

Measurement and Architecture for a Middleboxed Internet

Introducing the H2020 MAMI project

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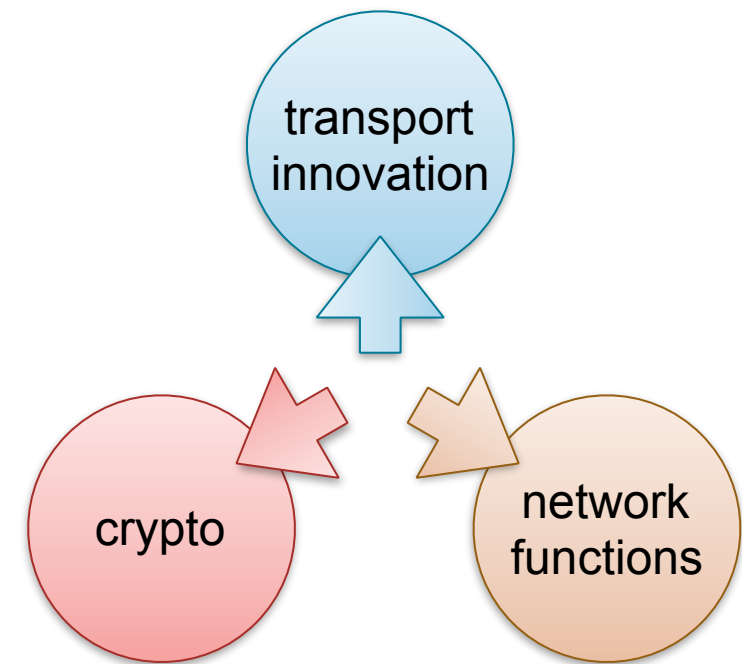


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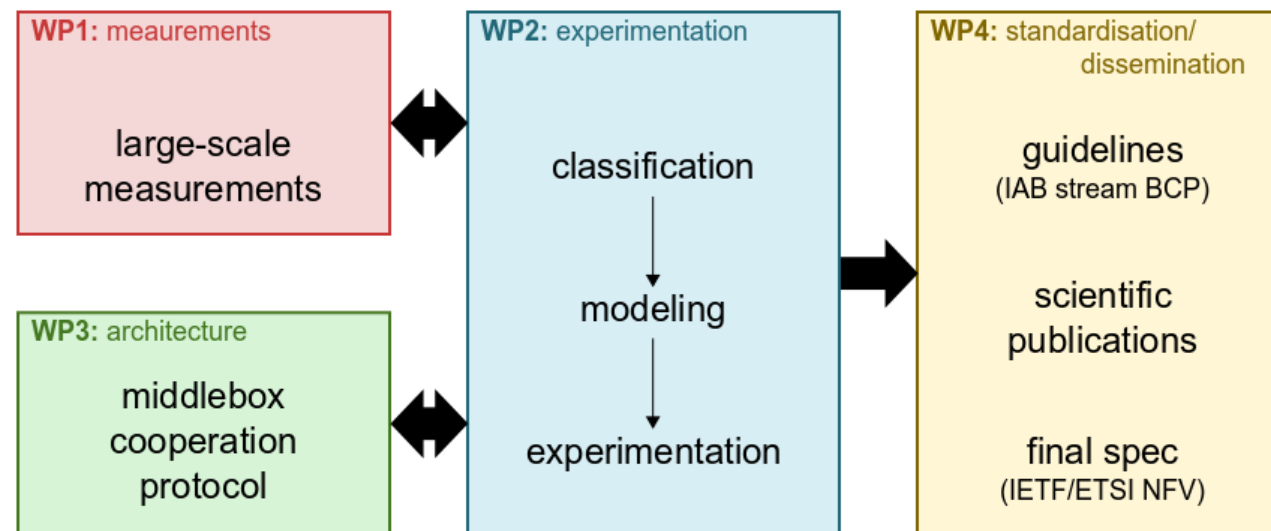


Goals

- Fundamental tension in further development of the Internet architecture:
 - Necessity of in-network functionality impairs innovation of the protocol stack
 - Increased encryption obsoletes in-network functionality
 - New applications need new transports to function efficiently
- Approach: develop **explicit cooperation** between applications and these in-network functions
- But first: develop a **deeper understanding** of the nature of this tension as deployed in the Internet



Project



- 30 months (Jan 2016 - Jun 2018), seven partners, three broad areas of work
 - **Measure** prevalence and character of middlebox interference
 - Develop an **architecture** and protocols for explicit cooperation between middleboxes and endpoints
 - **Experiment** with pilot implementations of this architecture
- Strong interaction with relevant standards organizations for impact on deployment
- **FIRE testbed (MONROE) support** for measurement as well as experimentation, especially on mobile broadband access networks
- Learn more at <http://mami-project.eu/>