

MULTIMEDIA TRAINING KIT

Trainers' notes: Outdoor radio simulation

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Introduction	<p>This unit serves as an introduction to the software “Radio Mobile”, a radio simulation tool for outdoor environments.</p> <p>The focus of this unit should be on the understanding of the different building blocks of the software. Rather than understanding how to simulate <i>one specific type</i> of wireless infrastructure, the trainee should be able to apply the methodology to <i>any kind</i> of wireless system.</p>
Timing/duration	<p>Presentation (slides): 45min Group exercises (1h30) Presenting/discussing results (45min)</p> <p>The unit should be presented after: <i>Link Budget Calculations and Budgeting and Planning</i></p>
Content outline and main topics covered	<p>Presentation of Radio Mobile (10min) Radio Mobile building blocks (20min) Radio link budget analysis (10min) Coverage area (5min)</p>
Target audience	<p>Anyone that aims to implement an outdoor radio link.</p>
Prerequisite skills/knowledge	<p>None.</p>
Unit objectives/expected outcomes	<p>To understand how a simulation software can support a viability study .</p> <p>To give an introduction to the tool “Radio Mobile”.</p> <p>To provide the “basics” or “building blocks” of the software to speed up the learning process.</p>

Pre-workshop activities	<p>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.</p> <p>Additionally, cartography for a larger area (a continent) can be downloaded to a portable harddrive and be distributed on site.</p>
Notes on using exercises	<p>The exercises should be done in groups of 2 trainees. Each group should be equipped with a PC/laptop running Radio Mobile.</p>
Resources included with unit	<p>Handout Slides Exercises Copyright Evaluation forms (x2)</p>
Additional trainer resources	
Equipment needed	<ul style="list-style-type: none"> • PC/Laptop • Radio mobile software <p>The software can either be pre-installed, or the trainer can demonstrate how to install the software.</p>
Comments	<p>The trainer should be well familiar with the software.</p>