### Introduction
This unit serves as an introduction to the software “Radio Mobile”, a radio simulation tool for outdoor environments.

The focus of this unit should be on the understanding of the different building blocks of the software. Rather than understanding how to simulate one specific type of wireless infrastructure, the trainee should be able to apply the methodology to any kind of wireless system.

### Timing/duration
- Presentation (slides): 45min
- Group exercises (1h30)
- Presenting/discussing results (45min)

The unit should be presented after: *Link Budget Calculations and Budgeting and Planning*

### Content outline and main topics covered
- Presentation of Radio Mobile (10min)
- Radio Mobile building blocks (20min)
- Radio link budget analysis (10min)
- Coverage area (5min)

### Target audience
Anyone that aims to implement an outdoor radio link.

### Prerequisite skills/knowledge
None.

### Unit objectives/expected outcomes
- To understand how a simulation software can support a viability study.
- To give an introduction to the tool “Radio Mobile”.
- To provide the “basics” or “building blocks” of the software to speed up the learning process.
| Pre-workshop activities | The Radio Mobile software should be distributed to all trainees on CD's. As the cartography is very large in volume (340 GB in total), a subset (a part of a continent) can be chosen depending on nationalities of the trainees. Additionally, cartography for a larger area (a continent) can be downloaded to a portable harddrive and be distributed on site. |
| Notes on using exercises | The exercises should be done in groups of 2 trainees. Each group should be equipped with a PC/laptop running Radio Mobile. |
| Resources included with unit | Handout  
Slides  
Exercises  
Copyright  
Evaluation forms (x2) |
| Additional trainer resources |  |
| Equipment needed | • PC/Laptop  
• Radio mobile software  
The software can either be pre-installed, or the trainer can demonstrate how to install the software. |
| Comments | The trainer should be well familiar with the software. |