M-PARKING scenarios:

'dual': Park meters continue to function as they are, no infrastructure upgrade is needed. Users with coins pay at the machines and place the payment slip in their car.
Users who want to pay by mPayment send an sms with the car's registration number to a predetermined number shown on the park meter. They can also pay for more time if their meeting or errand goes on longer than expected without returning to their car.

Wardens check coin-paid cars the regular way. Cars without an apparent slip are checked against a database using a device carried by wardens. These devices can be either ruggedised wireless PDAs or java phones depending on the implementation scenario.

The system can be also programmed to send a text message when the parking time is about to expire. Payment is taken directly from the driver's mobile telephony account (or m-wallet prepaid account).

Positive for «□□□□□» and users: remote recharge is possible. Low cost of infrastructure upgrade: no ATSB needed, just get PDAs/javaphones for wardens.
Negative: Wardens have to be retrained. Users and wardens could be confused by 'dual' system.

'advanced': All park meters are upgraded to 'keyboard' operation. All users have to introduce registration numbers or 'parking space id' (assuming parking spaces are numbered), whether by park meter keyboard or in sms text. Otherwise system identical to 'dual' mode for sms users.

Positive for «Δήμος»., wardens and users: unified system, common for all users.
Negative for «Δήμος»: have to invest in park meter keyboards, PDAs/javaphones, warden retraining and possibly park space ids.

Our proposal to a potential customer….

After discussions with our development team we have settled on the following scenario:

'm-paid Parking only':

1) user calls 090-type number [last two digits identifying minutes to bill or amount], enters parking space number [2 digits] then '#' then licence plate number [5 digits] and hangs up.
2) Fastlink IVR server bills user for xx minutes, sends sms confirmation/receipt with amount charged
3) Fatslink sends by XML (over HTTP) to mParking Server {mPS} message: <xx (minutes), yy (parking space), zzzzz (licence plate), nnnnnnnnn (mobile subscriber number)>
4) mPS updates database
5) traffic warden logs into the mParking server over GPRS on his GPRS-PDA
6) he sees (in real time) the situation of the street he is checking. If a place is not paid for he issues ticket.

Please find below a conceptual 'screen shot' of what the traffic warden will see on their GPRS-PDA.

Also:
A) 'administration platform': Parking space operator (ALO) can check transactions logged on server using web-based interface as well as create 'user-profiles' for new traffic wardens.

B) 'Expiry time notification by SMS': 10 minutes before expiry of paid time mPS sends an [XML/HTTP] message <nnnnnnnn has 10 minutes left on parking space yy> to FASTLINK server SMSC which forwards it to user 'nnnnnnnn'.