CoMiFin Project Overview
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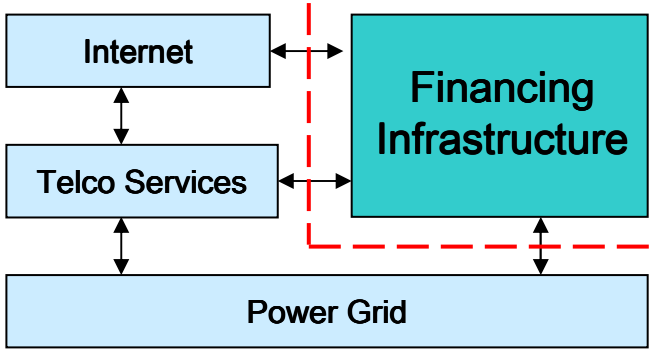
Landscape

The global financial infrastructure is a complex system consisting of a wide taxonomy of interconnected nodes and infrastructures that include:



- financial industry sites
- clearing houses
- government agencies
- regulatory sites
- stock exchange markets
- power grid infrastructures
- communication infrastructures (including both leased lines for financial data exchange and IP-based lines, including Internet)
- others

Each node has its own monitoring software, but an overall view of the whole financial infrastructure is still missing.

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The dependability problem

In order to raise the situation awareness around the single financial domain and to cope with dangerous and potentially catastrophic events, it is increasingly important to deploy methodologies, mechanisms and tools for enhancing the security of the financial infrastructure by:

- Managing the infrastructure itself as complex unmanaged system of independent managed systems
- Taking care of inter-relations with other critical infrastructures

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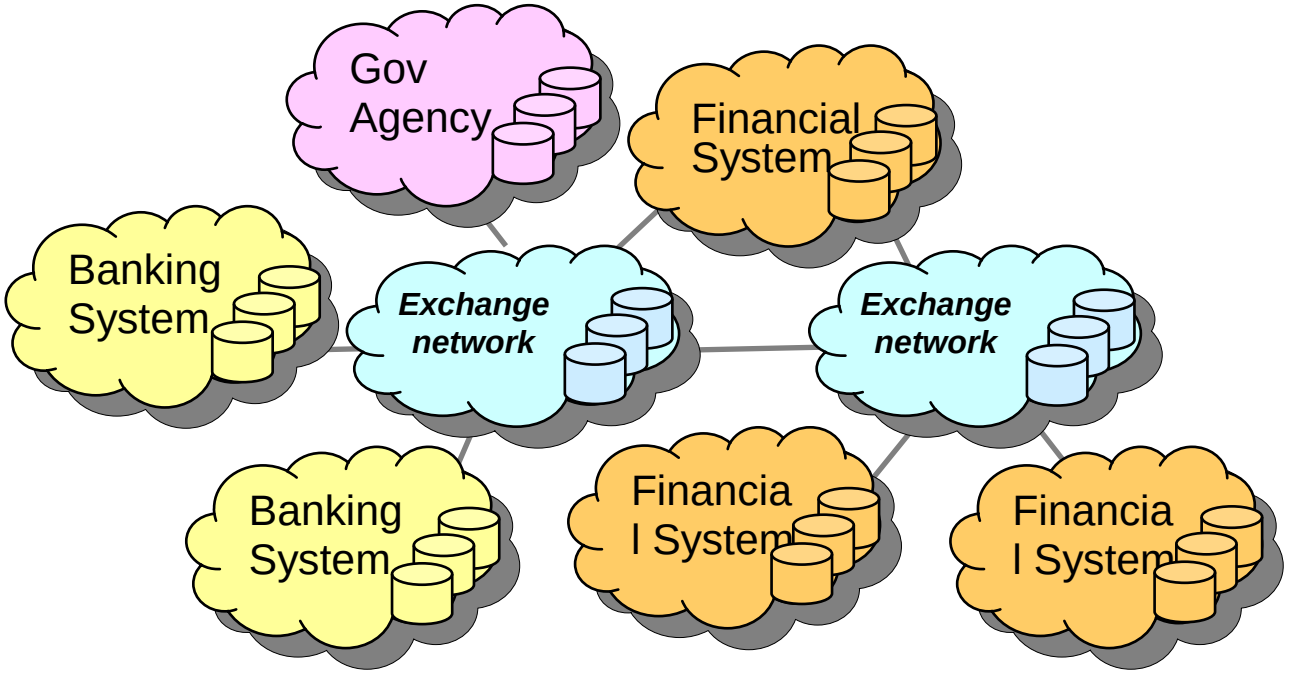
Project overview



CoMiFin intends to support business continuity of financial actors on top of unmanaged networks (e. g. Internet) connecting managed financial infrastructures under all foreseeable failure scenarios including the operational failures and deliberate breaches

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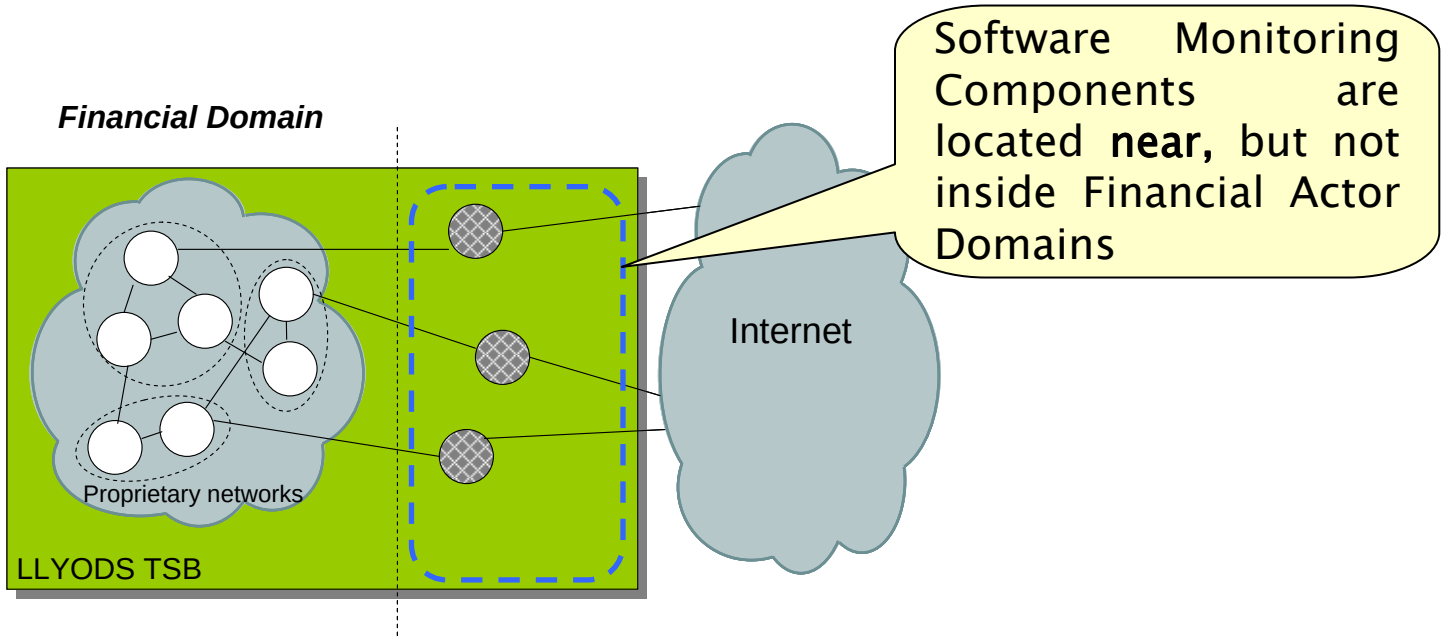
CoMiFin vision (1/3)

- CoMiFin plans to create a secure and collaborative monitoring system for enhancing trustworthiness and dependability of financial infrastructures by circulating information about node events

- A common knowledge of overall infrastructure status (including Internet, power grid, Telco services) and threats is shared to let nodes implement preventive actions and countermeasures



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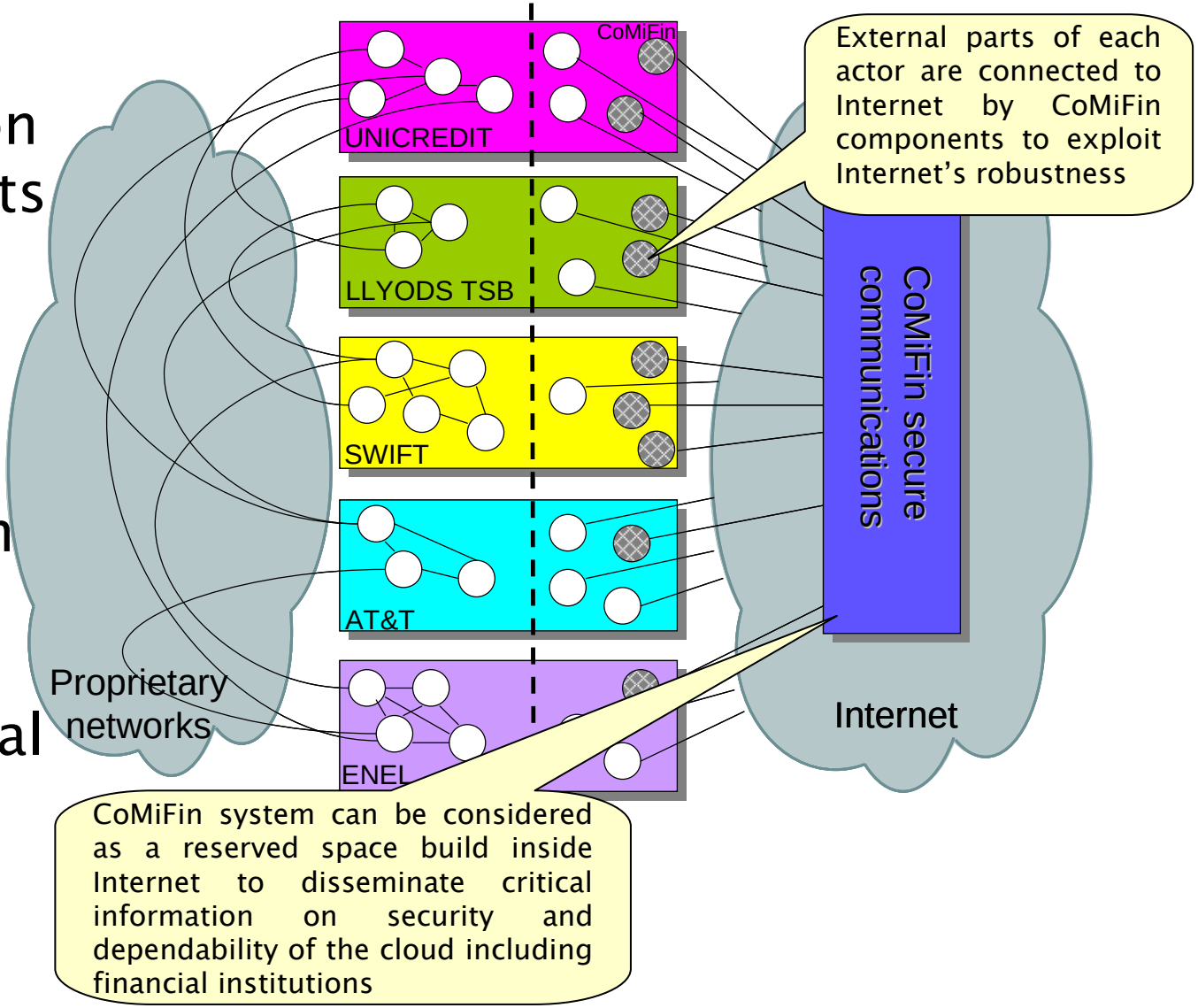
CoMiFin vision (2/3)

A Secure Communication Middleware acts as a mean to exchange events and shared information on security and dependability among financial domains



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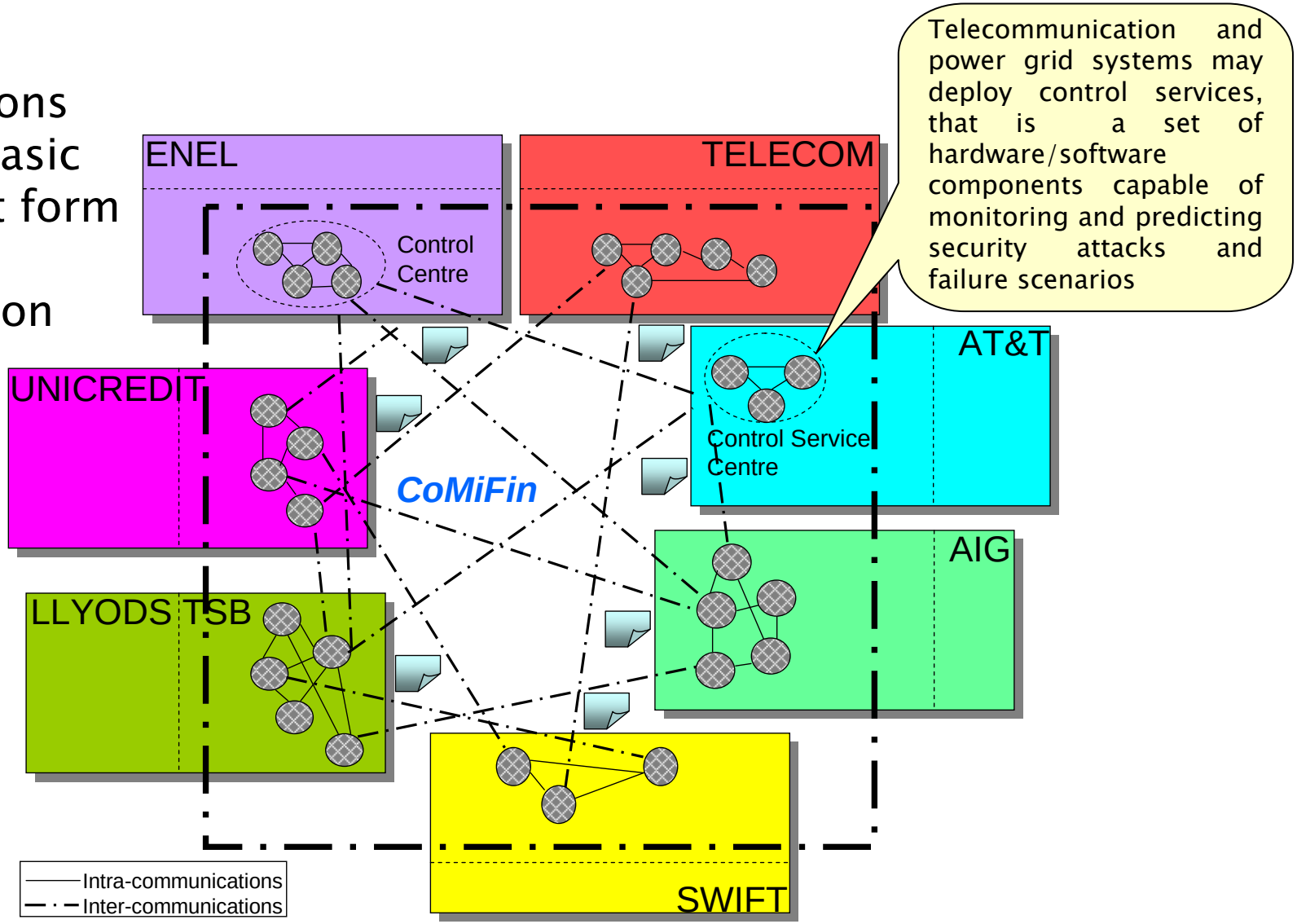
CoMiFin vision (3/3)

A set of organizations having a basic agreement form a Virtual Organization



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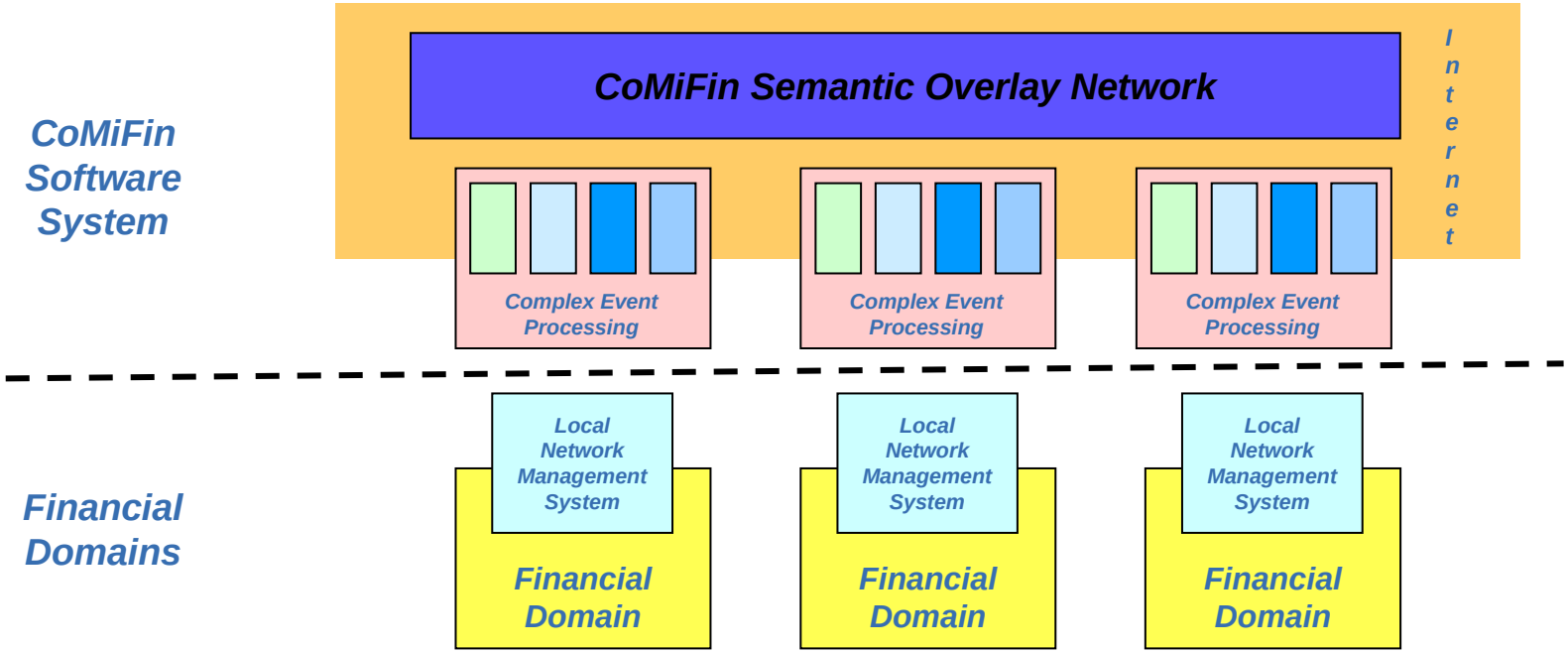
CoMiFin architecture
Layered approach



- The **Semantic Overlay Network** is designed for exchanging information among the financial domain based upon the distributed complex event processing capabilities of the Intelligence Cloud vision
- **Local Network Management System** of each FD shares its own information with other FDs through the overlay network
- Each **FD** receives correlated events from the semantic overlay and transforms these events in inputs for the Local Network Management System

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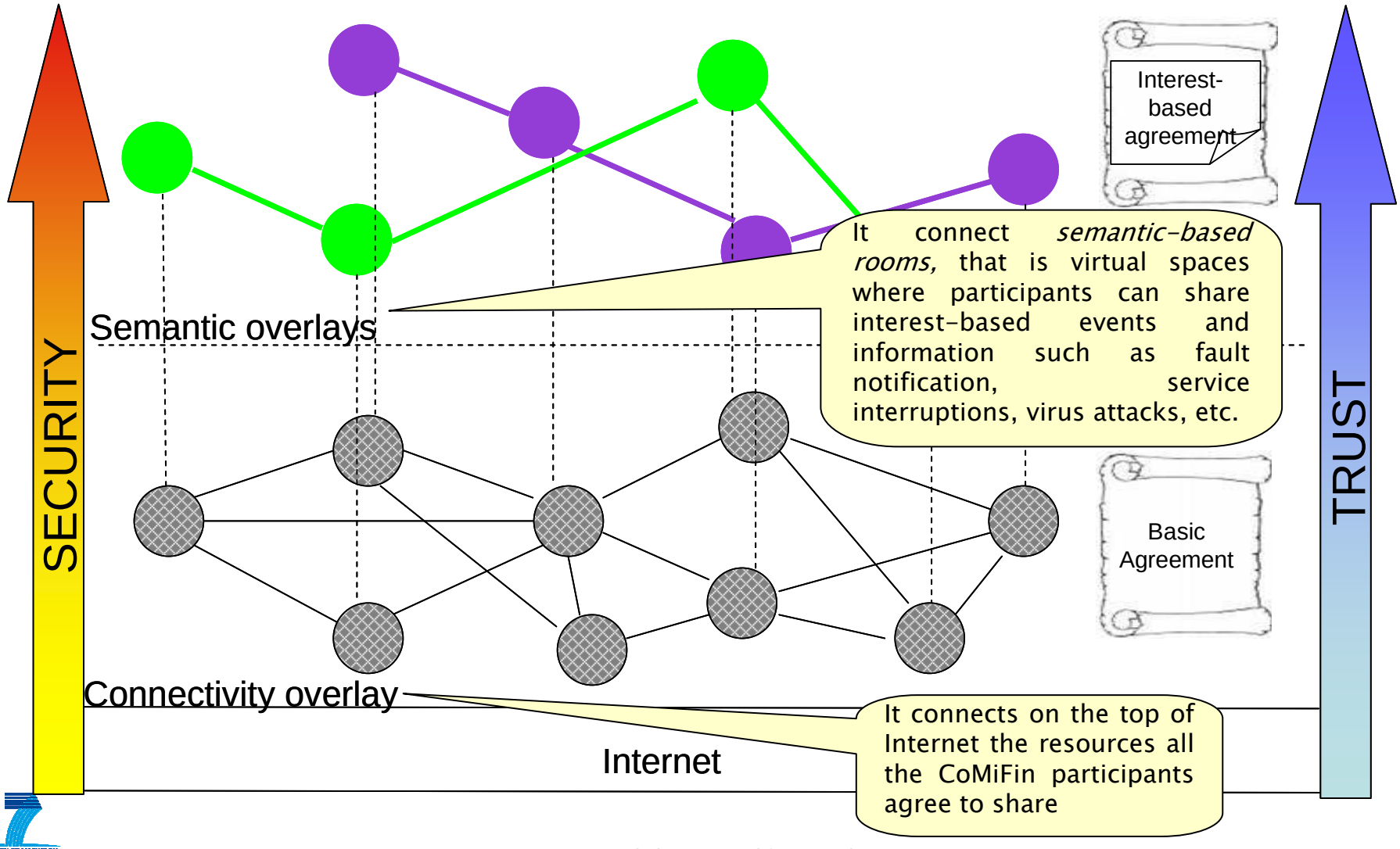
CoMiFin architecture
Connectivity and Semantic overlay



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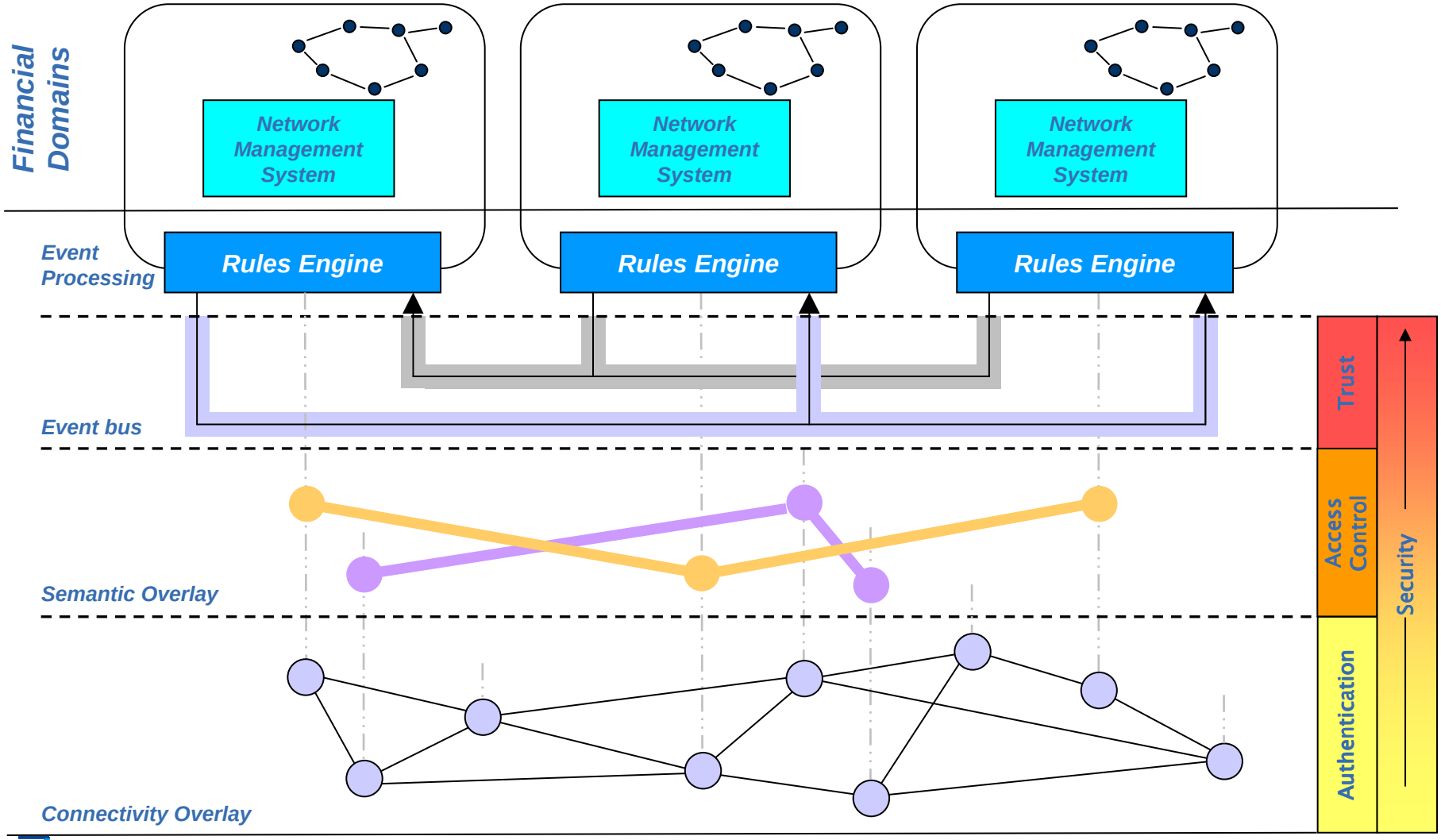
CoMiFin architecture
Overall view



Internet

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Financial Advisory Board

ComiFin actively plans to co-operate with financial entities over the spectrum of:

- Requirements analysis
- Impact evaluation of Regulatory laws
- Assessment and evaluation of the CoMiFin results
- Dissemination to financial community

- Through a
  - Financial Advisory Board
  - Stakeholder Group

Join the CoMiFin FAB: see www.comifin.eu

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Questionnaire

In order to collect information about financial stakeholder needs we're proposing a questionnaire

Questionnaire is aimed at collecting info on business needs and IT status of the art. It can be anonymously filled.

Questionnaire can be asked to CoMiFin people as well as can be completed on-line over the CoMiFin official web site at: http://www.comifin.eu/comifin-survey.html

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Thank you for your attention

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