Location-based services: Technology and applications

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Location-based services are enabled by a technology, which allows to localize mobile phone end-user to propose targeted services. Today the main French operators (SFR, Telecom Bouygues, Orange) propose these types of services. There are several location technologies:

- CellId: bases on mobile networks cells (location precision of 500m in town and up to 2.5 km in countryside but accessible on all the mobile phones). Around the cellId-based technology, other technologies allow to strengthen the precision of the location (for example the triangulation);
- "Enhanced Assisted" GPS: location by satellites, associated with correction data, for a precision from 5 to 20 meters. This type of location requires nevertheless to be equipped with a mobile phone supporting the assisted GPS technology. These location technologies are offered on platforms integrated into operators’ networks, which offer to the subscribers, through the management of their authorizations, to be localized, a respect of their private life is the main requirement for the development of this type of services.

The applications proposed today by the operators cover various domains:
- localized parental control: allows parents to know where their children; are systems of tracking allow to make sure for example that a child will not go out of an established route. An example of this type of service is OOTAY, offered by most of the operators. This type of application can also address old persons who have difficulties finding a way. They can be localized by close relations or localize themselves;
- navigation;
- management of car fleets or the other materials through equipments provided with SIM cards;
- convenience services: allow the subscribers to find services near the place where they are: pharmacy, gas station, cinema etc.;
- geomarketing: access to advertisements or promotional operations near the location etc.