Comments for EMS (Enhanced Messaging Service) Concept (tdoc T2-00100) and Technical Realisation Problems of the Service

Source: NOKIA

Introduction

This contribution contains comments related to the ESM concept, what are the problems with different types of terminals and how the service should be enhanced. Nokia wants to point out that ESM concept useful service as such, but it has been developed quite in a hurry. To make the service more consistent, the development of the ESM must continue in TSG-T2 to overcome the issues outlined.

Specific Comments

Sounds: The proposed sound elements are defined to be played after a specific instant. This

is very difficult to realise since there are terminals that could show the whole SM instantly. If the message has several sounds included, how should the sounds be

played?

Pictures: The concept should allow for scalable pictures. For this, a specific picture protocol

or format should be used, this picture protocol/format should also support animation. There should be no difference for representing either picture or animation, the picture protocol/format should support both. Also colour pictures

should be supported.

Animations: The animations should be supported by the same picture protocol/format as the

pictures are represented in. The picture itself should have the information whether it

is an animation or a picture.

Predefined: There should not be any predefined sounds or animations. The sound and picture

protocol/format should cover all the needs, the pictures and sounds should always

come over-the-air.

Text Formatting: The text formatting has a problem with alignment. The alignment of the text has

always to be started from anew line, it needs to be ended by a line feed, it can't be started only from a specific character and be applicable for some amount of characters. The alignment must be applicable for whole line. Different terminals will have different amount of characters per line, thus the text to be aligned must be

started and ended to a line feed.

ESM Protocol: The problem with ESM protocol is with terminals that don't support SM

concatenation or user data header formats. Also the formatting part of ESM is mixed with the message text parts in one SM segment. This leads to complex

implementation and inefficient usage of SM capacity.

Proposals for making the ESM Service a better quality service

Sounds: Only one sound per SM should be used to overcome the problems of multiple

sound presentation in different type of terminals. The sound should be played when

user opens the SM.

Pictures: A specific picture format/protocol should be used to allow scalable size pictures,

colour and animations. Example of such protocol/formats exits.

Animations: The picture protocol should support animations.

Predefined: Predefined sounds and animations should not be supported.

Text Formatting: The alignment should always start and end to a line feed.

ESM Protocol: The ESM protocol should be changed so that there should be a separate formatting

part (format information and media elements) and the SM part (text part). The formatting part could contain all the media elements and indication of the position of these elements in the SM part (text), and it could contain several concatenated short messages. The actual SM part (text) should be a separate short message(s) and there should be a reference tying the SM to the appropriate formatting part.

Nokia Recommendation

Nokia recommends that the ESM development will continue in TSG-T2 in order to get a workable and implementable ESM service for GSM and 3GPP.