

```
1  static_diagram DIGITALVOTERLIST
2  component
3    cluster CORE_DATA_TYPES
4    component
5      class CIPHERTEXT
6        feature
7          Value : BYTEARRAY
8        invariant
9          Value /= void
10     end
11
12     class ASYMMETRICKEY
13       feature
14         Value : ASYMMETRICKEYPARAMETER
15       invariant
16         Value /= void
17     end
18
19     class SYMMETRICKEY
20       feature
21         Value : BYTEARRAY
22       invariant
23         Value /= void
24     end
25
26     class MESSAGE
27       feature
28         Iv : BYTEARRAY
29
30         SymmetricKey : CIPHERTEXT
31
32         Command : CIPHERTEXT
33
34         SenderHash : CIPHERTEXT
35       invariant
36         Iv /= void and SymmetricKey /= void and Command /= void and
SenderHash /= void
37     end
38
39     class VOTERNUMBER
40       feature
41         Value : INTEGER
42       ensure
43         result /= void and
44         result >= 0
45       end
46     end
47
48     class CPR
49       feature
50         Value : INTEGER
51       ensure
52         result /= void and
53         result > 0
54       end
55     end
56
57     class BALLOTSTATUS
58       feature
59         Value : INTEGER
60       ensure
61         result /= void and
```

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62         result >= 0 and
63         result < 3
64         -- 0 is handed out, 1 is not handed out and 2 is not
available (this would ideally be an ENUM)
65     end
66 end
67
68 class ENCRYPTEDVOTERDATA
69     feature
70         cpr : CIPHERTEXT
71
72         voterNumber : CIPHERTEXT
73
74         ballotStatus : CIPHERTEXT
75     invariant
76         cpr /= void and voterNumber /= void and ballotStatus /= void
77 end
78
79 class LOGENTRY
80     feature
81         Message : VALUE
82         Level : VALUE
83         TimeStamp : INTEGER
84     invariant
85         Message /= void and Level /= void and TimeStamp /= void
86 end
87 end
88 end
```