



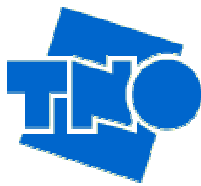
**TEST REPORT CONCERNING THE COMPLIANCE OF  
A VOTING MACHINE FOR USE AT ELECTIONS IN  
IRELAND, BRAND NEDAP, MODEL P.R.U., WITH  
PARTS OF THE STANDARDS IEC 60068-2 AND IEC  
60839-1-3**

FCC listed : 90828  
Industry Canada : IC3501  
VCCI registered : R-1518, C-1598

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Test specification(s): Parts of IEC 60068-2 and IEC 60839-1-3  
Description of EUT: Voting machine for use at elections in Ireland  
Manufacturer: N.V. Nederlandsche Apparatenfabriek NEDAP  
Brand mark: NEDAP  
Model: P.R.U.

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### Description of test item





Test item : Voting machine for use at elections in Ireland  
Manufacturer : N.V. Nederlandsche Apparatenfabriek NEDAP  
Brand : NEDAP  
Model : P.R.U.  
Serial numbers : --  
Revision : --  
Receipt number : 1  
Receipt date : May 08, 2003

### Applicant information

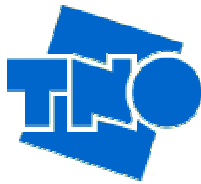
Applicant's representative : Mr. Peter Greene  
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### Test(s) performed

Location : Niekerc  
Test(s) started : May 08, 2003  
Test(s) completed : May 22, 2003  
Purpose of test(s) : Compliance with parts of the standard  
Test specification(s) : IEC 60068-2 and IEC 60839-1-3

Test engineer : A.W. Kars   
Project leader : A.W. Kars   
Report written by : A.W. Kars   
Report approved by : P. de Beer   
Report date : Aug. 08, 2003

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The test results relate only to the item(s) tested.

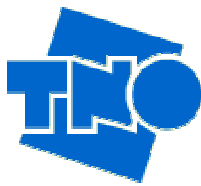


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# 1 General.

## 1.1 Applied standards.

The Voting machine for use at elections in Ireland, brand NEDAP, model P.R.U., has been tested in conformity with parts of the standards IEC 60068-2 and IEC 60839-1-3.

## 1.2 Detailed description of test configuration, input and output ports.

The Voting machine for use at elections in Ireland, brand NEDAP, model P.R.U., in the configuration as described below, will be referred to as EUT for the purpose of this test report.

### 1.2.1 Description of test configuration.

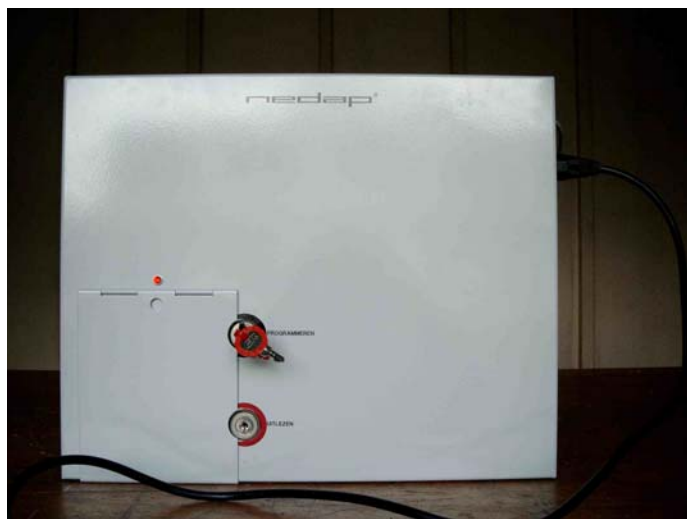
Test item : Voting machine for use at elections in Ireland  
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 Brand : NEDAP  
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 Serial number : --  
 Remarks : --

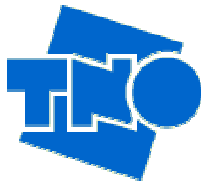
### 1.2.2 Description of input and output ports.

Number	Terminal	From	To	Remarks
1	Mains power supply	Mains terminal	EUT	None
2	Polling Staff control unit	Polling Staff Control box	EUT	< 2 m

Table 1

### 1.2.3 Photograph of the EUT.





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### **1.3 Test conditions.**

#### **1.3.1 Environmental conditions.**

During all tests the environmental conditions were the following:

Temperature : 22 °C  
Relative humidity : 45 %

#### **1.3.2 Operational mode(s).**

During all tests the EUT was set up to function according to the manufacturer's instructions and powered as necessary to the standard requirements where specified.



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## 2 Test results

TEST	CONDITIONS	STANDARD	CRITERIA	RESULT
Environmental Temperature	+ 5 °C ... + 40 °C	IEC 60839-1-3 IEC 60068-2	Functional before, during and after test	No problem was found
Environmental temperature (storage)	- 25 °C ... + 70 °C	IEC 60068-2	Functional before and after test	No problem was found
Relative Humidity (functional)	+ 40 °C at 85 % RH	IEC 60068-2	Functional before, during and after test	No problem was found
Relative Humidity non condensing (storage)	+ 40 °C at 95 % RH	IEC 60068-2	Functional before and after test	No problem was found
Temperature change (storage)	+ 25 °C ... + 30 °C	IEC 60068-2	Functional before and after test	No problem was found
Power supply fluctuation	230 V +/- 10 % 50 Hz +/- 2 %	IEC 60839-1-3	Functional before and after test	No problem was found
Power cuts	500 ms black out suppression up to 75 %	IEC 608390103	Functional before and after test	No problem was found
Insulation	> 10 MΩ at 2kV for 10 seconds	IEC 60839-1-3	Functional before and after test	No problem was found
Energy consumption	At least for 8 hours			Not applicable. (not available)

Table 2

The results of the tests, carried out in conformity with the standard IEC 60068-2 and IEC 60839-1-3 on a voting machine for use at elections in Ireland, brand NEDAP, model P.R.U., are depicted in table 2.

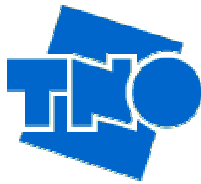


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### **3 Conclusion.**

The voting machine for use at elections in Ireland, brand NEDAP, model P.R.U., complies with the requirements of parts of the standards IEC 60068-2 and IEC 60839-1-3 in the configuration and operational mode(s) as stated in this test report.



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#### 4 List of utilized test equipment.

<u>Inventory Number</u>	<u>Description</u>	<u>Marketing name</u>	<u>Model</u>
99416	Function generator	Tektronix	CFG250
99429	Power analyzer	Elcontrol	Nanovip
13451	Multimeter	H & P	34401A
08-9501	Power supply	Behlman	150-C-202-320
14836	Power supply	Clare	A-203G
12640	Temperature chamber	Heraeus	VEM 03/500
99-9506	Climat chamber	Vötsch	VC0033