


 <p>Ciemat Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas</p>	<p align="center">ACTA <i>MINUTES OF MEETING</i></p>	<p>Código/Code: AC-DTF-MF-1/26</p>
		<p>Versión/Version: V0.1 (Borrador/Draff)</p>
 <p>Laboratorio Nacional de Fusión</p>	<p align="center">DIVISIÓN DE TECNOLOGÍAS PARA LA FUSIÓN (DTF) <i>FUSION TECHNOLOGIES DIVISION (FTD)</i></p>	<p>Fecha/Date: 13/03/2026</p>
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<p>ACTA REUNIÓN / MINUTES OF MEETING</p>
<p>PROVISION DE SERVICIOS ICTS-LNF <i>ICTS-LNF SERVICE PROVISION</i> July 2025 - December 2025</p>

ELABORADO/ <i>WRITTEN</i> :	REVISADO/ <i>CHECKED</i> :	APROBADO/ <i>APPROVED</i> :
<p>Guiomar Delgado Soria</p>	<p>María González Viada</p> <p>Nathalie Valle</p> <p>Raquel González-Arrabal</p> <p>Alejandro Moroño</p> <p>Arturs Zarins</p> <p>Fernando Sánchez Sanz</p> <p>José Ygnacio Pastor</p>	<p>Fernando Sánchez Sanz</p>

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Información de la reunión / Meeting Information	
Fecha / Date	9 Marzo 2026
Hora / Time	10:30 a.m.
Lugar / Location	Online
Vídeo-Conferencia Video-Conference	https://us02web.zoom.us/j/87418063631?pwd=EyhSxs6lis5F8b3rWUmUTuJgREvsFa.1

Asistentes / Attendance:	
Nombre / Name	Responsabilidad/Comentarios Role / Comments
A. Zarins	UL, Latvia. Committee member.
N. Valle	LIST, Luxemburg. Committee member.
R. González-Arrabal	UPM-ETSII, Spain. Committee member.
A. Moroño	CIEMAT, Spain. Committee member.
M. González	CIEMAT, Spain. Committee member.
F. Sánchez	CIEMAT, Spain. Committee member.
J. Y. Pastor	UPM-ETSICCP, Spain. Committee member.
G. D. Soria	Coordinator, CIEMAT, Spain. Coordinator.

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Lista de Distribución (vía e-mail) / Distribution List (via e-mail)	
A. Zarins	UL, Latvia. Committee member.
N. Valle	LIST, Luxemburg. Committee member.
R. González-Arrabal	UPM-ETSII, Spain. Committee member.
J. Y. Pastor	UPM-ETSICCP, Spain. Committee member.
A. Moroño	CIEMAT, Spain. Committee member.
M. González	CIEMAT, Spain. Committee member.
F. Sánchez	CIEMAT, Spain. Committee member.
G. D. Soria	CIEMAT, Spain. Coordinator.

Historia del documento / Document History			
[V.R]	Fecha/Date	Descripción del documento o modificaciones <i>Description of document or changes</i>	Realizado por <i>Made by</i>
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12th SCIENTIFIC COMMITTEE ON ACCESS TO THE ICTS LNF-DTF EQUIPMENT

* ICTS stands for Scientific and Technical Singular Facility, in Spanish

* LNF-DTF stands for Fusion National Lab-Fusion Technology Division

Date: 9 March 2026, 10.30hs

To be held: online meeting

<https://us02web.zoom.us/j/87418063631?pwd=EyhSxs6lis5F8b3rWUmUTuJgREvsFa.1>

Participants: A. Zarins (UL, Latvia), N. Valle (LIST, Luxemburg), R. González-Arrabal (UPM-ETSII, Spain), A. Moróño (CIEMAT), F. Sánchez (CIEMAT), M. González (CIEMAT) and G. D. Soria (CIEMAT, coordinator).

Agenda.



i) Introduction

The meeting was successfully initiated through the Zoom link provided. All committee members joined the session, and their punctuality, attendance, and dedicated work throughout the evaluation period were sincerely acknowledged. As is customary in these meetings, a presentation was shared to address the key topics for discussion.

ii) Ministry evaluation of ICTS (2021-2024)

In reference to the previous meeting, and in line with the information provided regarding the report submitted to the Ministry on the activities and follow-up of the 2021–2024 call for proposals, it was noted that the Ministry communicated its evaluation in mid-November 2025. In this evaluation, the strengths identified by the Ministry were analysed, highlighting the following aspects:

1. Excellent evaluation of the uniqueness, strategic character, and high-level technological capabilities of the facilities, including advanced fusion devices and irradiation/characterization infrastructure.
2. Management and staff rated excellent, with a well-organized structure, experienced leadership, highly skilled personnel, and a successfully completed previous Strategic Plan, together with an ambitious, well-designed Strategic Plan 2025–2028 supported by a sound investment plan.
3. Clear infrastructure objectives in terms of publications, collaborations and dissemination activities, as well as the integration of the new OLMAT and Liquid Metal Laboratories into the ICTS service, whose strategic plan for 2025–2028 has received positive approval.

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However, in that evaluation they also identified certain weaknesses that we must address, such as:

1. Website and access issues: Confusing website structure requiring greater consistency of facility information; problems with access procedures and clarity of rules for competitive access and on-demand technical services (fee-based services for industry).
2. User diversity: Need to increase visibility and engagement with international institutions.
3. Transparency and open calls: Insufficient visibility of the proposal submission protocol and evaluation committee composition; need to launch open calls at the laboratories.

Early this year, measures were already implemented to address the identified shortcomings, including improvements to the website with greater uniformity of information across laboratories and clear presentation of protocols and committees for each facility. Ongoing work continues to resolve the remaining reported issues. It was emphasized that all modifications intended for the access protocols/systems must be previously agreed upon with the Quality Manager, as the system is certified following specific methodologies and formats.



iii) UNE ISO 9001 Quality Certificate

The committee was briefly informed that, for the third consecutive year, the quality certification was successfully obtained following the external audit conducted on 16 February and led by Ms. María Isabel García Ortiz, Head of the Quality Unit. The importance and good practices of our quality management system were highlighted, noting that not only were the laboratories from previous audits recertified, but the scope has now been expanded to include confocal microscopy techniques, far-infrared absorbance and transmittance (FTIR), thermal desorption spectroscopy (TDS), and measurements of hardness and dielectric properties (permittivity and electrical loss).

iv) Follow-up of the petitions requested in the second half of 2025

First of all, it was reported that during this period a total of 13 requests were received, 6 originating from international projects and 7 from national projects. For better visualization and comparison, a graph and a table were presented showing the number of proposals received during the first period, which amounted to 23 in total. The decrease in the number of requests from one period to the next was explained by the fact that many proposals submitted at the beginning of the year remain under execution throughout the year, and may even continue into the following year when they require multiple types of analyses or the use of different instruments. In contrast, it was noted that the number of accepted proposals has increased substantially in the current year compared with the previous ICTS calls of 2021–2024.

It was also mentioned that SEM/EDX/EBSM techniques, together with SIMS, are the most requested, and that the majority of proposals are primarily linked to collaborative projects within the EUROfusion framework.

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Annex I provides a comprehensive overview of the proposals for this period. As illustrated in the table presented herein, the description of the proposals enumerates the following: the petitioner, the applicant entity, the project, the national or international origin, and the access code associated with the request.

v) State of scientific equipment

A review was conducted of the equipment within the DTF-ICTS CIEMAT facility to confirm its operational status. The SIMS instrument is functioning correctly with the oxygen primary ion beam, although the caesium (Cs) gun remains pending repair/maintenance. The SEM/EDX has operated satisfactorily during the reporting period, but is now undergoing software upgrades to improve handling of FIB mode. The Van de Graaff accelerator shows no equipment issues, though the absence of a technician was noted. Finally, the confocal microscope is currently operational, but its outdated Leica software renders it prone to frequent failures, limiting reliable operation to approximately two months per year.



vi) Improvements to the application system

As introduced in the previous meeting, work is ongoing to update access procedures through an application. This app, developed by Dr. Marcelo Roldán from CIEMAT and promoted by Ms. M^a Isabel García Ortiz, Head of Quality, will streamline access across ICTS facilities, including those from DTF, OLMAT, Liquid Metals Laboratory, and TJ-II. The system features three main interfaces: user registration, technique application submission, and a review panel for process tracking. The committee will also gain access for proposal evaluations. The application remains under testing and awaits final approval from management prior to implementation. Upon approval, a dedicated meeting will be scheduled for Dr. Roldán, the system administrator, to demonstrate its functionality and associated protocols.

vii) Advertising

On this slide, conferences held in previous periods are presented as outreach and dissemination activities for the LNF-ICTS. The Big Science Industry Forum Spain 2025 (BSIFS2025), held last December, placed particular emphasis on the potential application of our techniques in a more industrial context, where a poster was presented showcasing our capabilities. Earlier this March, a tritium school was organized with the participation of this committee (Raquel González Arrabal and CIEMAT); on the final day, participants were given a tour of the laboratories with a view to encouraging future proposals. Upcoming key events for promoting our instrumentation include the Advanced Fusion Materials Workshop (5–6 May 2026) and the 34th Symposium on Fusion Technology (21–25 September).

At this point in the meeting, Raquel González Arrabal informs the committee that she has to leave the session.



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viii) Comments/Suggestions

María González requests that the spokesperson provide a brief description of the new facilities to be incorporated into the ICTS under the 2025–2028 call (OLMAT and the Liquid Metals Laboratory). Subsequently, Nathalie del Valle emphasizes the importance of presenting, in a more explicit manner, the scientific output derived from the laboratory’s proposals. Direct communication channels with clients are noted, in addition to various internal applications used for recording and monitoring scientific output.

ix) End of the meeting



The meeting came to an end with warm thanks to everyone for their time and participation.

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ANNEX I

Table of Granted Access in July 2025 - December 2025 period

CALL FOR PROPOSALS	DESCRIPTION	APPLICANT	APPLICANT ENTITY	PROJECT	TYPE OF PROJECT	ACCESS CODE
DTF_Proposals for time booking_2025 S2	Microstructural characterization of new coatings developed within the EXCORPION project funded by the MCIU	Marta Malo	ICTS-CIEMAT	EXCORPION- Exploration of anti-Corrosion and Permeation Barriers	National	SEM-MMO-05-2025-1D
DTF_Proposals for time booking_2025 S2	Study on the diffusion of Li7	Teresa Hernandez	ICTS-CIEMAT	Internal CIEMAT	National	SIMS-SEM-THZ-02-2025-01B
DTF_Proposals for time booking_2025 S2	Microstructural characterization and compositional analysis of commercially modified zirconia	Julian Patiño Redondo	ICTS-CIEMAT	Luthyer (Fusion LiqUId meTals HYdrogen ExtRaction)	National	SIMS-SEM-JPO-08-2025-1
DTF_Proposals for time booking_2025 S2	Identification of D and He in fusion materials distributed in coexistence	Guiomar Delgado Soria	ICTS-CIEMAT	Internal CIEMAT	National	IMP-SIMS-SEM-GDS-03-2025-01A-C
DTF_Proposals for time booking_2025 S2	Characterization of soldered joints in the presence of lead-lithium (PbLi)	Teresa Hernandez	ICTS-CIEMAT	Collaboration ESS Bilbao - Ciemat	National	SIMS-SEM-THZ-05-2024-2A
DTF_Proposals for time booking_2025 S2	Characterization of SiC coatings deposited on EUROFER - As deposited characterization of permeation samples	Guillermo de la cuerda	UPM	EXCORPION- Exploration of anti-Corrosion and Permeation Barriers	National	CA-SEM-GCV-2024-1F-I

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CALL FOR PROPOSALS	DESCRIPTION	APPLICANT	APPLICANT ENTITY	PROJECT	TYPE OF PROJECT	ACCESS CODE
DTF_Proposals for time booking_2025 S2	Morphological characterization of PbS coatings	Raquel González Arrabal	UPM	MAMBA	International	SEM-RGA-09-2025-1
DTF_Proposals for time booking_2025 S2	In-situ induced radiation effects in functional materials	Edgard León	ICTS-CIEMAT	Functional Materials - Eurofusion	International	VDG-ELN-05-2024-1C
DTF_Proposals for time booking_2025 S2	Morphological characterization of the PbS coatings as a function of Ar flow rate.	Raquel González Arrabal	UPM	MAMBA	International	SEM-RGA-09-2025-1A
DTF_Proposals for time booking_2025 S2	Microstructural characterization of new coatings developed in the frame of the INNUMAT project	Elisabetta Carella	ICTS-CIEMAT	Innumat-Euratom	International	SEM-SIMS-ECA-06-2025-1A
DTF_Proposals for time booking_2025 S2	OLMAT samples analysis: advanced tungsten materials, liquid metals in porous systems, fatigue damage and laser irradiation effects	Daniel Alegre	ICTS-CIEMAT	WPIE	International	SEM-DAE-12-2024-1A
DTF_Proposals for time booking_2025 S2	Microscope examination of biomass combustion fly-ash.	David Sanz	ICTS-CIEMAT	TERA-RED	National	SEM-DSR-11-2024-1A
DTF_Proposals for time booking_2025 S2	OLMAT samples analysis: advanced tungsten materials, liquid metals in porous systems, fatigue damage and laser irradiation effects	Daniel Alegre	ICTS-CIEMAT	WPIE	International	SEM-FIB-CONF-DAE-11-2025-1