

# Fast-FMS: Fast Multimedia Across 3G Mobile Networks

Gustavo Marfia, Daniela Maniezzo, Giovanni Pau  
UCLA Computer Science Department  
E-mail: {gmarfia|maniezzo|gpau}@cs.ucla.edu

## Abstract

*Fast-FMS is a new network protocol designed to support fast and effective multimedia delivery in 3G networks. In particular, Fast-FMS provides a reliable session between two mobile customers that want to transmit multimedia and data while on a voice conversation. The protocol leverages the multi-RAB feature of 2.5+ cellular networks to provide a new almost-real-time class of services that fill the gap between the costly circuit-switched video-call service and the basic services based on MMS.*

## 1. Fast-FMS Description

Fast-FMS is an enabling technology, developed by the Network Research Lab at the UCLA Computer Science Department. It is aimed at complementing and/or substituting the current Multimedia Messaging Systems. In particular, Fast-FMS is designed to provide a new class of value added services suitable to fill the gap between the essential features offered by Voice Call/MMS and the world class Video-Call service. Fast-FMS is available in the 2.5G+ cellular systems.

Our cutting-edge technology allows fast exchange of messages between mobile terminals, empowering a new generation of services suitable for both packet switched and multi-RAB scenarios.

The user will experience a completion time from twice to more than ten times shorter compared to the current state of the art when sending pictures, small

video clips and any type of files over the wireless connection (2.5G+ systems).

A mobile operator and/or an Internet Service Provider can distribute this technology directly to the end user as a value added application, or as an API to third party developers. The system has been designed for the most common platforms on the market.

Fast-FMS enables a wide spectrum of value added services while keeping a scalable, easy, and cost effective deployment.

## 2. Demo Set Up

We will show the prototype of Fast-FMS to the demo attendees and let them try our Fast-FMS enabled terminal. In particular, the demo will consist in a couple of Fast-FMS enabled EDGE/3G terminals that will exchange pictures, short videos and even enable the remote control of Power Point presentations while on a voice call in a multi-RAB fashion.

This scenario will be compared with the current MMS technology to show how Fast FMS can perform up to 10 times better.

## 3. Demo Requirements

We will need just a table, 1 power outlet, and the cellular network coverage. During the demo we will also show 1 explanatory poster and distribute a 1 page explanatory flyer that is also attached to this page.