Location Inter-operability Forum (LIF)

Global standard bodies and specification organizations are in the process of defining and standardizing capabilities in the wireless networks for determining and delivering the geographic location of wireless terminals and devices. These capabilities are quickly being recognized as enablers of new revenue, personalization, safety and convenience services for consumers, network operators, and service providers worldwide.

In order for these services to be widely deployed and accepted by consumers worldwide, the need for a simple, ubiquitous, and inter-operable location services solution that is capable of determining and delivering the location of mobile devices across the different wireless network boundaries becomes crucial.

Most of currently marketed solutions address specific wireless technologies and short term market requirements and lack inter-operability, simplicity, long term evolution paths and may not be supported by major manufacturers and operators. Some issues to consider are:

- How to ensure end user privacy and location information security
- How to locate legacy phones (with no existing positioning capability)
- How to offer location services to roaming users (both visitors and own customers)
- How to support applications developed by various entities such as in house, 3rd party developers, and service providers
- Availability of location capable terminals
- Interoperability of equipment and applications provided by multiple vendors
- Provisioning, billing and revenue sharing models

These issues are especially urgent to international operators operating multiple networks, with possibly different standards (e.g. GSM&IS-136 and GSM&IS-95), or to any operator with 3G plans and licenses.

In this situation there is a need to establish a global forum to address the complexity and multiplicity of current solutions and market situation. The forum should define and promote an inter-operable location services solution that is open, simple, and secure. This solution allows user appliances and internet-based applications to obtain location information from the wireless networks independent of their air interfaces and positioning methods.

With this purpose in mind, Motorola, Nokia and Ericsson have taken the initiative to establish the Location Inter-operability Forum (LIF). LIF's purpose is to define, and promote -through the global standard bodies and specification organizations - a common and ubiquitous location services solution. Such a solution will:

1. Define a simple and secure access method that allows user appliances and Internet applications to access location information from the wireless networks irrespective of their underlying air interface technologies and positioning methods.

2. Promote a family of standards-based location determination methods and their supporting architectures, that are based on CellSector-ID, Cell-ID and Timing Advance, E-OTD (GSM), AFLT (IS-95), and Assisted-GPS.

3. Work with industry experts and organizations to define/adopt common solutions that facilitate billing and revenue sharing of location services and applications in multi-network, multi-vendor and multi-service environments.

4. Work with industry experts and organizations to define/adopt common solutions that facilitate provisioning of location services and applications in a multi-network, multi-vendor and multi-service environments.

5. Establish a framework for contributing to the global standard bodies and specification organizations to define common methods and procedures for the testing and verification of the LIF-recommended access method and positioning technologies.

LIF members represent a mix of network operators, equipment manufacturers, and service providers responsible for deploying equipment utilizing this solution. Its members will define this solution and submit it to the working standards groups. The members will then support the solution defined in LIF in the appropriate existing global standard bodies and specification organizations and in the deployment of their products and systems.