##### ASTA project – Short Phase Report

# Application Description:

The advanced speed test application (from now on – ASTA) is a client application that allows the user to test the network connection with advanced options / parameters and retrieve results for later analysis.   
This application is aimed to an experienced users with knowledge on communication protocols.  
It will be able to supply special information about the connection and data traffic that is being transferred between the application and the chosen server.

# Phase 2 Goal:

Develop download and upload task mechanism with GUI (online graph) that will run a data traffic task.

# Development on this phase:

* Test Details Screen: designed a screen that is aimed for inserting test parameters.
* Difficulties:
* Couldn’t change phone connectivity settings – after some research I realized that it isn’t possible to change network type from android application – android block this option for security reasons.  
  in order to face this challenge, I implemented a mechanism that validates that the user chose the correct network type.   
  if user tried to test wify but his device settings are cellular network
* Crashes – in download / upload task
* Graph Stuck
* Udp test is problematic
* We have to supply a udp server application.
* The basic udp protocol does not support reliability – this need to be implemented in both sides – there should be common mechanism between 2 sides
* It won’t be plug and play – one should install server app in some server
* No one will install some “unknowen” application in it’s server.. it’s not usable..
* What are the right parameters for udp test ? should we send lost packets again ?