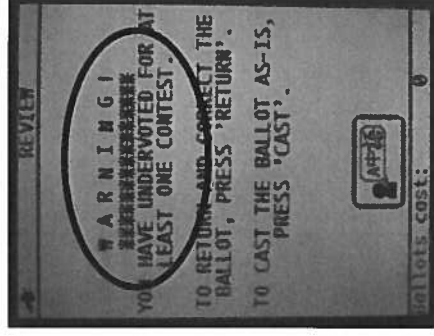
Casting your Ballot on the ImageCast

- The voter takes their marked paper ballot to the ImageCast Tabulator

- The ballot is inserted, and in seconds scanned by the tabulator

- Voter verifies their selections privately on the scanner's LCD screen
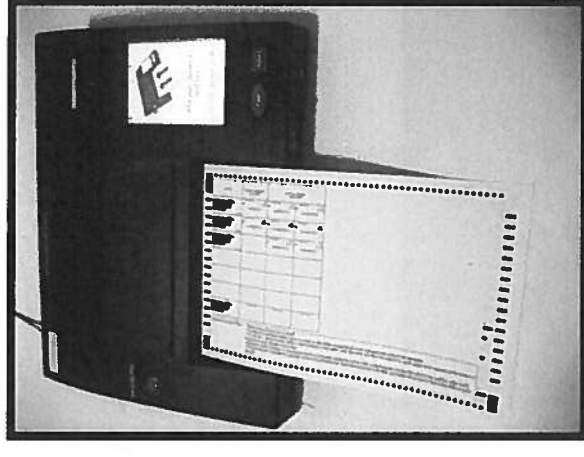
- Voter then CASTS their ballot if satisfied, or RETURNS their ballot for correction or a new ballot

ImageCast Accessible Voting

- After signing in, the voter receives a blank paper ballot from the poll inspector

- Poll inspector then starts an accessible voting session on the ImageCast
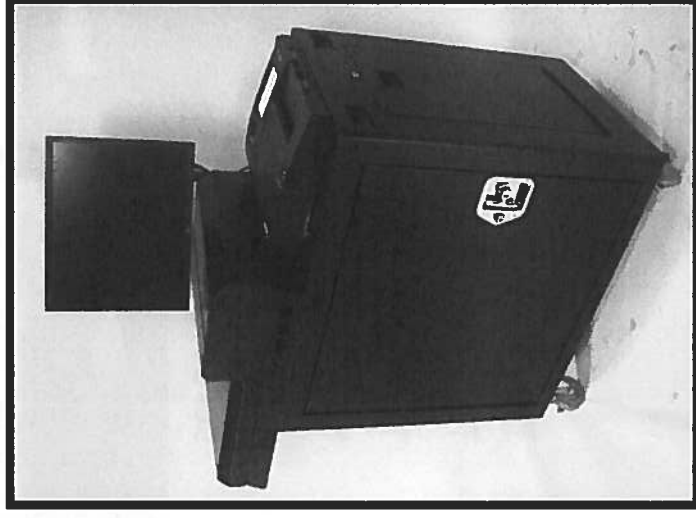
- Using one of the interfaces, the voter makes their selections

- Ballot is printed and ready to be CAST

DOMINION
VOTING

ImageCast Ballot Marking Device

- The ImageCast BMD makes a random mark to simulate a hand-made mark

- Impossible to identify ADA ballots from regular ballots!

Other Ballot Marking Devices

- Create marks that are perfect shapes easily identified as machine made
- Possible to identify an ADA voter's ballot!

X

| LIEUTENANT GOVERNOR Vote for ONE (1)	U.S. SENATE Vote for ONE (1)	REP. IN CONGRESS 28th DISTRICT Vote for ONE (1)
2	4	5
CONSERVATIVE 2E STEPHEN NOONAN	CONSERVATIVE 4E ELIZABETH PIAZZA	CONSERVATIVE 5E LIN HA
CONSERVATIVE 2F RICHARD RAPP	CONSERVATIVE 4F RICHARD MAXIAN	CONSERVATIVE 5F PH TH
CONSERVATIVE 2G ARNOLD PARHAM	CONSERVATIVE 4G GAIL ROSS	CONSERVATIVE 5G PHILLIP MALLIA

ImageCast Accountability

"How do you prove, beyond a doubt, that your ballot was COUNTED correctly?"

- Patented ImageCast digital audit feature:

  - Stores a complete image of every ballot cast

  - Each image includes an appendage or record of exactly how that ballot was interpreted by the system

  - In the event of a recount, ImageCast allows you to demonstrate the accuracy and integrity of the system

- *ImageCast leaves no room for doubt*

ImageCast Ballot Auditing

ImageCast Security

- Pass code protection by machine
- Based completely on Open Source Linux for superior software security
  - End-to-End system encryption and signaturing on memory cards, ballots and security keys
  - **5 Sets of Redundant Results**
    - Physical ballots
    - Electronic Ballot Images
    - Memory Card #1 (poll worker bay)
    - Memory Card #2 (administrators bay – separately locked)
    - Results tape
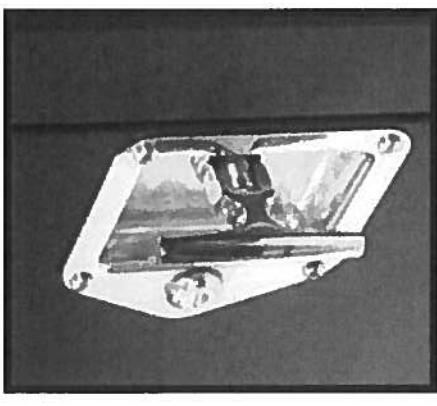
Demonstration...

Dokumentresumé:

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Dokumentnr.:   5711
Titel: DRS Presentation
Dokumenttype: I
Dokumentdato: 04-09-2012
Kontor/enhed: VALG-ENH, Valgenheden
Sagsmedarb.:   Nicoline Nyholm Miller, DEPNNM
Indblik:
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Reg.dato: 13-09-2012
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Tekst:

Modtagere:
    Afsender   Gary Butler ,

Oplysninger:

Datoer:

Erindringer:

Christina Løtzsch Hansen

Fra:	Gary Butler <Gary.Butler@drs.co.uk>
Sendt:	4. september 2012 18:05
Til:	Nicoline Nyholm Miller
Emne:	DRS Presentation

Dear Nicoline,

Thank you, and your team , for your hospitality and your time yesterday.

Our presentation is attached to this mail as promised.

If you require any additional information or have any further questions, please do not hesitate to contact me.

We are all looking forward to reading your report and moving onwards through the process.
Kind Regards
Gary

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Global scanning recognition & processing solutions for the public, private and not for profit sectors
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