Mobile Phone Indoor Positioning Systems (IPS) and Real Time Locating Systems (RTLS) 2014-2024

Description: The term Indoor Positioning Systems (IPS) primarily concerns location-based services on mobile phones where GPS does not work. The term Real Time Locating Systems (RTLS) primarily concerns locating people and things at a distance, securely, using second generation RFID. The subjects are converging with Apple, Samsung, Google, Nokia, Microsoft, Hewlett Packard and IBM clashing for the tens of billions of dollars of business that is emerging. The first $0.5 billion order has been landed. This subject heavily involves short range communications notably WiFi and Bluetooth and inertial navigation and advanced RFID as it progresses to determining 3D position including orientation and line of travel.

Emergency services, healthcare, retailing, manufacturing, logistics and many other industries will be transformed by what is becoming possible.

The winners in making and operating mobile phones will offer the most compelling new functionality, IPS being a major enabler. The winners in making, integrating and operating RTLS will reduce cost and improve usefulness, not least to encompass mobile phones and other mobile computing. The world's largest companies are locking horns on this.

The topics of IPS and RTLS embrace a value chain from research and consultancy to software, services, hardware, integration and facilities management. Mobile phone app developers and value added enhancements plus ecosystems of mobile phones, web services and more are also involved.

Most of the development and use is in the USA but with other territories racing to catch up. For example, the new Indoor Location Alliance came from Europe but has global players and companies, such as Samsung in East Asia, and is taking an exceptionally broad view from new phone design to RTLS in smart cities. Siemens in Europe and several Japanese and US companies seamlessly integrate GPS outdoor navigation and services with IPS and RTLS.

This report consists entirely of evidence-based analysis following seven years of conferences, masterclasses and reports on the subject produced by the PhD level analysts and team.

The main features of the report, which is continuously updated, are the following:

- Ten year forecast of the RTLS market 2014-2024, platform hardware vs system integration/services.
- Full explanation of what IPS and RTLS are and how these technologies are evolving and converging, with detailed, original graphs and diagrams, largest orders landed and lessons arising. Threats, opportunities and company strategies are revealed.
- Comparison of 105 organisations in the IPS/RTLS value chain by country, basic measuring principle, standards, frequencies, protocol, range, accuracy, applications targeted and background information. Pie charts and graphs give analysis by parameter.
- Comparison of 74 case studies of RTLS with many pie charts presenting the lessons arising.
- Detailed original interviews carried out from mid 2013 with important organisations in this space.
- Glossary of the challenging jargon, which is different between IPS and RTLS yet often refers to the same or similar things.

Contents:

1. EXECUTIVE SUMMARY AND CONCLUSIONS
   1.1. Indoor Positioning Systems
   1.2. Real Time Locating Systems
   1.3. RTLS takes off
   1.4. More advanced forms
   1.5. Market size 2013-2024
   1.6. The need
   1.7. RTLS is mainly about healthcare
1.8. RTLS mainly gets used in the USA
1.9. IPS and RTLS mainly gets developed and made in the USA
1.10. The link between IPS and RTLS
1.11. Commonality of interest is only just beginning
1.12. IPS and RTLS are almost all about large buildings
1.13. Ranking of frequencies by popularity
1.14. ZigBee
1.15. The unique attraction of WiFi
1.16. Basic measuring principle - relative popularity

2. INTRODUCTION
2.1. RTLS
2.1.1. Hospitals
2.1.2. Very rapid paybacks in healthcare
2.1.3. Samsung objectives
2.2. IPS
2.2.1. In-Location Alliance
2.3. Ranges
2.4. Second generation RFID
2.4.1. Principles of locating using RTLS and IPS
2.4.2. Choice of infrastructure
2.5. No infrastructure
2.5.1. Inertial/ dead reckoning measurements
2.5.2. Single beam RSSI
2.5.3. Enhanced infrastructure
2.5.4. Dedicated infrastructure
2.5.5. Trend for infrastructure
2.6. Choices of signal interpretation to find position
2.6.1. Angle of Arrival AOA
2.6.2. GPS/ GLONASS trilateration
2.6.3. GSM/ GPRS triangulation etc.
2.6.4. VLF including Near Field Electromagnetic Ranging NFER
2.6.5. Passive RFID tags with enhanced interrogation
2.6.6. Received Signal Strength Indication RSSI
2.6.7. Time Difference of Arrival TDOA
2.6.8. Time of Arrival TOA
2.6.9. Wireless Sensor Networks
2.6.10. Zonal
2.6.11. RFID evolves to RTLS and WSN
2.6.12. RFID evolves to encompass location and positioning
2.7. Applications, compromises and value chain
2.7.1. Leading applications of RTLS
2.7.2. Technology compromises
2.7.3. Pseudolites
2.7.4. Coin sized solar powered GPS tracking device
2.8. Location Detection Systems and WSN

3. MANUFACTURERS, SERVICE PROVIDERS AND DEVELOPERS IN THE IPS AND RTLS VALUE CHAINS - UP TO NINE PARAMETERS AND COMMENTARY FOR 104 ORGANISATIONS

4. CASE STUDIES OF IPS AND RTLS IN ACTION
4.1. Advocate Good Shepherd Hospital USA
4.2. Alexandra Hospital/ Singapore National University Hospital, staff, visitors and patients, Singapore
4.3. Alton Memory Care USA
4.4. AM General Corporation USA
4.5. Aobaku schoolchildren, Japan
4.6. Apollo Hospitals Chennai India
4.7. AWAREA personalised marketing/ advertising, guidance for the disabled, USA
4.8. Beth Israel Deaconess Medical Center equipment USA
4.9. Birmingham Heartlands and Solihull NHS Trust patients UK
4.10. BMW vehicles Germany, UK, South Africa
4.11. Boeing, item level, USA
4.12. Brigham & Women's Hospital USA
4.13. Broekman Group The Netherlands
4.14. Bon Secours Health System, equipment, USA
4.15. BP USA
4.16. Borgess Medical Center patients USA
4.17. Carolinas Healthcare USA
4.18. Changgen Memorial Hospital patients Taiwan
4.19. Chelopech mine Bulgaria
4.20. City halls Japan
4.21. Dow Chemical USA
4.22. E.S.E.G. Euro Security Group, Germany
4.23. Family Housing UK
4.24. Felixstowe Dock and Rail Company vehicles UK
4.25. Ford Van Dyke plant work in progress and finished vehicles USA
4.26. Friedrich von Canitz school Germany
4.27. Hospital patients Israel
4.28. Holy Name Hospital USA
4.29. Home of the Innocents USA
4.30. IBS Japan
4.31. Inco Mine Canada
4.32. Jackson Memorial; Hospital assets USA
4.33. John Deere USA
4.34. Josef-Ecker Foundation Germany
4.35. King Hamad University Hospital Bahrain
4.36. Klinikum Saarbrucken Hospital patients Germany
4.37. The Lasting Hope Recovery Center
4.38. Legacy Salmon Creek Hospital equipment USA
4.39. Lleida Alguare Airport Spain
4.40. Massachusetts General Hospital patients and assets USA
4.41. Marion Correctional Treatment center inmates USA
4.42. Mercy Hospital USA
4.43. Metrotown Mall security Canada
4.44. Midwest College of Oriental Medicine USA
4.45. MKWE farming Germany
4.46. Nagoya Ekisaikai Hospital Japan
4.47. Nottingham University Hospitals NHS Trust assets UK
4.48. NYK Logistics, tracking containers, USA
4.49. Levinoff-Colbex Canada
4.50. Ohio State University Medical Center, USA
4.51. One Housing UK
4.52. Ortrander Eisenhütte Germany
4.53. Palmetto Health USA
4.54. PINC Solutions USA
4.55. Robert Wood Johnson University Hospital USA
4.56. Solstice Medical USA
4.57. Sosteri Finland
4.58. Southeast Alabama medical Center USA
4.59. University Hospital of Innsbruck Austria
4.60. Washington Hospital Center, patients and assets, USA
4.61. Presbyterian Hospital patients USA
4.62. Purple Property Shop UK
4.63. Singapore PSA Singapore
4.64. Toyota USA
4.65. Tung Yuan Hospital in Hsinchu, patients Taiwan
4.66. University of California San Francisco Medical Center USA
4.67. University of Michigan Health System USA
4.68. Vale of Aylesbury Housing UK
4.69. Vanderbilt Children's Hospital, assets, USA
4.70. Washington Hospital Center, patients and assets, USA
4.71. Werribee Mercy Hospital, patient tracking, Australia
4.72. Volkswagen, Germany
4.73. Wirral Hospital UK
4.74. Yanzhou Mining Group vehicle tracking China
4.75. Vale of Aylesbury Housing, UK
4.76. Wolftank Germany

5. COMPANY INTERVIEWS
5.1. BeSpoon
5.2. CSR (formerly Cambridge Silicon Radio)
5.3. Ekahau
5.4. Essensium NV
5.5. In-Location Alliance
5.6. Redpine Signals
5.7. Ubisense

APPENDIX 1: GLOSSARY
APPENDIX 2: IN-LOCATION ALLIANCE INTRODUCTION

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