



TIRAMISU








**Toolbox Implementation for Removal
of Anti-personnel Mines, Submunitions and Uxo**












TIRAMISU map symbols









This table shows the map symbols that were designed for T-REX and for T-IMS.

T-IMS includes IMSMA symbols, and notably symbols from the new set developed by the GICHD in 2015, in line with the IMAS 07.11 Land Release (<http://mwiki.gichd.org/IM/Symbology>).


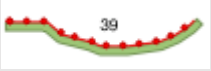
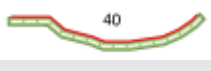




In T-REX, there is very little overlap with IMSMA symbols as the focus is on indirect evidence of the presence or absence of landmines (IMP: Indicators of Mine Presence; IMA: Indicators of Mine Absence). The symbols are presented in neutral black but colour, size, orientation, border thickness and border colour are automatically modified according to subtype and other specific parameters. The symbol library can be downloaded from <http://qrex.ulb.ac.be> for the Q-GIS implementation of T-REX.









| Geometry | Group | Type | Subtype | IMP IMA | T-REX | T-IMS |
|----------|--|---------|---------------------------------|------------|---|---|
| Point | Fortifications and other military features | Bunker | Not specified | IMP |  |  |
| Point | Fortifications and other military features | Bunker | Non combatant | IMP |  | |
| Point | Fortifications and other military features | Bunker | Firing position (not specified) | IMP |  | |
| Point | Fortifications and other military features | Bunker | Firing position (small arms) | IMP |  | |
| Point | Fortifications and other military features | Bunker | Firing position (light weapons) | IMP |  | |
| Point | Fortifications and other military features | Shelter | Not specified | IMP |  |  |
| Point | Fortifications and other military features | Shelter | Firing position (not specified) | IMP |  | |
| Point | Fortifications and other military features | Shelter | Firing position (small arms) | IMP |  | |








| | | | | | | |
|-------|--|------------|--|-----|---|---|
| Point | Fortifications and other military features | Shelter | Firing position (light weapons) | IMP |  | |
| Point | Fortifications and other military features | Shelter | Firing position (heavy weapons/vehicles) | IMP |  | |
| Point | Fortifications and other military features | Shelter | Housing facilities | IMP |  | |
| Point | Fortifications and other military features | Earth berm | Not specified | IMP |  |  |
| Point | Fortifications and other military features | Earth berm | Non combatant | IMP |  | |
| Point | Fortifications and other military features | Earth berm | Firing position (small arms) | IMP |  | |
| Point | Fortifications and other military features | Earth berm | Firing position (light weapons) | IMP |  | |
| Point | Fortifications and other military features | Earth berm | Firing position (heavy weapons/vehicles) | IMP |  | |
| Point | Fortifications and other military features | Foxhole | Not specified | IMP |  |  |













| | | | | | | |
|-------|--|-----------------------------|---|-----|---|----------|
| Point | Fortifications and other military features | Tank position | Not specified | IMP |  | |
| Point | Fortifications and other military features | Position of motorcycle unit | Not specified | IMP |  | |
| Point | Fortifications and other military features | Remnants of equipment | Not specified | IMP | E | E |
| Point | Fortifications and other military features | Remnants of equipment | Ammunition | IMP |  | |
| Point | Fortifications and other military features | Remnants of equipment | Mine packaging | IMP |  | |
| Point | Fortifications and other military features | Remnants of equipment | Vehicle | IMP |  | |
| Point | Fortifications and other military features | Remnants of equipment | Weapon | IMP |  | |
| Point | Fortifications and other military features | Remnants of equipment | Ammunition crate | IMP |  | |
| Point | Fortifications and other military features | Remnants of equipment | Logistics (tent, food tin, brasero, outfit, etc.) | IMP |  | |

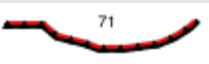

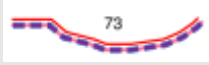
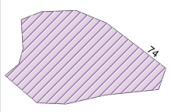





| | | | | | | |
|-------|--|------------------|-----------------------------------|-----|---|---|
| Point | Fortifications and other military features | Crater | Not specified | IMP |  |  |
| Point | Fortifications and other military features | Crater | Explosion during war | IMP |  | |
| Point | Fortifications and other military features | Crater | Destruction of mine/UXO after war | IMP |  | |
| Point | Fortifications and other military features | Warehouse | Not specified | IMP |  |  |
| Point | Fortifications and other military features | Warehouse | Ammunition and/or mines | IMP |  | |
| Point | Fortifications and other military features | Barracks | Housing facilities | IMP |  |  |
| Point | Fortifications and other military features | Heliport/Helipad | Not specified | IMP |  |  |
| Line | Fortifications and other military features | Trench | Not specified | IMP |  | |
| Line | Fortifications and other military features | Trench | Frontline | IMP |  | |













| | | | | | | |
|-------|--|---------------------------------|--|-----|---|--|
| Line | Fortifications and other military features | Trench | Communication | IMP |  | |
| Line | Fortifications and other military features | Embankment | Not specified | IMP |  | |
| Line | Fortifications and other military features | Embankment | Frontline | IMP |  | |
| Line | Fortifications and other military features | Embankment | Communication | IMP |  | |
| Line | Fortifications and other military features | Dirt track in military position | Not specified | IMP |  | |
| Line | Fortifications and other military features | Dirt track in military position | Access to fortification/ military feature | IMP |  | |
| Line | Fortifications and other military features | Road in military position | Not specified | IMP |  | |
| Line | Fortifications and other military features | Road in military position | Access to fortification/ military feature | IMP |  | |
| Point | Fortifications and other military features | Military inscription | Not specified | IMP |  | |







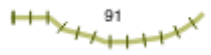



| | | | | | | |
|-------|--|-------------------------|---------------------------------|-----|---|--|
| Point | Fortifications and other military features | Military sign | Not specified | IMP |  | |
| Point | Fortifications and other military features | Military sign | Minefield limit ('MINE'/'МИНЕ') | IMP |  | |
| Point | Fortifications and other military features | UN position | Not specified | IMP |  | |
| Point | Fortifications and other military features | Mine accident | Not specified | IMP |  | |
| Point | Fortifications and other military features | Mine accident | Deminer casualty | IMP |  | |
| Point | Fortifications and other military features | Mine accident | Civilian casualty | IMP |  | |
| Point | Fortifications and other military features | Mine accident | Animal casualty | IMP |  | |
| Line | Fortifications and other military features | Obstacle line, AP mines | Not specified | IMP |  | |
| Line | Fortifications and other military features | Obstacle line, AT mines | Not specified | IMP |  | |



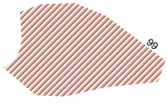
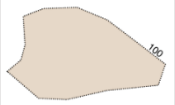
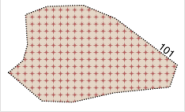
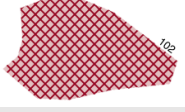



| | | | | | | |
|---------|---|--|--------------------|-----|---|---|
| Point | Fortifications and other military features | Other fortifications and military features | Not specified | IMP |  | |
| Line | Fortifications and other military features | Other fortifications and military features | Not specified | IMP |  | |
| Polygon | Fortifications and other military features | Other fortifications and military features | Not specified | IMP |  | |
| Point | Civilian features diverted for military use | House in good condition | Not specified | IMP |  | |
| Point | Civilian features diverted for military use | House in good condition | Housing facilities | IMP |  | |
| Point | Civilian features diverted for military use | House in good condition | Warehouse | IMP |  | |
| Point | Civilian features diverted for military use | Destroyed house | Not specified | IMP |  |  |
| Point | Civilian features diverted for military use | Destroyed house | Housing facilities | IMP |  | |
| Point | Civilian features diverted for military use | Destroyed house | Warehouse | IMP |  | |

| | | | | | | |
|-------|---|-----------------|------------------------------|-----|---|---|
| Point | Civilian features diverted for military use | Shepherd's hut | Not specified | IMP |  |  |
| Point | Civilian features diverted for military use | Shepherd's hut | Housing facilities | IMP |  | |
| Point | Civilian features diverted for military use | Shepherd's hut | Warehouse | IMP |  | |
| Point | Civilian features diverted for military use | Cabin | Not specified | IMP |  |  |
| Point | Civilian features diverted for military use | Cabin | Housing facilities | IMP |  | |
| Point | Civilian features diverted for military use | Cabin | Warehouse | IMP |  | |
| Point | Civilian features diverted for military use | Hunting lookout | Not specified | IMP |  |  |
| Point | Civilian features diverted for military use | Hunting lookout | Firing position (small arms) | IMP |  | |
| Line | Civilian features diverted for military use | Wall | Not specified | IMP |  | |

| | | | | | | |
|---------|---|---|------------------------------|-----|---|--|
| Line | Civilian features diverted for military use | Wall | Firing position (small arms) | IMP |  | |
| Point | Civilian features diverted for military use | Other civilian features diverted for military use | Not specified | IMP |  | |
| Line | Civilian features diverted for military use | Other civilian features diverted for military use | Not specified | IMP |  | |
| Polygon | Civilian features diverted for military use | Other civilian features diverted for military use | Not specified | IMP |  | |
| Point | Strategically important features | Bridge | Not specified | IMP |  | |
| Point | Strategically important features | Bridge | Destroyed bridge | |  | |
| Line | Strategically important features | Bridge | Not specified | |  | |
| Line | Strategically important features | Stream bank | Not specified | IMP |  | |
| Point | Strategically important features | Water tank | Not specified | IMP |  | |











| | | | | | | |
|-------|----------------------------------|------------------------------------|---------------|-----|---|---|
| Point | Strategically important features | Well | Not specified | IMP |  |  |
| Point | Strategically important features | Spring | Not specified | IMP |  |  |
| Point | Strategically important features | Ford | Not specified | IMP |  |  |
| Line | Strategically important features | Track, in use | Not specified | IMA |  | |
| Line | Strategically important features | Track, abandoned | Not specified | IMP |  | |
| Line | Strategically important features | Road, in use | Not specified | IMA |  | |
| Line | Strategically important features | Road, abandoned | Not specified | IMP |  | |
| Line | Strategically important features | Road with hairpin bends, in use | Not specified | IMA |  | |
| Line | Strategically important features | Road with hairpin bends, abandoned | Not specified | IMP |  | |


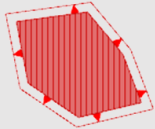

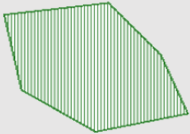
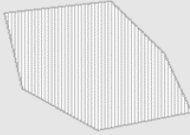




| | | | | | | |
|---------|----------------------------------|--|---------------------|-----|---|---|
| Line | Strategically important features | Narrow road section, in use | Not specified | IMA |  | |
| Line | Strategically important features | Narrow road section, abandoned | Not specified | IMP |  | |
| Point | Strategically important features | Road culvert | Not specified | IMP |  |  |
| Point | Strategically important features | Other strategically important features | Not specified | IMP |  | |
| Polygon | Strategically important features | Other strategically important features | Not specified | IMP |  | |
| Line | Terrain features | Gully | Not specified | IMP |  | |
| Line | Terrain features | Gully | Cover | IMP |  | |
| Line | Terrain features | Gully | Vehicle concealment | IMP |  | |
| Line | Terrain features | Ravine/gorge | Not specified | IMP |  | |










| | | | | | | |
|---------|------------------|--------------------|---------------|-----|---|--|
| Line | Terrain features | Ravine/gorge | Ambush site | IMP |  | |
| Polygon | Terrain features | Large depression | Not specified | IMA |  | |
| Polygon | Terrain features | Steep slope (>40°) | Not specified | IMA |  | |
| Polygon | Terrain features | Mountain pass | Not specified | IMP |  | |
| Polygon | Terrain features | Mountain pass | Ambush site | IMP |  | |
| Polygon | Terrain features | Precipice | Not specified | IMA |  | |
| Polygon | Terrain features | Hill top | Vantage point | IMP |  | |
| Polygon | Terrain features | Mountain top | Vantage point | IMP |  | |
| Line | Terrain features | Ridge | Vantage point | IMP |  | |




| | | | | | | |
|---------|------------------------------|------------------------------|---------------|-----|---|--|
| Polygon | Terrain features | Plateau | Vantage point | IMP |  | |
| Point | Terrain features | Other terrain features | Not specified | IMP |  | |
| Line | Terrain features | Other terrain features | Not specified | IMP |  | |
| Polygon | Terrain features | Other terrain features | Not specified | IMP |  | |
| Polygon | Land cover/Land use features | Cultivated field, in use | Not specified | IMA |  | |
| Polygon | Land cover/Land use features | Overgrown field, abandoned | Not specified | IMP |  | |
| Polygon | Land cover/Land use features | Pasture, in use | Not specified | IMA |  | |
| Polygon | Land cover/Land use features | Overgrown pasture, abandoned | Not specified | IMP |  | |
| Polygon | Land cover/Land use features | Managed forest, in use | Not specified | IMA |  | |

| | | | | | | |
|---------|------------------------------|------------------------------------|---------------|-----|---|---|
| Polygon | Land cover/Land use features | Managed forest, abandoned | Not specified | IMP |  | |
| Line | Land cover/Land use features | Forest edge (historical location) | Not specified | IMP |  | |
| Polygon | Land cover/Land use features | Forest glade (historical location) | Not specified | IMP |  | |
| Polygon | Land cover/Land use features | Overgrown meadow, abandoned | Not specified | IMP |  | |
| Polygon | Land cover/Land use features | Permanently flooded wetlands | Not specified | IMA |  | |
| Point | Land cover/Land use features | Other Land cover/Land use features | Not specified | IMP |  | |
| Line | Land cover/Land use features | Other Land cover/Land use features | Not specified | IMP |  | |
| Polygon | Land cover/Land use features | Other Land cover/Land use features | Not specified | IMP |  | |
| Point | Ordnances | Mine | AT mine | |  |  |

| | | | | | | |
|-------|-----------|------|-------------------|--|--|--|
| Point | Ordnances | Mine | AP mine | |  |  |
| Point | Ordnances | Mine | Not specified | | |  [With CORD we need a generic symbol for mine] |
| Point | Ordnances | UXO | UXO spot | |  |  |
| Point | Ordnances | UXO | UXO unknown | | |  |
| Point | Ordnances | UXO | UXO identified | | |  |
| Point | Ordnances | IED | IED | |  |  |
| Point | Ordnances | Mine | Naval mine ground | | |  |
| Point | Ordnances | Mine | Naval mine moored | | |  |

| | | | | | | |
|---------|------------|-----------|----------------------|--|---|---|
| Point | Ordnances | Torpedo | Not specified | | |  |
| Polygon | Activities | Areas | Minefield | | |  |
| Polygon | Activities | Areas | Dangerous area | | |  |
| Polygon | Activities | Areas | Cleared area | | |  |
| Polygon | Activities | Areas | Cancelled area | | |  |
| Point | Activities | Locations | Landmark | | |  |
| Point | Activities | Locations | Benchmark | | |  |
| Point | Activities | Locations | Area reference point | | |  |
| Point | Activities | Locations | Start point | |  | |

| | | | | | | |
|-------|------------|------------|------------------|--|---|---|
| Point | Activities | Locations | Turning point | |  | |
| Point | Activities | Locations | General position | | |  |
| Point | Activities | Locations | Flagpole | |  |  |
| Point | Activities | Attachment | Not specified | | |  test1 [The label is the filename without extension] |
| Point | Activities | Attachment | Image | | |  demining [Indication of the direction the image is taken at] |
| Point | Activities | Attachment | Close-up photo | |  | |
| Point | Activities | Attachment | Panorama photo | |  | |
| Point | Activities | Attachment | High angle photo | |  | |

| | | | | | | |
|-------|------------|------------|--------------------|--|---|--|
| Point | Activities | Attachment | Low angle photo | |  | |
| Point | Activities | Attachment | RPAS vertical view | |  | |
| Point | Activities | Attachment | RPAS oblique view | |  | |

