

WP2: Experimentation

Korian Edeline, Benoit Donnet (ULG)
MAMI Plenary, Berlin, Thursday 14 July 2016



measurement and architecture for a middleboxed internet

measurement

architecture

experimentation

This project has received funding from the European Union's Horizon 2020 research and innovation programme

under grant agreement No 688421. The opinions expressed and arguments employed reflect only the authors'

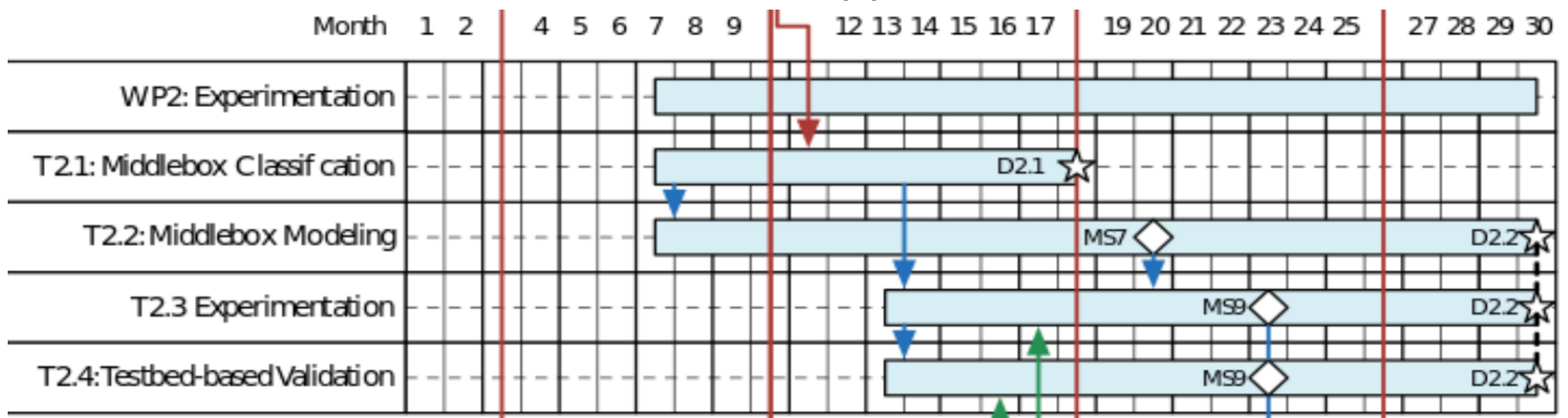
view. The European Commission is not responsible for any use that may be made of that information.





WP2 recap

- Starts July 2016
 - T2.1 Middlebox Classification (ULg, Aberdeen, SRL)
 - T2.2 Middlebox Modeling (ULg, TID)
- Starts January 2017
 - T2.3: Model/NFV-based Experimentation (ETH, Aberdeen, SRL)
 - T2.4: Testbed-based Validation Approach (ETH, Aberdeen, SRL)





WP2 Early Plan



- Data
- Classification
- Class models



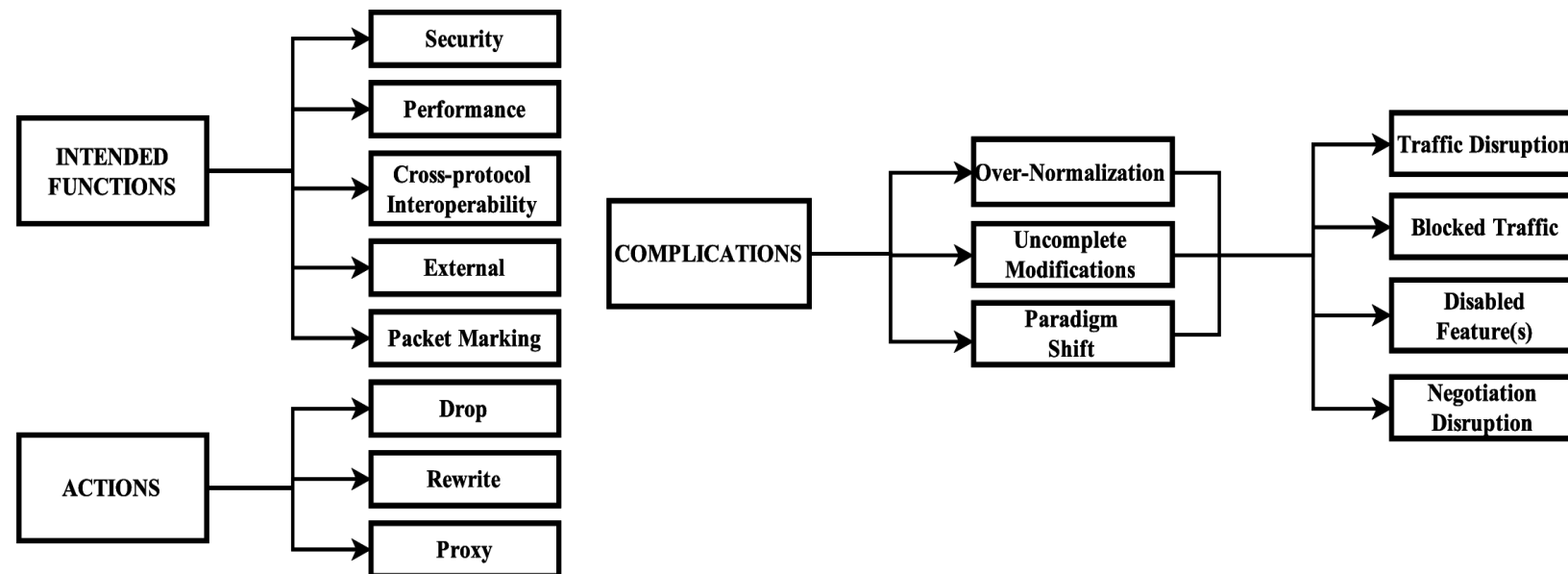
Tracebox Datasets

- Collected data:
 - PlanetLab
- Being-collected data:
 - Ark (IPv6)
- To-Be-Collected data:
 - RIPE Atlas
- Additional data (SRL ?):
 - MONROE, NORNET



Classification

- Taxonomy



Extend with:

- Persistence (Temporal aspect)
- Positionning (Location on the path)
- Carpenter, B., & Brim, S. (2002). Middleboxes: Taxonomy and issues (No. RFC 3234).
- Edeline, K., & Donnet, B. (2015, April). Towards a middlebox policy taxonomy: Path impairments. In 2015 IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS) (pp. 402-407). IEEE.



Classification

-
-
-
- Planned PAM16 submission



Modeling

Simulator

- Netkit
 - http://wiki.netkit.org/index.php/Main_Page
- Netkit + Click (MBTest)
 - <https://bitbucket.org/bhesmans/mbtest/src>
- Mininet (Any experienced user ?)
 - <http://mininet.org/>