Example of a Gaia Role Schema

Role Schema: ReviewCatcher
Description: This role is in charge of selecting reviewers and distributing papers among them.
Protocol and Activities: CheckPaperTopic, CheckRefereeExpertise, CheckRefereeConstraints, AssignPaperReferee, ReceiveRefereeRefuse, UpdateDBSubmission, UpdateDBReferee

Permissions:

Reads	*paper_submitted*	// in order to check the topic and authors
	referee-data	// in order to check the expertise and constraint (i.e. the referee is one of the authors, or belong to the same organization
Changes	*DB Submission*	// assigning a referee to the paper
	DB Referee	// assigning the paper to the referee incrementing the number of assigned papers

Responsibilities:

Liveness:

ReviewCatcher = (CheckPaperTopic.CheckRefereeExpertise.
CheckRefereeConstraints.AssignPaperReferee.
[ReceiveRefereeRefuse] | UpdateDBSubmission.
UpdateDBReferee)^n

Safety:

- AssignPaperReferee =>*Referee ≠ authors ∧ Referee_organization ≠ authors_organizations*

- ∀ paper: *number_of_referees* = 3

Example of a Gaia Role Schema

Role Schema: `ReviewPartitioner`	

Description:
This role is in charge of distributing papers among Vice-Chairs according to the area of competence.

Protocol and Activities:
`CheckPaperTopic`, `CheckViceChairArea`, `AssignPaperViceChair`, `UpdateDBSubmission`

Permissions:

Reads	*paper_submitted*	// in order to check the topic and authors
	Vice-Chair-data	// in order to check the area
Changes	*DB Submission*	// assigning the paper to a Vice-Chair area

Responsibilities:

Liveness:
    `ReviewPartitioner = (CheckPaperTopic.CheckViceChairArea.`
                  `AssignPaperViceChair.UpdateDBSubmission)`*

Safety:

- $\forall$ paper assigned to a ViceChairArea