

Project Number: IST-2001-33234
Project Acronym: PEPITO
Title: PEer-to-Peer Implementation and TheOry
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Deliverable no:	D2.5
Title:	Algorithms and applications of probabilistic reliable broadcast
Workpackage no:	WP2
Due date:	24
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Short Description

This deliverable presents a summary of the work done in the context of WP2. The work is mainly about algorithms and applications of probabilistic reliable broadcast and event dissemination.

It is appealing to disseminate information that users are interested in. In this work, we advocate the need for dedicated overlay networks -where the overlay structure reflects the actual structure of the underlying application properties- to implement efficient content-based style information broadcast. We propose a new scalable P2P event dissemination scheme where user specify their interests in terms of filters and these filters are arranged according to a dictionary-based semantics. This structured overlay, which we call *GosSkip*, relies on gossip messages to construct a structure eventually similar to a Skip list, preserving the semantic locality of the items stored in the overlay. Preliminary implementation results based on a real P2P trace convey the scalability and the efficiency of the approach both in static and dynamic scenarios.

Partner owning:	EPFL
Available to:	Public