

## INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

**Terrain Analysis**

The success of any military operation depends on how well you, as the leader on the ground, have studied the terrain and planned for how weather and light will affect your soldiers and the enemy. You must be skilful in evaluating these effects on your own soldiers' ability to perform, but you must also analyse how the terrain, weather, and light will affect enemy troops, weapons, and tactics.

Terrain analysis is a key element of the *reconnaissance* step in the Army's troop leading procedures (TLP). It's also an essential element of the Intelligence Preparation of the Battlefield (IPB) process. IPB is a systematic and continuous process of analysing the enemy and the environment in a specific geographical area. IPB includes four steps:

- Define the battlefield environment
- Describe the battlefield's effects
- Evaluate the threat
- Determine threat courses of action (COA).

Terrain analysis can be very important even after a battle is over because combat action can significantly alter the terrain, requiring an update of the previous terrain analysis. Remember that the terrain is constantly changing.

SOURCE:

[http://www.mc.edu/rotc/files/8113/1471/9553/MSL\\_202\\_L03a\\_Intro\\_to\\_Terrain\\_Analysis.pdf](http://www.mc.edu/rotc/files/8113/1471/9553/MSL_202_L03a_Intro_to_Terrain_Analysis.pdf)

**Advice on terrain analysis**

From a military point of view the terrain analysis is composed of three main parts:

- ***the topographic description***: it is physical description of the area;
- ***terrain assessment***: military aspects resulting of the description above;
- ***military analysis***: this phase, which is determining for the tactical choices, cannot be performed without the accurate knowledge of the precise mission.

**1 TOPOGRAPHIC DESCRIPTION****1.1 Introduction**

- *geographic location of the described area*
- *reference maps and grids*

**1.2 General description**

The aim is to highlight the prominent topographic components (accurately described: height, elevation, width ...); this description is issued after having drawn the terrain skeleton.

- *crest lines (elevation of typical points)*
- *valley*
- *plateau*

### 1.3 Vegetation

- *forest coverage (percentage);*
- *marshes*
- *dessert areas*
- *vineyards, orchards...*

### 1.4 Population

- *habitat (disseminated or close)*
- *main cities (size)*
- *structure of build-up area (street, village.....)*

### 1.5 Avenues of approach

- *main roads including highways and the general orientation of the road net*
- *secondary roads*
- *main cross-roads*
- *tunnels*
- *bridges*
- *railways*
- *Airfields, ports*

### 1.6 Hydrography

- *main and secondary rivers (width)*
- *canals*

### 1.7 Miscellaneous

- *power lines*
- *factories*
- *storage sites.....*

## 2 TERRAIN ASSESSMENT

This phase consists of assessing the capabilities of the various services (Eng. ...) to perform missions in each area.

## 3 MILITARY ANALYSIS

To take in account the constraints of the terrain to perform the mission in order to make tactical choices and to define the role of subordinate units.

### **1. Describe the terrain using the phrases. (Appendix 1).**