```
 1
 2 #import CommBasicObjects.*;
 3
 4 CommObjectsRepository SmartInstitutionsServiceRepository version 1 . 0
 5 {
 6     CommObject MemberIdentifier {
 7         id  : UInt64
 8         name: String
 9         type: String
10     }
11     Enumeration InstitutionCategory {
12         SINGLE_MEMBER_INSTITUTE
13         PAIR_INSTITUTE
14         STATIC_MULTI_INSTITUTE
15         DYNAMIC_MULTI_INSTITUTE
16     }
17     Enumeration InstitutionType {
18         TYPE0_USER_DEFINED
19         TYPE1
20         TYPE2
21         TYPE3
22         TYPE4
23     }
24     Enumeration InstitutionPhase {
25         FORMATION
26         FOUNDATION
27         FULFILMENT
28     }
29     Enumeration EnforcementInstruction {
30         START
31         PAUSE
32         STOP
33         FORMED
34         FOUNDED
35         FULFILLED
36         INFORM
37         WARNING
38         NOTICE
39         EJECTED
40         CUSTOM
41     }
42     CommObject InstitutionIdentifier    {
43         id  : UInt64
44         name: String
45     }
46     CommObject InstitutionStatus    {
47         institute   : InstitutionIdentifier
48         category    : InstitutionCategory
49         type        : InstitutionType
50         institutionMembers          : MemberIdentifier[*]
51         institutionEnforcers        : MemberIdentifier[*]
52         phase       : InstitutionPhase
53         signed_at   : CommTimeStamp
```

```
 54          signed_by   : MemberIdentifier
 55      }
 56      CommObject PackageIdentifier    {
 57          id          :    UInt64
 58          timestampe  : CommTimeStamp
 59      }
 60      CommObject EnforcementInstructionPackage {
 61          id          : PackageIdentifier
 62          to          : MemberIdentifier[*]
 63          from        : MemberIdentifier
 64          context     : InstitutionStatus
 65          instruction : EnforcementInstruction
 66          ifCustom    : String
 67      }
 68      CommObject EnforcementReplyPackage {
 69          id          : PackageIdentifier
 70          replyingto  : PackageIdentifier
 71          to          : MemberIdentifier
 72          from        : MemberIdentifier
 73          context     : InstitutionStatus
 74          reply       : String
 75      }
 76      CommObject EnforcementReportPackage {
 77          id      : PackageIdentifier
 78          to      : MemberIdentifier[*]
 79          from    : MemberIdentifier
 80          report  : InstitutionStatus
 81          text    : String
 82      }
 83      CommObject SmartIN_Command {
 84          msg         : CommBasicObjects.CommTaskMessage
 85          commandID   : UInt64
 86          command     : String
 87      }
 88      Enumeration SmartINPackageTypeEnums {
 89          EnforcementInstructionPackage
 90          EnforcementReplyPackage
 91          EnforcementReportPackage
 92      }
 93      CommObject SmartIN_EventType {
 94          type    : SmartINPackageTypeEnums
 95      }
 96      CommObject SmartIN_EventMessage {
 97          usetype : SmartINPackageTypeEnums
 98          ifEnforcementInstructionPackage : EnforcementInstructionPackage
 99          ifEnforcementReplyPackage       : EnforcementReplyPackage
100          ifEnforcementReportPackage      : EnforcementReportPackage
101      }
102      CommObject SmartIN_EventStateType {
103          targets : MemberIdentifier[*]
104          message : SmartIN_EventMessage
105      }
106 }
```