GLOSSARY

1G	First generation of wireless telephone technology (mobile telecommunications) refer as analog standard
2G	Second-generation wireless telephone technology.
3G	Third generation of mobile phone standards as set by the International Telecommunications Union (ITU)
3GPP	Third Generation Partnership Project
4G	Fourth generation of mobile telecommunications technology, succeeding 3G
ACP	Automatic Cell Planning
EIRP	Equivalent Isotropic Radiated Power
eNB	Evolved Node B
GA	Genetic Algorithm
GSM	Global System for Mobile Communications
GWO	Grey Wolf Optimizer
LTE	Long Term Evolution
MAPL	Maximum Allowable Path Loss
MCS	Modulation and Coding Scheme
NP-hard	Non-deterministic Polynomial-time hardness
PSO	Particle Swarm Optimization
QAM	Quadrature Amplitude Modulation
QoS	Quality of Service
QPSK	Quadrature Phase Shift Keying
RSSI	Received signal strength indicator
UMTS	Universal Mobile Telecommunication System

LIST OF SYMBOL

η	capacity threshold
$\rho_{s,i,j}\left(x_j, y_j\right)$	portion of intersection between surface covered by sector s of base station j and sub area i to the observed/intended surface
$\alpha_{s,i,j}\left(x_j, y_j\right)$	intersection area of the cell with observed area
$A_{s,j}$	Area of sector s of base station j
$\gamma_n(x,j)$	referrence point function
N_{ref}	number of reference points
τ	coverage threshold
α	variabel of coefficient vector |A|
T_{max}	maximum interation
$U_{cap}^{(l)}$	difference between the number of users successfully served by a base station with the number of users it should served
$U_{cov}^{(l)}$	fitness function manifest coverage if only constraint of capacity is fulfilled
$W^{(l)}$	matrices of 2x1 that contains of Cartesian coordinate of certain search agent
l	search agent
$x^{(l)}$	x position of search agent in cartesian
$y^{(l)}$	y position of search agent in cartesian
U^{α}	Fitness value of alfa wolf
U^{β}	Fitness value of beta wolf
U^{δ}	Fitness value of delta wolf
$W_{\alpha}^{(l)}$	position of alfa wolf
$W_{\beta}^{(l)}$	position of beta wolf
$W_{\delta}^{(l)}$	position of delta wolf