

Conferência  
**E-Gov**

23 de Outubro  
Espaço EGOV - PAV. 1

Expositores  
Inforpor 2003 Espotelecent

# Voting Solutions



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Unisys Portugal

*Director de Marketing*

Unisys Portugal & Espanha

- > Systems Integration.
- > Outsourcing.
- > Infrastructure.
- > Server Technology.
- > Consulting.

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# Unisys & Partners

## International Elections

- Panama – Voter registration and identification system
- Costa Rica - Voter registration and identification system
- Dominican Republic - Voter registration and ID card system
- Italy – web election results reporting
- Malaysia – multi-purpose ID card for VR, drivers license, etc
- Brazil – national electronic voting system
- South Africa – national ID/voter registration system
- Switzerland – e-Voting system
- United Kingdom – Multi-channel voting pilot

### > Option

- In Person / Assisted
- Remote
- Mix

### > Place

- Across the world

+ Plus

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# What is e-Voting?

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Not just the supply of voting terminals to polling stations. e-Voting is:

The provision of a complete e-enabled service for the voter *and* the election administrator regardless of the voter's location or the type of election.

# Gartner Projections USA

## Projections for Future Voting Methods Voting Technology

Paper	12%	10%	7%	4%
Mechanical Lever	15%	10%	5%	0%
Punch Card	18%	12%	5%	0%
Optical Scan	40%	50%	55%	55%
Electronic Voting	9%	14%	17%	15%
Internet Voting	-	2%	10%	25%
	2000	2004	2008	2012

Based on a survey of senior election officials in 40 of the largest voting jurisdictions in the United States, research firm Gartner projects that paper-ballot, mechanical-lever and punch-card systems will be phased out in their regions by 2012.

Source: Gartner, 2001

## > Conclusion

- Multi-channel approach

# What does e-Voting do?

- > Increased efficiencies
- > Delivery of e-Wider participation
- > Assisting to stem decline in voter

## > May 03 UK Elections stated benefits

- Increased choice of channels » positive effect on level of participation
- Effective voter support and communication
- Excellent service to disabled voters (process easier)
- Quicker counting

## > May 03 UK Pilot – proved

- Accuracy
- Transparency
- Ease of use for
  - Election Manager / Voter
- Security meets/exceeds gov criterias

# Multi-Channel Elections UK May 03



Council Logo **VOTE** Borough Council Name 1st May 2003  
SUMMARY BALLOT

**INSTRUCTIONS:**  
To cast your ballot, select "Click Here to Cast Your Ballot Now".  
To change your candidate selection - select a candidate below or select "Return to Ballot".  
You may need to scroll down to see all of the candidates you have selected.

**CLICK HERE TO CAST YOUR BALLOT NOW**

WARD NAME of Council VOTE FOR NO MORE THAN 3 CANDIDATES		WARD NAME of Council VOTE FOR ONE CANDIDATE ONLY	
CANDIDATE SURNAME 2 Candidate Name Candidate Address The (Party Name) Party Candidate	Party Logo	CANDIDATE SURNAME 4 Candidate Name Candidate Address The (Party Name) Party Candidate	Party Logo
CANDIDATE SURNAME 3 Candidate Name Candidate Address The (Party Name) Party Candidate	Party Logo		
CANDIDATE SURNAME 7 Candidate Name Candidate Address The (Party Name) Party Candidate	Party Logo		

RETURN TO BALLOT



**\* E-Polling**

**Assisted Voting  
(In Person)**

**\* E-Voting**










**Remote Voting**

**Robert Dix**  
45 Summerhill Road, South Shields  
The Labour Party Candidate

**GRAINGER**  
**Dorothy Jane Grainger**  
1 Brandling Court, South Shields  
Liberal Democrat

**NOLAN**  
**Lawrence Nolan**  
54 Meldon Avenue, South Shields  
Progressive

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MORE THAN ONCE C

-  Pleidlais dros y we  
Internet Voting
-  Pleidlais dros y ffôn  
Voting via telephone
-  Pleidlais trwy neges destun  
SMS Text message voting
-  Pleidlais trwy deledu digidol  
Voting via Digital TV
-  Pleidlais mewn Ciosg Cyffwrdd Sgrîn  
Touch Screen Kiosk voting
-  e- Gyfrif  
e-Counting
-  Pleidlais trwy'r post  
Postal Ballots
-  Darpariaeth ar gyfer yr anabl  
Voting solutions for the disabled
-  Cofrestru Pleidleiswyr  
Voter Registration

MULTI-CHANNEL  
ELECTIONS.

# **Voter Interface – at the Polls**

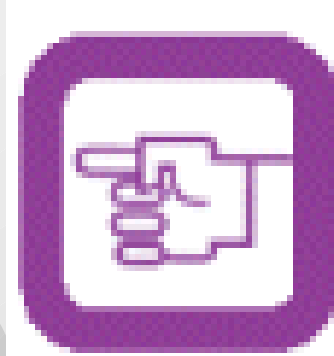
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- > Voter Interface designed regardless of host solution**
- > Considerations given special cases**
- > Not everyone can use a computer**
- > Voter Outreach**



# Public Access Kiosks

- > New or Existing kiosks
- > On-line to central voting application
- > Access options
- > Allows voter to access election information and other e-enabled services
- > Investment in kiosks can be offset by use for other purposes





# **Voter Interface –Remote voting**

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- > Remote interface should be the same as the polls**
- > Remote voting by special groups**
- > Government now has a choice:**
  - Internet
  - Telephone
  - Post
- > Remote registered voters linked to same database**

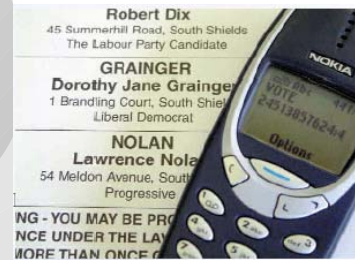
# Internet voting

- > Verification of the user
- > Anonymous cast ballot separated from verification process
- > Automatic update of the Register
- > Help Line by email or free phone



# Voting via touch tone telephone

- > Touch tone dual language
- > Assuring voter is who they say they are
- > Voter Education
- > Remote Assistance/ Help Desk



**Robert Dix**  
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# SMS Text Message

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- > Youth engagement
- > Lifestyle channel
- > Limited interaction

# Postal Voting

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- > Clear and Unambiguous
- > Ballot Returns and Administration
- > Security of Ballots
- > Count Options
- > Failsafe



# For Disabled People Touch Screens

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**Voting Options for the Disabled** – ES&S and Unisys understand that every citizen has the right to vote unassisted. All touch screen voting machines are accessible to people with wheelchairs as well as being audio enabled to allow the blind or poorly sighted voter to vote an audio ballot via headphones attached to the voting device. Braille is incorporated in the navigation buttons allowing the same privacy to every voter. Ballots are also available in large size fonts.

## > Disabled Options

- Accessible touch-screen voting machines (wheelchairs)
- Audio enabled (blind or poorly sighted) with headphones
- Braille availability
- Large size fonts

# E-Voting at Polling Stations



## e-Voting at Polling Stations –

Running elections from designated polling stations remains the most common method but this can now be implemented and administered more efficiently. Depending upon the Council's requirements, voters can use touch-screen electronic voting kiosks or vote using machine-readable ballot papers. By providing some of the traditional services on-line, such as the voter register, voters can now decide where they want to vote. Ballots are counted automatically and vote totals are transmitted electronically to the count centre when the polls close - thereby ensuring a swift and accurate accumulation of results.

## > Polling Stations

- Most common method
- Touch-screen kiosks
- Machine-readable ballot papers

## > Services On-line

- Voter register – choosing where to vote
- Ballot automatically counted
- Vote totals transmitted electronically
- Swift and accurate results



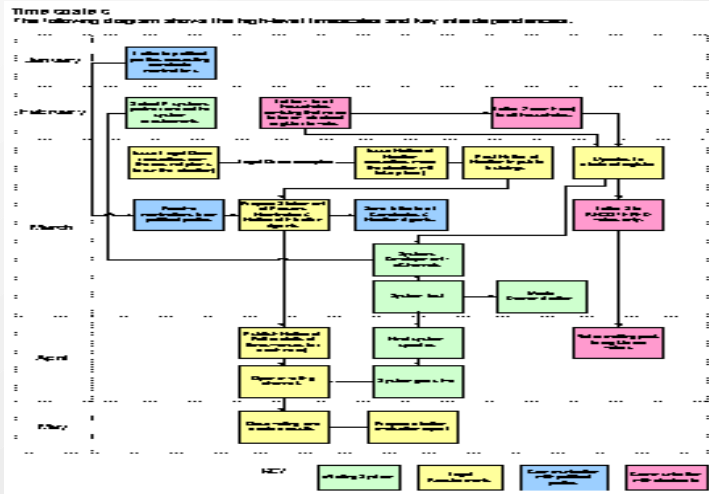
# Project Delivery Challenges

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- > Time was catalyst
- > Decision management
- > Rehearsals
- > Technology Acceptance at all levels

# UK Process May 03

- > From January to May 2003
- > January – letter to parties requesting candidate nominations
- > April – open e-voting chan's
- > May – close voting / results / evaluation report



KEY

eVoting System

Legal Requirements

Communication with political parties

Communication with electorate

## Pioneer Multi-Channel Voting

- 300,000 voters in three local authorities successfully use five different voting methods
- Over 14 percent of all votes cast via internet and telephone



(C) Automobile Association, Powered by ESRI (UK)

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# Global Project Management

## > Unisys & Partners\* project delivery and project management

- Responsible for:
  - Pollworker & election staff training
  - Systems integration
  - Data Hosting
  - Ballot preparation and proofing
  - Delivery of Voter Packs
  - Results delivery
  - Voter Outreach design
  - 24/7 Help desk throughout voting period



\* International & Local

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# Security

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- > Voter Security
- > Systems Security
- > Count Security

# Brazilian Elections Presidentials 2002

SAO PAULO, Brazil -- Last Sunday, October 6, approximately 115 million voters went to the polls for Brazil's first-ever fully automated election for president, state governors and federal and state legislators. Electronic voting machines were used at thousands of polling stations across the country, including 51,000 new units designed and built by Unisys for this year's elections.

In all, more than 406,000 electronic machines were used. The entire system was supported by nearly 9,000 workers whom Unisys hired and trained to provide technical support and voter assistance in the field and at Unisys new Managed Services Centre (MSC) in nearby Veleiros. The MSC is scheduled to officially open later this month.



Unisys electronic voting machine displays Brazilian candidate.



## > Another Reality

- Fully automated election
- In-Person / Polling Stations
- 115M voters
- 406K machines (Urna) used
- From São Paulo to Amazon

	ELEIÇÕES 2.002/1.998					
	2.002		2.002		1.998	
ELEITORADO	115.254.113		115.254.113		106.101.067	
	1º TURNO		2º TURNO		1º TURNO	
COMPAREC.	94.804.126		91.664.259		83.275.929	
ABSTENÇÃO	20.449.987	17,74%	23.589.188	20,47%	22.773.983	21,47%
BRANCOS	2.873.720	3,03%	1.727.760	1,88%	6.688.403	8,03%
NULOS	6.976.107	7,36%	3.772.138	4,12%	8.886.895	10,67%
SEÇÕES	320.458		320.458			

Transparency, Speed, Ease of Use, Accuracy

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# Brazilian Elections Presidential 2002



UNISYS

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# Brazilian Elections Presidentials 2002

## > Simulation

- Correct Vote

http://www1.tse.gov.br/eleicoes/urna\_eletronica/simulacao\_votacao/presidente/SimUrna.ht...

SEU VOTO PARA  
**PRESIDENTE**

Número: 91  
Presidente: **Cazuza**  
Vice-Presidente: Tom Jobim  
Partido: PMS

Aperte a Tecla:  
VERDE para CONFIRMAR  
LARANJA para CORRIGIR

JUSTIÇA ELEITORAL

BRANCO CORRIGE CONFIRMA

Candidatos a Presidente *Simulação de Votação*  
Cazuza (PMS) - 91 Carlos Drummond (PLT) - 92

Fechar Copyright © 2002 - TSE

## Wrong Vote

http://www1.tse.gov.br/eleicoes/urna\_eletronica/simulacao\_votacao/presidente/SimUrna.ht...

SEU VOTO PARA  
**PRESIDENTE**

Número: 11 (número errado)

Aperte a Tecla:  
VERDE para CONFIRMAR (voto nulo)  
LARANJA para CORRIGIR

JUSTIÇA ELEITORAL

BRANCO CORRIGE CONFIRMA

Candidatos a Presidente *Simulação de Votação*  
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Fechar Copyright © 2002 - TSE

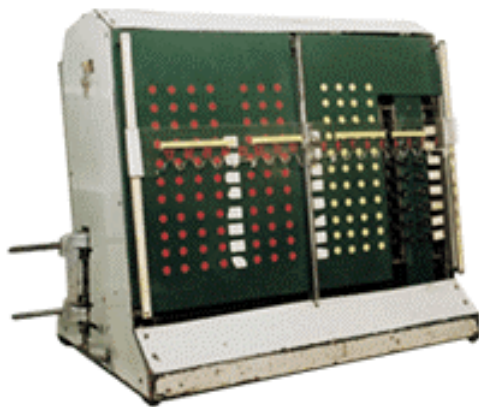
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SEÇÕES	320.458	320.458	

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# Brazilian Elections History



Bem-vindo ao  
**TRIBUNAL SUPERIOR ELEITORAL**

Praca dos Tribunais Superiores - Bloco C  
CEP: 70.096-900 Brasília/DF (61) 316-3000

ELEIÇÕES 2.002/1.998						
	2.002				1.998	
ELEITORADO	115.254.113				106.101.067	
	1º TURNO		2º TURNO		1º TURNO	
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## UNISYS

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