

Cell Broadcast System Factsheet



Muslim Prayer Service

The service

The Muslim Prayer service is an information service on mobile phones to Muslim users based on cell broadcast technology. It provides valuable information to Muslim mobile users on prayer times and prayer direction. It also provides a business opportunity to mobile operators; to differentiate from competitors, increase network traffic and raise awareness on other value added services.

Background

One of the most important duties for every Muslim is the execution of the five daily prayers (Salat):

- The evening prayer (salat al-maghrib)
- The night prayer (salat al-'isha')
- The morning prayer (salat al-fajr)
- The noon prayer (salat al-zuhr)
- The afternoon prayer (salat al-'asr)

Every prayer has to be done within a certain period of the day or night, depending of the position of the sun above or below the horizon. Although the Muslim is free to perform the prayer routine at any moment within a given period, it is preferable to pray at the beginning of a period. Also important is the fact that a Muslim should face towards "Mecca" as the centre of Islamic faith; therefore, the correct direction (Qiblah) is important as well. Besides the 5 daily prayers, a number of extra prayers exist for special occasions, e.g. Ramadan.

For a Muslim who is travelling, it may be troublesome to determine the right moment and Qiblah, because both may vary per area. For Muslim mobile users, the prayer service may be helpful.

The solution

Using cell broadcast technology, an information service is possible that signals Muslims about the start of the prayer and

the Qiblah, according area specific characteristics. During the prayer period, the information is repeated until the "forbidden time" (*waqt al-tahrim*); after this period it is not possible to complete the prayer in time. The service is set-up with the following steps:

1. Determine the various areas within the PLMN with different prayer schedule or Qiblah.
2. Establish per area a prayer schedule and determine the Qiblah. (This information can easily be derived from the web and/or a dedicated tool (see also references))
3. Islamic authorities have to validate this information on correctness.
4. Feed the information into the CBS (e.g. via a dedicated application).
5. The CBS broadcasts the information to the Muslim mobile users, according the area specific schedule.
6. The user receives the broadcast message after the activation of the Muslim Prayer Service channel.

With this service it is possible to increase revenues; via: attracting roaming Muslim users, extra phone-calls, SMS and WAP-sessions to Muslim organizations, attract users to premium services. To achieve this, the content has to be enriched with additional information like: "nearest Mosque", Muslim related service numbers, WAP-links, etc. Also extra CB-messages can be put into the CB-channel, e.g. with references to premium services.

The Muslim prayer service is realized with the elements shown in the figure below. The open interfaces of our unique CBS product, based upon XML and ASN.1, enable easy integration of the prayer service application as a dedicated cell broadcast entry tool.

For more information: see www.on2many.eu

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Key benefits:

- Value added service to large group of users.
- Increase of network traffic, as a response to additional information
- Cost-efficient because of standard CBS-functionality.
- Attract roaming users.

Important issues and conditions:

- Acision recommends using broadcast channel **083** for Islamic Information.
- Accurate Cell (BTS) co-ordinates have to be stored into the CBC for area calculation.

- Publicity campaign is needed to inform users on how to activate the Muslim Prayer Service.
- Prayer schedules have to be validated per area by Islamic authorities.

References:

- The Prophet's prayer described:
http://www.usc.edu/dept/MSA/fundamentals/pillars/prayer/albaani/prayer_1.html
- Muslim Prayer Times:
<http://www.qibla.org/>

