

2015 SIM TFMWG Workshop and Planning Meeting Agenda

Horario/Time	Duración/Duration	Title	Presenter
Tuesday, January 27, 2015			
8:30 – 9:00	30 minutos 30 minutes	Bienvenida y presentación del CENAMEP Welcome to CENAMEP presentation	Director of CENAMEP
Day 1 - Basic Concepts and Calibration and Measurement Techniques			
9:00 – 9:10	10 minutos 10 minutes	Introduction to Meeting and Discussion of Agenda	Michael Lombardi, NIST
9:10 – 10:00	50 minutos 50 minutes	Conceptos generales de la metrología de tiempo y frecuencia Introduction to Time and Frequency Metrology	Michael Lombardi, NIST
10:00 – 10:30	30 minutos 30 minutes	Coffee Break	
10:30 – 12:00	90 minutos 90 minutes	Basic Laboratory Calibrations Calibrations of Stopwatches/Timers Calibrations of Tachometers	Raul Solis and Luis Mojica, CENAMEP
12:00 – 1:00	60 minutos 60 minutes	Lunch	
1:00 – 2:30	90 minutos 90 minutes	Introduction to Frequency Measurements medición de frecuencia <ul style="list-style-type: none"> • mediciones directas / Direct measurements with counters • mezcla de frecuencia / single mixer frequency measurements • doble mezcla de frecuencia / double mixer frequency measurements 	Francisco Jiménez, CENAM
2:30 – 3:00	30 minutos 30 minutes	Coffee Break	
3:00 – 3:45	45 minutos	Introduction to Atomic Clocks and	Mauricio Lopez,

	45 minutes	How They Work <ul style="list-style-type: none"> • Rubidium • Cesium • Hydrogen Maser 	CENAM
3:45 – 5:00	75 minutos 75 minutes	Análisis estadístico de mediciones Statistical analysis of measurements <ul style="list-style-type: none"> • Desviación de Allan / Allan deviation • Desviación modificada de Allan / Modified Allan deviation • Desviación temporal / Time deviation 	Mauricio Lopez, CENAM
Wednesday, January 28, 2015			
Day 2 – International Comparisons, Time Scales, CMCs, and Disseminating Time			
8:30 – 9:00	30 minutos 30 minutes	The Role of Science and Research in Panama	Jorge Morta, National Secretary of Science and Technology in Panama
9:00 – 10:15	75 minutos 75 minutes	GPS and common-view time transfer <ul style="list-style-type: none"> • Introduction to GPS • The SIM Time Network • Contributing to Coordinated Universal Time (UTC) • Receiver calibrations in SIM region (Group 1 and Group 2) • Traceability 	Michael Lombardi, NIST
10:15 – 10:30	15 minutos 15 minutes	Coffee Break	
10:30 – 11:15	45 minutos 45 minutes	Building an Ensemble Time Scale from Multiple Atomic Clocks	Ricardo de Carvalho, ONRJ
11:15 – 12:00	45 minutos 45 minutes	The SIM Time Scale <ul style="list-style-type: none"> • Contributing Labs • Non-contributing Labs • SIMT disciplined oscillators 	Mauricio Lopez, CENAM

12:00 – 1:00	60 minutos 60 minutes	Lunch	
1:00 – 1:45	45 minutos 45 minutes	CMCs and the BIPM Key Comparison Database	Raul Solis, CENAMEP
1:45 – 2:15	30 minutos 30 minutes	Preparing Calibration Service Procedures and Validation Methods in Support of CMCs	Marina Gertsvolf, NRC
2:15 – 2:30	15 minutos 15 minutes	Group discussion about quality systems, CMCs, and reviewing CMCs from other NMIs	Michael Lombardi, NIST (moderator)
2:30 – 3:00	30 minutos 30 minutes	Coffee Break	
3:00 – 4:00	60 minutos 60 minutes	Time Dissemination - Distributing the Laboratory Time to the Nation's Citizens <ul style="list-style-type: none"> • The Network Time Protocol, distributing the national time through NTP • Other forms of time dissemination (telephone, radio, web clocks, etc.) 	Francisco Jiménez, CENAM
4:00 – 4:30	30 minutos 30 minutes	Auditing Time System Service in Brazil	Mario Fittipaldi, ONRJ
Thursday, January 29, 2015			
Day 3 – Future Plans of the Working Group and Reports from the Laboratories			
8:30 – 9:30	60 minutos 60 minutes	The Future of Time and Frequency Measurements, including new advances in atomic clocks	Mauricio Lopez, CENAM
9:30 – 10:30	60 minutos 60 minutes	Open group discussion about future projects and future direction of the SIM Time and Frequency Metrology Working Group	Michael Lombardi, NIST (moderator)
10:30 – 11:00	30 minutos 30 minutes	Coffee Break	
11:00 – 12:00	60 minutos 60 minutes	Open group discussion about future projects and future direction of the SIM Time and Frequency Metrology Working Group	Michael Lombardi, NIST (moderator)
12:00 – 1:00	60 minutos 60 minutes	Lunch	
1:00 - 4:50	Each presenter will have 15 minutes, but the presentations can be shorter. Presenters can provide general background information about their institution in addition to describing their time and frequency related activities. We encourage		

	group discussion and questions during all presentations		
		Antigua and Barbuda Lab Report	
		Argentina Lab Report	
		Bolivia Lab Report	
		Brazil Lab Report	
		Canada Lab Report	
		Columbia Lab Report	
2:45 – 3:00	Break		
		Costa Rica Lab Report	
		Dominican Republic Lab Report	
		Ecuador Lab Report	
		El Salvador Lab Report	
		Guatemala Lab Report	
		Guyana Lab Report	
		Jamaica Lab Report	
		Mexico Lab Report	
		Panama Lab Report	
		Paraguay Lab Report	
		Peru Lab Report	
		St. Kitts and Nevis Lab Report	
		St. Lucia Lab Report	
		Trinidad and Tobago Lab Report	
		United States Lab Report	
		Uruguay Lab Report	
4:50 – 5:00		Closing Remarks and Discussion	
5:00 – 6:00		Tour of CENAMEP	