CONTEXT Employment IN ENGLISH

PURPOSE CONTEXT Employment

{+ This context looks at the employment of people within 'Our Organization'.

   This means that we do not consider anything outside of 'Our Organization'.

+}

--[Concept Definitions]

CONCEPT Person     "a human being"

CONCEPT Department "a functional unit within an organization that is being managed."

CONCEPT Function   "a job position or title that employees can hold."

--[Relation and Property Definitions]

RELATION boardMember[Person] [PROP]        MEANING "{{SRC}} is a member of the board of the organization"

RELATION oversees[Person\*Department]       MEANING "{{SRC}} oversees department {{TGT}}"

RELATION deptManager[Department\*Person]    MEANING "{{SRC}} has {{TGT}} as its manager"

RELATION deptFunction[Department\*Function] MEANING "{{SRC}} has job positions for employees that can fulfill {{TGT}}"

RELATION isQualifiedFor[Person\*Function]   MEANING "{{SRC}} has been qualified to fulfill funtion {{TGT}}"

RELATION employee[Person] [PROP]           MEANING "{{SRC}} has a working relationship/contract with our organization"

RELATION emplDepartment[Person\*Department] MEANING "{{SRC}} works in department {{TGT}} of the organization"

RELATION emplFunction[Person\*Function]     MEANING "{{SRC}} has been assigned the function {{TGT}}"

RELATION reportsTo[Person\*Person]          MEANING "{{SRC}} reports to {{TGT}}"

--[Principles: Board and organization structure]

PURPOSE RULE "**P-B1: The board must oversee all departments**"

{+ In order to be in control, every deparment must be overseen by a member of the board - no exceptions. +}

--[Principles: Departments]

PURPOSE RULE "**P-D1: Departments must have precisely one manager**"

{+ Departments must be led/managed. The responsibility for doing so must be assigned to a single person,  
 to ensure that it is always unambiguously clear who it is that bears that responsibility. +}

PURPOSE RULE "**P-D2: Departments must list the functions for which they have positions**"

{+ Hiring people that can do the work in a department (a functional unit) becomes easier if sets of

  capabilities are specified (Functions) that the deparment needs to get its work done.

  Therefore, departments should list the functions for which they have job positions. +}

PURPOSE RULE "**P-D3: Departments must have employees**"

{+ A department that doesn't have employees cannot do work. +}

PURPOSE RULE "**P-D4: Everyone that works for a department must be an employee (have a contract)**"

{+ In order to make sure that people working in one of our organization's departments are well-behaved,

  they must be employees, which implies they have signed a contract that provides appropriate guarantees for that. +}

--[Principles: Employees]

PURPOSE RULE "**P\_E1: All employees must have one function**"

{+ In order to not overload employees, it has been decided that they can have at most one function. +}

PURPOSE RULE "**P\_E2 An employee that has been assigned a function must have the associated qualifications**"

{+ People should only be employed to fulfill a function if they can do the associated work.

  Therefore, it must have been established that they can do the work if they are assigned a function. +}

PURPOSE RULE "**P\_E3: All employees must be assigned to a department for which their function is relevant**"

{+ In order to guarantee that people end up in a department that can use the capabilities

  for which they are qualified, people should only be assigned to deparments that can use those. +}

--[Principles: Reporting]

PURPOSE RULE "**P\_R1: People must not report to themselves**"

{+ Butchers should not judge their own meat, and similarly, people must not report to themselves. +}

-- PURPOSE RULE "**P\_R2: Employees must report to their manager**"

-- {+ In order not to overload people with red tape, people must report to at most one person. +}

PURPOSE RULE "**P\_R2: All employees that are not the department manager must report to their department manager**"

{+ The easiest reporting line for employees is to report to their department manager

(provided they are not the manager themselves).+}

-- PURPOSE RULE "P\_R3: Managers must report to a member of the board"

-- {+To ensure that the board can oversee all departments, each manager must report to some member of the board.+}

PURPOSE RULE "**P\_R3: Managers must report to the board member that oversees his department**"

{+Since the board has decided to assign departments to its members to oversee, it makes sense

  to have the managers of these departments report to the board member that oversees his/her department.+}

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--[SPECIFYING A TEST POPULATION]--

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--[The Board]--

POPULATION boardMember[Person\*Person] CONTAINS

   [ ("Boris", "Boris")

, ("Birgit", "Birgit")

, ("Bram", "Bram")

]

POPULATION oversees[Person\*Department] CONTAINS

   [ ("Boris", "Finance")

   , ("Birgit", "Operations")

   , ("Bram", "Support")

   ]

--[Departments]--

POPULATION deptManager[Department\*Person] CONTAINS

   [ ("Finance", "Alice")

   , ("Operations","Darryl")

   , ("Support", "George")

   ]

POPULATION deptFunction[Department\*Function] CONTAINS

   [ ("Finance", "Manager")

, ("Finance", "Controller")

, ("Finance", "Administrator")

   , ("Operations","Manager")

, ("Operations","Operator")

   , ("Support", "Manager")

, ("Support", "Support engineer")

   ]

--[Employees]--

POPULATION employee[Person\*Person] CONTAINS

   [ ("Alice", "Alice")

   , ("Bob", "Bob")

   , ("Charlie","Charlie")

   , ("Darryl", "Darryl")

   , ("Evert", "Evert")

   , ("Flora", "Flora")

   , ("George", "George")

   , ("Harry", "Harry")

   ]

POPULATION emplDepartment[Person\*Department] CONTAINS

   [ ("Alice", "Finance")

   , ("Bob", "Finance")

   , ("Charlie","Finance")

   , ("Darryl", "Operations")

   , ("Evert", "Operations")

   , ("Flora", "Operations")

   , ("George", "Support")

   , ("Harry", "Support")

   ]

POPULATION isQualifiedFor[Person\*Function] CONTAINS

   [ ("Alice","Manager"), ("Alice","Controller"), ("Alice","Administrator")

   , ("Bob","Controller"), ("Bob","Administrator")

   , ("Charlie","Administrator")

   , ("Darryl","Manager"), ("Darryl","Operator")

   , ("Evert","Operator")

   , ("Flora", "Operator")

   , ("George","Manager"), ("George","Controller")

   , ("Harry","Support engineer"), ("Harry","Operator")

   , ("Irene","Manager"), ("Irene","Controller")

   , ("John","Operator"), ("John","Support Engineer")

   , ("Karel","CISO"), ("Karel","Security Officer")

   ]

POPULATION emplFunction[Person\*Function] CONTAINS

   [ ("Alice", "Manager")

   , ("Bob", "Controller")

   , ("Charlie","Administrator")

   , ("Darryl", "Manager")

   , ("Evert", "Operator")

   , ("Flora", "Operator")

   , ("George", "Manager")

   , ("Harry", "Support engineer")

   ]

POPULATION reportsTo[Person\*Person] CONTAINS

   [ ("Alice", "Boris")

   , ("Bob", "Alice")

   , ("Charlie","Alice")

   , ("Darryl", "Birgit")

   , ("Evert", "Darryl")

   , ("Flora", "Darryl")

   , ("George", "Bram")

   , ("Harry", "George")

   ]

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DEFINING INTERFACES FOR THE PROTOTYPE

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INTERFACE "Board": V[ONE\*Person];boardMember

BOX <TABLE>

   [ "Board member" : I[Person]

   , "Oversees" : oversees

   , "Rep. Mgrs." : reportsTo~

   , "Qualified for": isQualifiedFor

   ]

INTERFACE "Departments": V[ONE\*Department]

BOX <TABLE>

   [ "Department" : I[Department]

   , "Manager" : deptManager

   , "Employees" : emplDepartment~

   , "Functions" : deptFunction

   ]

INTERFACE "Employees": V[ONE\*Person];employee

BOX <TABLE>

   [ "Name" : I[Person]

   , "Department" : emplDepartment

   , "Function" : emplFunction

   , "Reports to" : reportsTo

   , "Qualified for": isQualifiedFor

   ]

INTERFACE "Functions": V[ONE\*Function]

BOX <TABLE>

   [ "Function" : I[Function]

   , "Departments" : deptFunction~

   , "Employees" : emplFunction~

   ]

INTERFACE "Principle Acceptance": V[ONE\*RuleID] cRud

BOX<TABLE>

   [ "Accept?" : isAccepted

   , "ID" : I[RuleID] cRud

   , "Principle" : rulePrinciple cRud

   ]

INTERFACE "Other people": V[ONE\*Person];employee

BOX <TABLE>

   [ "Name" : I[Person]

   , "Board member?": boardMember

   , "Function" : emplFunction

   , "Reports to" : reportsTo

   , "Qualified for": isQualifiedFor

   ]

|  |  |  |
| --- | --- | --- |
|  | INTERFACE "My Organization": "\_SESSION";V[SESSION\*ONE]  BOX <TABS>     [ "The Board":            I INTERFACE "Board"     , "Departments":          I INTERFACE "Departments"     , "Functions":            I INTERFACE "Functions"     , "Employees":            I INTERFACE "Employees"     , "Other people":         I INTERFACE "Other people"     , "Principle Acceptance": I INTERFACE "Principle Acceptance"     ] |  |

ENDCONTEXT