LIST OF SYMBOLS/ GLOSSARY

OFDM	Orthogonal Frequency Division Multiplexing
T_{FC}	Global decision of Fusion Center
H_0	Null Hypotheses or noise-only hypotheses
H_1	Alternate Hypotheses or signal-plus-noise hypotheses
IEEE	Institute of Electrical and Electronics Engineers
WiMAX	Worldwide Interoperability for Microwave Access
MAN	Metropolitan Area Network
LAN	Local Area Network
MBWA	Mobile Broadband Wireless Access
LTE	Long Term Evolution
3G	Third-Generation Technology
IFFT	Inverse Fast Fourier Transform
DFT	Discrete Fourier Transform
BPSK	Binary Phase-Shift keying
QPSK	Quadrature Phase-Shift keying
QAM	Quadrature Amplitude Modulation
ICI	Inter Carrier Interference
RF	Radio Frequency
IFI	Inter-Frame Interference
ISI	Inter-Symbol Interference
CR	Cognitive Radio
FDM	Frequency Division Multiplexing
SFN	Single Frequency Network
SNR	Signal-to-Noise Ratio
P_f or P_{fa}	Probability of False Alarm
P_d	Probability of Detection
P_m	Probability of Miss Detection
ROC	Receiver Operation Characteristic
LO	Local Oscillator
FCC	Federal Communications Commission
AWGN	Additive White Gaussian Noise
$y(k)$	Sample to be analyzed at each instant k
$n(k)$	Noise (not necessarily white Gaussian noise) of variance σ^2
$s(k)$	The signal the network wants to detect
CP	Cyclic Prefix
T_c	Number of samples corresponding to CP in an OFDM block
T_d	Number of samples corresponding to symbol length in an OFDM block
$s(t)$	The symbol of the transmitted OFDM frame
$w(t)$	Noise
$\rho(\tau)$	Autocorrelation coefficient
ρ_1	Autocorrelation coefficient for delays $\tau = \pm T_d$
σ_s^2	Power of signal
σ_w^2	Power of noise
M	Number of samples corresponding to total OFDM symbol
ρ_{ML}	Maximum likelihood estimate of ρ
ηl	Threshold of local detector
erfc	Complementary error function
LRT	Likelihood Ratio Test
LLRT	Log Likelihood Ratio Test
$T(\mathbf{D})$	Optimum fusion rule
J	J-Divergence