

Invitation to participate in the virtual Workshop

**”Metrology for Digital Transformation -
the potentials for developing NMIs”
M4DT-SIM**

that will take place during the days of 14th, 15th and 16th of July 2020.

This workshop was originally planned by SIM, INTI and PTB as a 3-day face-to-face workshop to be held in Buenos Aires, Argentine in June 2020. All in all, 24 hours of workshop. Because of the COVID-19 pandemic, we must adapt the workshop to a virtual mode, as so many other activities and processes of our life. Now, an organizer group was conformed, and they are inviting you to participate in the Workshop on a virtual mode. Language: English

1. Objectives of the virtual Workshop

This workshop is contributing to:

- inform on the possibilities offered by the digital transformation and organize an exchange between NMIs;
- improve the use of the digital transformation by the NMIs;
- accelerate the digital transformation of the NMIs;
- develop a digital transformation strategy for the NMIs.

Metrology for Digital Transformation (M4DT) cover a broad range of topics. This workshop will be focused on the following topics and instruments:

- Topic 1: Automation of laboratory processes
- Topic 2: Digitalization in legal metrology
- Topic 3: Digital Calibration Certificate
- Topic 4: Metrology for Industry 4.0
- Topic 5: NMI's digital transformation strategy

2. Participants & Registration

Recognizing and making use of the advantages of the virtual mode of the meeting, we invite all interested representatives from your NMI to register and participate in this Workshop by using the following link: <https://www.cenam.mx/m4dt-sim>

Registrations are possible **by Monday, June 29th, 2020.**

In case, we receive a high number of registrations, we will need to differentiate between “active participants” and “passive participants”. Generally speaking, all participants will be able to participate in all sessions and will be able to see and hear everything. “Active participants” will additionally be able and be asked to contribute, communicate and interact with other “active participants”.

In case, we need to differentiate participants, we will approach each NMI based on the registrations received, to take the decision who will participate as an “active participant” and who will do it as a “passive participant”. At least one representative from each NMI will participate as an “active participant”. For more information, please read the consideration in “5 The rationale and differences between active and passive participants”.

3. The workshop methodology

In order to have a successful workshop and considering the fact, that videoconferences in plenary session with duration of more than 3 hours are demotivating and tedious and therefore less productive, we organize the work on the 5 topics named in section 1, based on synchronic (exchange and presentation of conclusions) and asynchronous (video watching and working group) activities:

What?	How?	When?
1. Step: The input.	The main input will be provided by short videos	During the week from Monday 6 th to Friday 10 th July you will have the opportunity to watch the videos related to the 5 topics and will be asked to provide feedback on them.
2. Step: The Exchange in plenary	The exchange will start with your questions and feedback to the videos and will be facilitated by a main expert for the topic.	During the first (14 th July) and second day (15 th July) in our plenary sessions, we will have 1 hour of exchange for each topic.
3. Step: Analysis of the situation and development of options Working Groups	In small Working Groups (6 – 10 participants) we will analyze the situation and develop options based on the Innovators' Compass methodology.	During the first (14 th July) and second day (15 th July) in the working group sessions, we will have up to two hours for each topic. The first 4 topics will be treated in parallel sessions so that participants will have to decide in which group to participate.
4. Step: Presentation of Working Groups results to the plenary	The presentation will be performed by one Working Group member and facilitated by the main expert for the topic.	During the third day (16 th July) in our plenary we will have 20 minutes presentation for each topic.

A technical description of the modules:

Module: Videos

As an input, colleagues are preparing short videos (up to 15 min) where they present their experiences on one of the 5 topics the Workshop is focusing on. Participants will be asked to view the videos and comment and ask questions in written form on the workshop platform the week before the Workshop. This is a crucial preparation of your participation in the workshop.

For this asynchronous activity, please reserve approximately 6 hours during the week from 6th to 10th July, 2020.

In case, you want to elaborate and present your own experience and input through a video, please approach Hugo Gasca hgasca@cenam.mx, Francisco Flamenco f flamenc@cenam.mx or Alexis Valqui alexis.valqui@gmail.com.

Module: Videoconferences - plenary

The synchronic and central module are the videoconferences with all participants that will take part Tuesday 14th July, Wednesday 15th July and Thursday 16th July 2020 in the

morning/midday from 14:00 to 17:00 UTC. As an option, the week before, connection and software test possibilities are offered.

Module: Working Groups

For deeper exchange, development of ideas based on the Innovator's compass and analysis of the situation and developing options, you will have the opportunity to meet in small Working Groups (6 to 10 colleagues) during the afternoon of the first and second day. For each topic you are interested to engaged in the WG, you have to foresee and reserve two additional hours.

The schedule

The week before the Workshop: 6th to 10th July 2020

Time (UTC)	Monday	Tuesday	Wednesday	Tuesday	Friday
14:00	MS Teams connection test (optional)		Introduction to Mural (optional)		
24 hours	Self-organized video watching and feedback (asynchronous)				

The Workshop agenda 14th to 16th July 2020

Time (UTC)	Tuesday, 14 th		Wednesday, 15 th		Thursday, 16 th
13:30	Connecting to MS Teams				
14:00	Welcome and introduction		Plenary Digital Calibration Certificate Questions and Exchange		Presentation of results of WGs
15:00	Plenary Automation of laboratory processes Questions and Exchange		Plenary Metrology for Industry 4.0 Questions and Exchange		
16:00	Plenary Digitalization in legal metrology – Questions and Exchange		Plenary NMI's digital transformation strategy Questions and Exchange		Final conclusions
17:00	Free time		Free time		Free time
18:00	Free time		Free time		
19:00	WGs: Automation of laboratory processes	WGs: Digitalization in legal metrology	WGs NMI's digital transformation		
20:00					
21:00	Free time		WGs Digital Calibration Certificate	WGs Metrology for Industry 4.0	
22:00	Free time				

4. Virtual Tools that will be used

The following tools will be used during the workshop:

Workshop platform:

Participants are requested to register through the Workshop platform. With this registration you will be able to enter the Workshop platform during all the process. Through the platform, you will get access to the information, documents and links you need to enter the other software used.

Videoconference:

For the Videoconference we will use MS Teams. Active participants are asked to install the MS Teams application (free version available) and will be registered as members for the dedicated MS Team. Passive participants could use the weblink or if they want, install the MS Teams application, too.

Videos:

Videos will be presented in the YouTube format. No registration needed.

Virtual collaboration:

For the virtual collaboration the “Mural” software will be used by the active participants. To use it, participants will not require registration.

Standard communication:

Before the workshop the standard communication will be via e-Mail. The week before and the week during the workshop the communication will be mainly through the Workshop platform, MS Teams and/or Mural.

Communication back-up:

Our communication back-up will be through WhatsApp. Active participants will be requested to provide their WhatsApp number.

Introduction and test of the virtual tools

For the introduction to MS Teams and Mural a test session of 1 hour each will be offered the week before the workshop. The aim is not to lose time of the synchronic sessions because of connection and/or software initiation issues. Nevertheless, you can learn more about this software from now, visiting or viewing the following:

MS Teams HW requirements: <https://docs.microsoft.com/es-es/microsoftteams/hardware-requirements-for-the-teams-app>

Join a meeting in Teams: <https://support.office.com/en-us/article/join-a-meeting-in-teams-1613bb53-f3fa-431e-85a9-d6a91e3468c9>

What is MURAL?: <https://www.youtube.com/watch?v=6DLMlzwhAp4>

How to Mural?: <https://www.youtube.com/watch?v=o0946e6barQ>

5. The rationale and difference between active and passive participants

The main idea of the workshop is to allow in a virtual environment a real exchange between participants. As in the face to face mode also in the virtual mode an effective and efficient exchange is only possible if the group involved is not too large. Therefore, in case there is a high number of registrations, we have to limit the number of “active participants”. The “active participant” will be able and asked to communicate, contribute and interact with all other active participants during the plenary and working group sessions. Remember, all discussions and presentations will be done in English.

But in comparison to the face to face mode, in the virtual mode we are able to create an additional category of participants. We offer this option to allow more interested NMI’s colleagues to take part and make use of the workshop. These “passive participants” will be able to see and hear everything that takes place during the workshop, including the prepared videos, but could not intervene, contribute or interact directly.

At the moment, we are not limiting the total number of participants from each NMI. We will be able to manage up to a total of 200 participants. In the unexpected case, that more than 200 participants are registered, then we will need to limit the number of participants for each NMI to not supersede the total of 200 participants.

For any questions please contact:

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