

# ITU-R SG8 회의 기고서

RADIO COMMUNICATION  
STUDY GROUPS

Delayed Contribution  
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REPUBLIC KOREA

## PAIRWISE COMPARISONS IN RSEL CRITERIA

### 1. Introduction

In the light of current status on mobile communication in Korea, the following consensus on the ranking order of RSEL criteria was agreed as requested in ITU-R Doc. 8-1/TEMP/119. We have also scored each criterion as indicated in the guideline of Mr. Watanabe's mail.

#### 1) Pedestrian Environment

Handportability=System Complexity, Cost > Coverage=Quality=Spectral Efficiency > Flexibility > Commonality

6		3.3		1.82	1
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#### 2) Indoor Office Environment

Flexibility=Quality > Coverage=Spectral Efficiency > Handportability > System Complexity, Cost > Commonality

6	3.75	2.45	1.57	1
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#### 3) Vehicular Test Environment

Coverage=Spectral Efficiency > Flexibility=Quality > Handportability > System Complexity, Cost > Commonality

6	3.75	2.45	1.57	1
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#### 4) Satellite Environment

Spectral Efficiency > Coverage > Flexibility=Quality=Handportability > System Complexity, Cost > Commonality

6	3.75	2.45	1.57	1
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## 2. Comments on rank ordering of criteria

### 1) Handportability

This criterion is considered most important in the pedestrian environment because the system operating in this environment will have to compete with the existing cellular terminal and to penetrate mobile communication market. In other cases such as indoor office, vehicular test and satellite environment it is less important.

### 2) System complexity, Cost

In order to popularize wireless communication systems in Korea the cost/economy is also considered as the most important criteria. However, in the indoor office, vehicular test and satellite environment, it was considered less important.

### 3) Coverage

In the vehicular environment, the coverage is regarded as the most important. In other environments such as the pedestrian and indoor office environments, the cell size is small and hence the coverage becomes less important.

### 4) Quality

The quality criterion like the coverage is considered more important in most of the environments while the indoor office environment in which various data services are expected considers the quality the most important.

### 5) Spectral Efficiency

The spectral efficiency is the most important both in the satellite and vehicular environments wherein efficient use of the limited radio resource should be required and relatively large cells are likely to be used. In the case of the pedestrian environment, however, it is less important, and in the indoor office environment it is ranked more important because a large traffic of data service is expected.

### 6) Flexibility

Since various types of communications services will be needed in the indoor environment, flexibility

ty is the most important criterion and in the vehicular environment it is also the most important for network deployment. In the pedestrian and satellite environments, less important and medium important are ranked, respectively.

#### 7) Commonality

This criterion has not been well taken into account and hence is ranked, for the moment, the least important.