



2G, 3G Network Planning and Optimization...

Экономия бензина

<http://depositfiles.com/files/zsxl7kqoc>

Tak.ru

Оплаченная Реклама:

- Icq
- НТВ+ по доступной цене. Бесплатный тест!
- SurfSitMoney (jetswap) рэфбек от 120% до 200%
- SurfSitMoney (jetswap) рэфбек от 120% до 200%
- Зобачев Жлобин
- Дипломные работы
- CARscore.ru: автомобильный журнал
- Наш Родной Малый Седяк
- группа континент
- Plea

Archives

▼ 2009 (56)

► Октябрь (15)

▼ Сентябрь (41)

- 3.8 Network Capacity Comparison For the comparis...
- 3.7 Multiple Reuse Pattern Technology3.7.1 Basic...
- 3.6 Concentric Cell Technology 3.6.1 Concept I...
- 3.5 Aggressive Frequency Reuse Technology 3.5.1 ...
- 3.4 Normal Frequency Reuse Technology 3.4.1 C...
- 3.3 Frequency Planning Principle Generally, when ...
- 3.2 Frequency Division and CI Requirement 3.2.1 ...
- 3 GSM Frequency Planning 3.1 Overview Frequency ...
- 2.13 Conclusion Network planning is the foundatio...
- 2.12 Repeater Planning 2.12.1 Application Backg...
- 2.11 Tunnel Coverage 2.11.1 Characteristic of T...
- 2.10 Design of Indoor Coverage System2.10.1 Ch...
- 2.9 Dual-Band Network Design 2.9.1 Necessity for...
- 2.8 Location Area Design 2.8.1 Definition of Loc...
- 2.7 Design of Base Station Address 2.7.1 Address d...
- 2.6 Base Station Number Decision After traffic an...
- 2.5 Traffic Analysis 2.5.1 Traffic Prediction an...
- 2.4 Network Structure Analysis When considering t...
- 2.3 Coverage Analysis 2.3.1 Area Division I. Typ...**
- 2.2 Planning Foundation 2.2.1 Coverage and Capacit...
- 2 GSM Radio Network Planning 2.1 Overview The de...
- 1.17 CBS Cell Broadcast Service (CBS) is similar ...
- 1.16 Call Re-Establishment 1.16.1 Introduction ...
- 1.15 HOAs a key technology in the cellular mobil...
- 1.14 MS Originated Call Flow 1.14.1 Enquiry Afte...
- 1.13 MS Originating Call Flow The MS needs to set ...
- 1.12 Location Update In GSM, the paging informati...
- 1.11 Authentication and Encryption GSM takes lots...
- 1.10 Immediate Assignment Procedure The purpose o...
- 1.9 Power Control 1.9.1 Power Control Overview P...
- 1.8 Discontinuous Reception and Discontinuous Tra...
- 1.7 Frequency Hopping With the ever growing traff...
- 1.6 Cell Selection and Re-Selection 1.6.1 Cell S...
- 1.5 System Information System information is sent ...
- 1.4 Timing advance Signal transmission has a dela...
- 1.3 Data Transmission Radio channel has totally d...
- 1.2 Multiple Access Technology and Logical Channel...
- 1 GSM Principles and Call Flow 1.1 GSM Frequency ...
- Radio Network Planning Optimization The objective ...
- History of GSM 1 GSM Development Mobile telecomm...

четверг, 3 сентября 2009 г.

2.3 Coverage Analysis

2.3.1 Area Division

I. Types of coverage area

The signal propagation models are applied in accordance with the propagation environments in areas of different types. The signal propagation models decide the design principles, network structures, grade of services and frequency reuse modes for the radio networks in coverage areas. In order to decide the cell coverage area, you can the radio coverage areas into the following four types:

- Big city
- Middle-sized city
- Small town
- Countryside

Big city

- Dense population
- Developed economy
- Large traffic
- Dense high buildings and mansions distributed in center areas
- Flourishing shopping centers

Middle-sized city

- Relatively dense population
- Relatively developed economy
- Relatively large traffic
- Dense buildings distributed in center areas
- Active and promising shopping centers

Small town

- Relative large population
- Promising economic development
- Moderate traffic
- Relative dense buildings distributed in center areas
- A certain scale of shopping centers but with great potentiality

Countryside

- Scattered population
- Developing economy
- Low traffic

In addition, you must consider the coverage of the areas at the intersections and various transport arteries, including:

- Express way
- National high way
- Provincial highway
- Railway
- Sea-route
- Roads in mountain areas

Generally, it is recommended to apply omni base stations in the countries plains and the areas with restricted landforms. In big cities, middle-sized cities, and along expressways, it is recommended to apply directional base stations.

II. Define the field strength at coverage area edges

When defining the field strength of the uplink edges of a service area, you must consider the factors:

Mobile station sensitivity -102 dBm

Fast fading protection 4 dB (3 dB for countryside)

Slow fading protection 8 dB (6 dB for countryside)

Noise (environmental noise and interfering noise) protection 5 dB

Remark:

- To ensure the indoor coverage in big and middle-sized cities, you can consider 15dB for the average penetration loss between buildings and consider adding 5dB to the protection margin.

- Generally, the propagation loss of GSM 1800MHz signals is 8 dB greater than that of the GSM 900MHz signals in average.

- Radio links have two directions, namely, uplink direction and downlink direction, and the coverage area is defined by the direction in which the signals are poor, so you must consider the uplink and downlink balance. Therefore, if you intend to plan an ideal network, you must make a good power control budget so that the uplink and downlink can be as balance as possible.

III. Define coverage probability

The definition of coverage probability varies with the coverage areas, and the coverage probability is gradually improved along with the construction of the network.

Generally, a call must be ensured to access the network at 90% of the places and 99% of the time within the coverage area.

- For the outdoor environment in big cities, the two ratios must be greater.

- For the areas in countryside, the two ratios can be lower.

- For transport arteries, different standards are applied, and the coverage probability can be defined in accordance with the types of the arteries.

Live

| | |
|----------|------------|
| | ↗ |
| ЭТО ДЕНЬ | 724 195 |
| ОТ ДНЕЙ | 136 47 |
| ВЧ МЕСЯ | 61 9 |
| СЕГОДНЯ | 61 9 |
| НА ПИНИИ | 53 4 |

Hit

0 0 6 1 4 1

Постоянные читатели

2.3.2 Radio Environment Survey

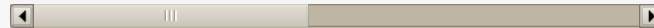
Through surveying radio propagation environments, you can get familiar with the overall landforms, estimate the rough antenna height, and select the proper radio propagation model, among which the radio propagation model helps you estimate the number of base station when predicting the coverage. If necessary, you must adjust the propagation model.

Автор: ourdot на 1:04

0 коммент.:

Отправить комментарий

Подпись комментария:



[Следующее](#)

[Главная страница](#)

[Предыдущее](#)

Подписаться на: [Комментарии к сообщению \(Atom\)](#)