

PRIDA HCM4A Software Training

DRAFT PROGRAMME TRAINING ON THE HCM4A SOFTWARE 3 – 7 MARCH 2025 (ADDIS ABABA, ETHIOPIA)		
DAY 1: MONDAY 03 MARCH 2025		
TIME (EAT)	ACTIVITY	ACTION
08:00 – 09:00	Arrival and Registrations	
09:00 – 09:30	Welcome Remarks	
09:15 – 10:30	Recap of the HCM4A Administrative Training <ul style="list-style-type: none"> Recap of Cross-Border Frequency Coordination Main Texts of the HCM4A Agreement 	
10:15 – 10:30	GROUP PHOTO	
10:30 – 11:00	COFFEE BREAK	
11:00 – 12:30	Recap of the HCM4A Technical Procedures <ul style="list-style-type: none"> Annexes 1 - 11 	
12:30 – 14:00	LUNCH BREAK	
14:00 – 15:30	The HCM4A Technical Procedures <ul style="list-style-type: none"> Technical procedures 	
15:30 – 16:00	COFFEE BREAK	
16:00 – 17:30	The HCM4A Technical Procedures <ul style="list-style-type: none"> Technical procedures 	
	Q&A	
*****END OF DAY ONE*****		
DAY 2: TUESDAY 04 MARCH 2025		
08:30 – 09:00	Arrival and registration	
09:00 – 09:15	Opening Remarks	
09:15 – 10:30	The HCM and the HCM4A Agreements background <ul style="list-style-type: none"> The development of the HCM Agreement The development of the HCM4A Agreement The HCM4A Agreement short overview 	
10:30 – 11:00	COFFEE BREAK	
11:00 – 12:30	The HCM4A software development project <ul style="list-style-type: none"> The scope of the project The HCM software overview The HCM4A software current state The HCM4A software planned short-term enhancements Potential future development and integration 	
12:30 – 14:00	LUNCH BREAK	
14:00 – 15:30	The HCM4A software architecture and source code <ul style="list-style-type: none"> U++/C++ framework introduction 	

	<ul style="list-style-type: none"> • Structure of the calculation library for fixed service • Structure of the GUI software for fixed service • Structure of the calculation library for mobile service • Structure of the GUI software for mobile service • Differences and modifications compared to the HCM code 	
15:30 – 16:00	COFFEE BREAK	
16:00 – 17:30	<p>The HCM4A data and data formats</p> <ul style="list-style-type: none"> • Topographical and morphological data • Border polygons and borderlines • Mobile service exchange formats • Fixed service exchange format • SMS4DC database vs HCM4A formats • XSD (XML schema) for data formats validation 	
	Q&A	
*****END OF DAY 2*****		
DAY 3: WEDNESDAY 05 MARCH 2025		
08:30 – 09:00	Arrival and registration	
09:00 – 10:30	<p>The HCM4A fixed service coordination theory</p> <ul style="list-style-type: none"> • Interference calculations basics • Main input parameters and their interpretation • Passive repeaters as special case in the HCM4A Agreement • Single entry calculations and criteria • Overall calculation procedure 	
10:30 – 11:00	COFFEE BREAK	
11:00 – 12:30	<p>The HCM4A fixed service practical application</p> <ul style="list-style-type: none"> • Installation and setup of the software • Main elements of GUI • Practical single-entry calculations and reporting • Batch calculations • Potential use for national spectrum management • Future improvements for fixed service 	
12:30 – 14:00	LUNCH BREAK	
14:00 – 15:30	<p>The HCM4A mobile service (non-IMT) coordination theory</p> <ul style="list-style-type: none"> • Interference calculation basics • Cross border range concept • Borderline calculation basics • Main input parameters and their interpretation 	

	<ul style="list-style-type: none"> • Mobile station treatment and receiver protection • Single and batch calculations 	
15:30 – 16:00	COFFEE BREAK	
16:00 – 17:30	<p>The HCM4A mobile service (non-IMT) coordination practical application</p> <ul style="list-style-type: none"> • Installation and setup of the software • Main elements of GUI • Practical single-entry calculations and reporting • Practical cross-border range calculations • Mobile station and receiver calculations • Batch calculations • Potential use for national spectrum management • Future improvements for fixed service 	
	Q&A	
*****END OF DAY 3*****		
Day 4: THURSDAY 06 March 2025		
08:30 – 09:00	Arrival and registration	
09:00 – 10:30	<p>The HCM4A mobile service (IMT) coordination theory</p> <ul style="list-style-type: none"> • ECC cross-border recommendations • Old approaches: Preferential and non-preferential frequencies • New approaches: Balancing coverage and capacity for wideband technologies • The HCM4A software calculations for ECC cross-border recommendations • Other aspect of using the HCM4A software for modern IMT systems 	
10:30 – 11:00	COFFEE BREAK	
11:00 – 12:30	<p>The HCM4A mobile service (IMT) coordination practical application</p> <ul style="list-style-type: none"> • Main elements of GUI • Practical single-entry calculations and reporting • Batch calculations • Taking into account more complex conditions for IMT systems coordination • Potential use for national spectrum management • Future improvements for fixed service 	
12:30 – 14:00	LUNCH BREAK	
14:00 – 15:15	<p>The HCM4A Agreement future development - opinions exchange</p> <ul style="list-style-type: none"> • Major topics of discussion/feedback collection: 	

	<ul style="list-style-type: none"> • Administrations vs operators responsibility in adhering the HCM4A Agreement • Working group on the HCM4A framework • Immediate and follow up feedback on the HCM4A software and its future evolution • Future trainings on updated HCM4A software 	
15:15 – 15:45	COFFEE BREAK	
15:45 – 17:00	<ul style="list-style-type: none"> • HCM4A software implementation, access modalities and adoption 	
	Q&A	
*****END OF DAY 4*****		
Day 5: FRIDAY 7th March 2025		
08:30 – 09:00	Arrival and registration	
09:00 – 10:30	Feedback and discussions	
10:30 – 11:00	COFFEE BREAK	
11:00 – 12:30	Technical Work Group and agreement adoption modalities	
12:30 – 14:00	LUNCH BREAK	
14:00 – 15:15	Closing remarks	
*****END OF WORKSHOP *****		