

TF-NGN

Transport Protocols activity 9.5

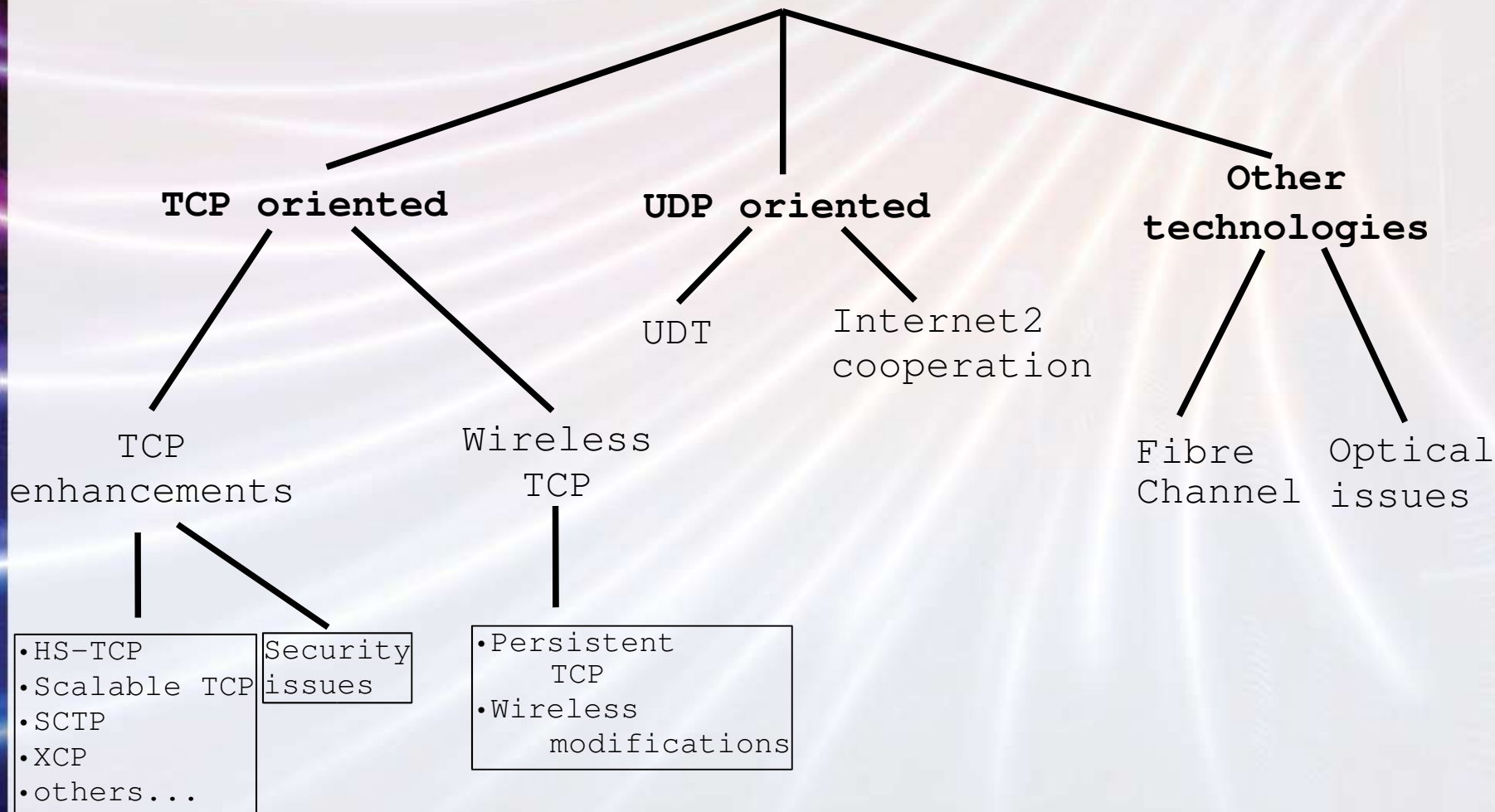
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Agenda

- **Activity scope**
- Internet2 work
- General activity plan

Activity scope



Activity scope

- Other ideas:
 - Kernel vs user space implementations
 - Delay oriented vs loss oriented congestion control
 - Random loss/reordering vulnerability
 - TCP vs UDP approach
 - Creating brand new solution vs improving existing one
 - Reno compatibility
 - QoS vulnerability
 - WEB100 interaction
 - Meeting IETF standards

Agenda

- Activity scope
- **Internet2 work**
- General activity plan

Internet2

bulk transfer protocol

- Objectives
 - Easy to deploy
 - Portability on Unix platforms
 - Ability to use without administrator privileges
 - Ability to transfer at high speed (1Gbps, 10Gbps, ...)
 - Tolerance for minor non-congestive packet loss
 - Independence from network configuration changes
 - Fair bandwidth sharing
 - Tuning ability

Internet2

bulk transfer protocol

- User space oriented
- Delay oriented congestion control
 - empty queues vs full queues
 - measurement noise
 - ascertaining base delay
 - Can use otherwise unused capacity without affecting TCP

Internet2

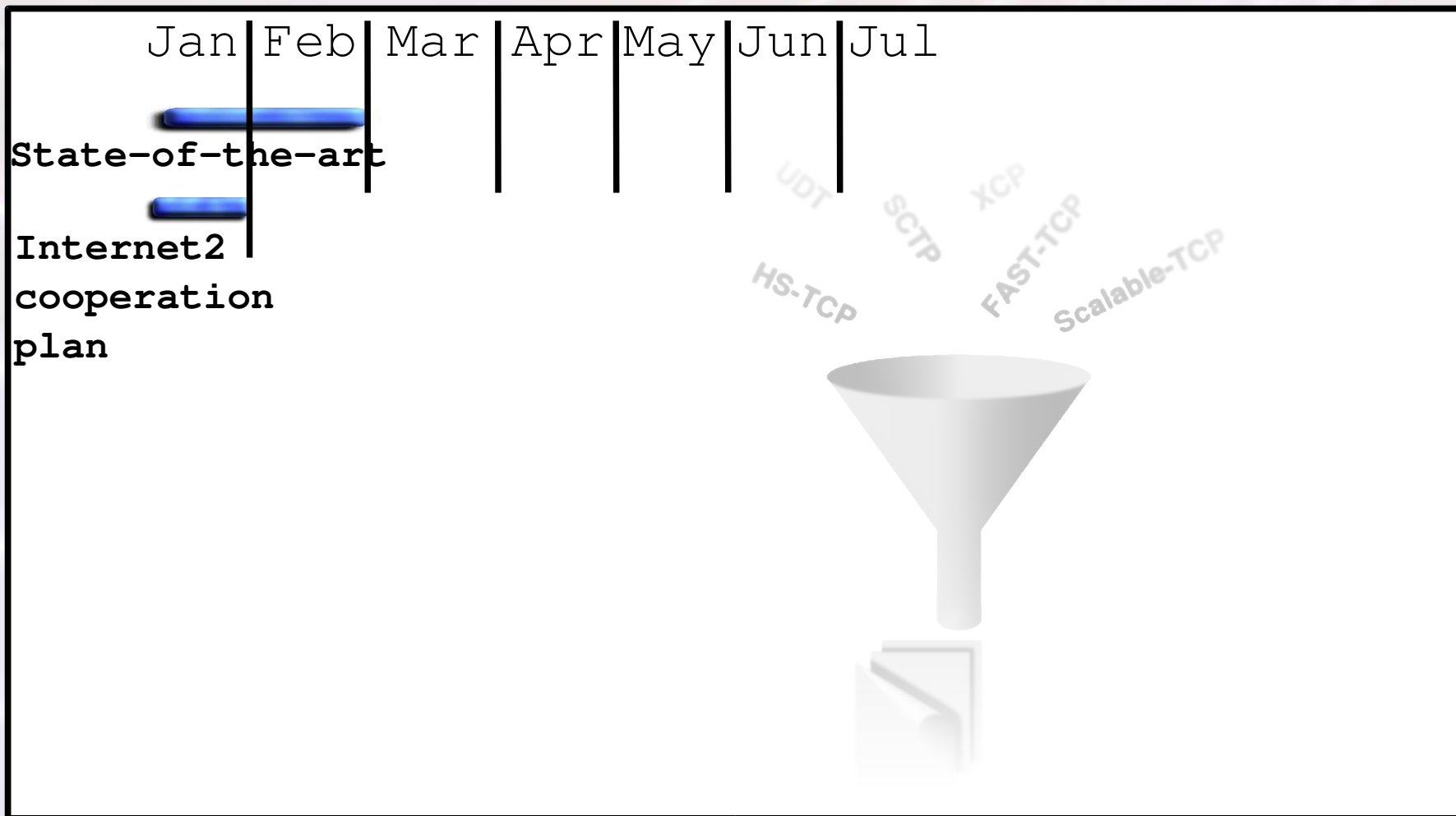
bulk transfer protocol

- Timetable
 - Design and requirements - by the end of January
 - Prototype - by the end of April
 - Working tool - 3rd quarter of 2005
 - Release - another ½ a year
- Contact person:
 - Stanislav Shalunov
shalunov@internet2.edu

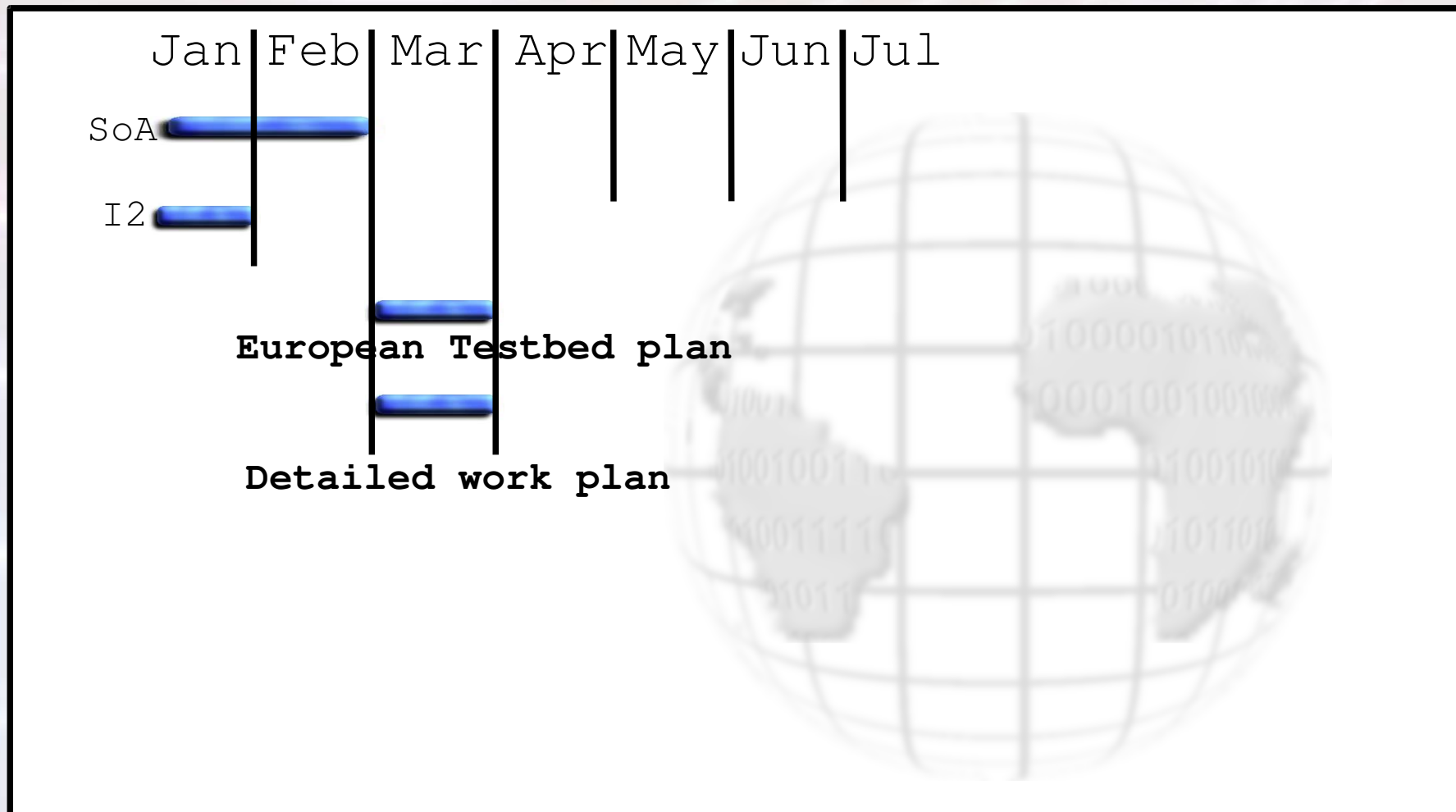
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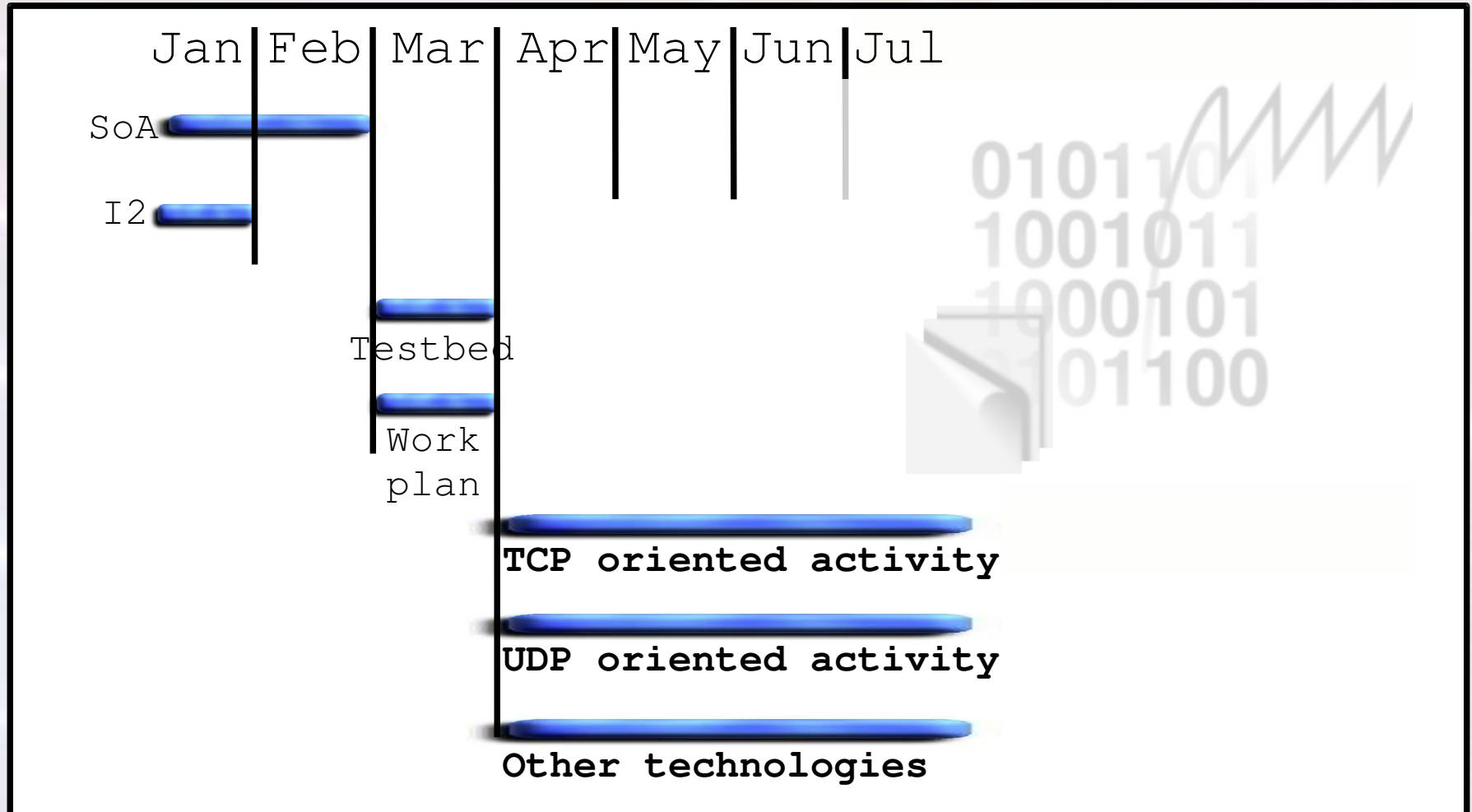
General activity plan



General activity plan



General activity plan



The End

Thank you for your attention.

Questions?