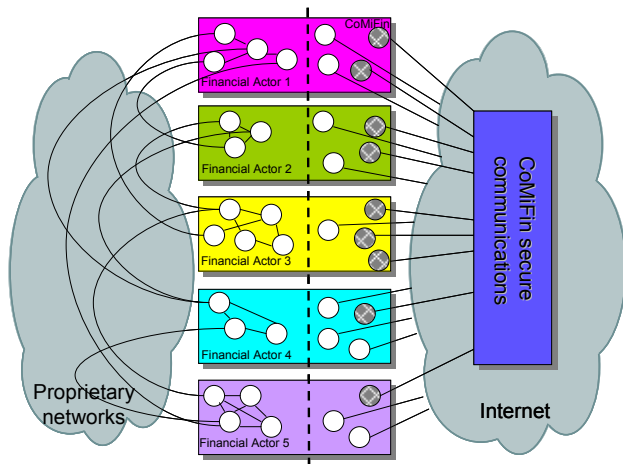


## Communication Middleware for Monitoring Financial CI

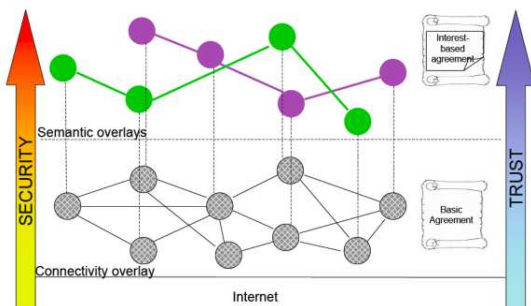
### Vision and Objectives

The financial infrastructure is a global ecosystem interconnecting diverse infrastructures such as financial sites, clearing houses, regulatory sites using proprietary networks and increasingly the Internet for front end services. While the interconnections provide the convenience of system-wide access and features, it also exposes the overall infrastructure to disruptions arising from across the spectrum of interconnected entities. Traditionally, each domain deploys its customized monitoring software solutions in order to protect itself from operational failures and deliberate attacks. Protecting the interconnected infrastructure required a coordinated monitoring the overall financial ecosystem. **This comprehensive global monitoring schema is currently missing, and constitutes the key objective of CoMiFin to provide.**



### The CoMiFin Framework

**CoMiFin does not perturb or require any changes to existing client infrastructures or proprietary networks!** CoMiFin is an add-on middleware layer structured as a stack of overlay networks built on top of the Internet in order to exploit Internet business continuity. The system facilitates the sharing of critical events among interested parties, which can in turn use these events to trigger the necessary local protection mechanisms in a timely fashion.



A financial player willing to connect to the CoMiFin infrastructure must sign and adhere to the **basic participation agreement**. The participating parties can further form **semantic partitions**, i.e., virtual spaces where they can share events and information of mutual interest at a higher level of security and trust as per a more specific **interest-based agreement** being signed by the partition members for that purpose. Semantic partitions are enforced as **semantic overlays**, built on top of the overlay network providing basic connectivity. Shared information may include:

- ❖ **Technical:** Fault Notification
- ❖ **Service Related:** Interruptions, Updates
- ❖ **Infrastructure:** Power, Network Faults
- ❖ **Security:** Threat Notification, Phishing info, Detected Frauds, Intrusions, DoS Attacks
- ❖ **Others:** General Warnings

This information is consumed by the event processing engines installed at each participating site. These event engines leverage the computing and storage capabilities available in the local data center to discover malicious attack patterns and other impending threats in a timely fashion.

### CoMiFin Technological Value

CoMiFin innovates across a spectrum of the distributed computing technologies including (but not limited to) the following:

- ❖ Semantic overlay networking enhanced with trusted and secure group formation;
- ❖ Highly scalable complex event processing;
- ❖ New mechanisms for intrusion detection, and mitigation strategies

### CoMiFin Community

CoMiFin plans to actively co-operate with financial bodies over the spectrum of:

- ❖ Requirements analysis
- ❖ Regulatory policies
- ❖ Assessment & prototyping of CoMiFin results
- ❖ Dissemination to financial community

Join the CoMiFin Community: see [www.comifin.eu](http://www.comifin.eu)

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**Project website:** [www.comifin.eu](http://www.comifin.eu)

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