



Italian National Agency for New Technologies,
Energy and Sustainable Economic Development

STATUS OF MST1 ACTIVITIES AND FUTURE PROGRAMS

16/10/2020

F. Bombarda



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0101 0010 1101
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MST1: Contributing Laboratories

Institute	LTP	AUG	TCV	MAST-U	PAX*
ENEA -Frascati	00	1	12	4	16
RFX -Padova	01	12	14	10	18
CNR -Milano	02	16	8		19
CREATE	03		3		3
UniTV -Roma	04	4	6	3	8
PoliTO -Torino	05	1			1
UniMIB -Milano	09	3	2	2	4
PoliMI -Milano	10	1			1
UniCA -Cagliari	17	4		5	6
UniTuscia -Viterbo	18		1		1
Totals		42	48	24	77

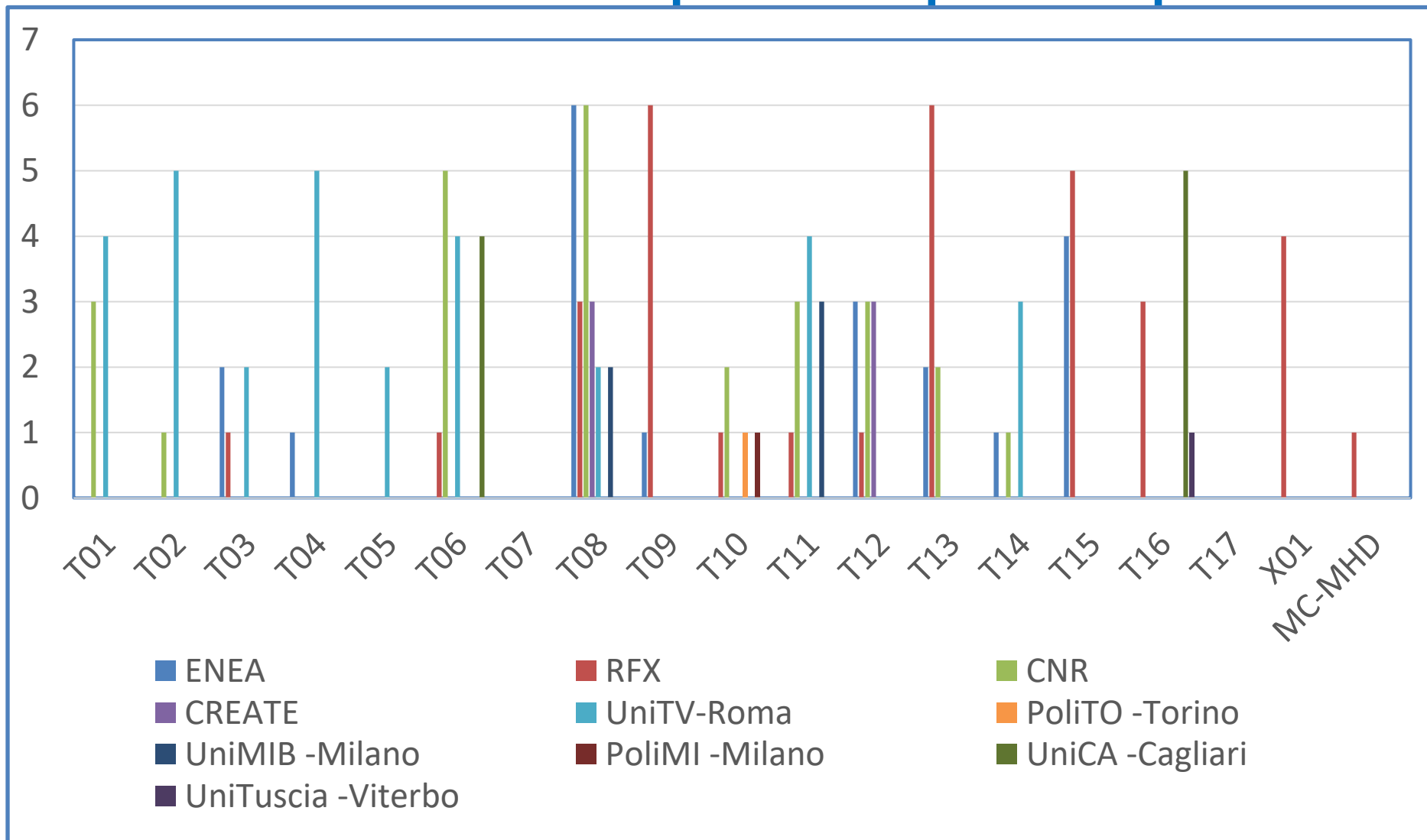
*2020 Approved

MST1: List of Topics (2020)

#	Title	#	Title
01:	ITER H-mode (7)	10:	W transport & control (5)
02:	Pedestal & seeding (6)	11:	Fast ions (11)
03:	RMP ELM suppression (5)	12:	Control of off-normal events (10)
04:	No-ELM regimes (6)	13:	Advanced Scenarios (10)
05:	Small ELMs (2)	14:	Heat loads & detachment (5)
06:	Disruption prediction & avoidance (14)	15:	Alternative divertors (9)
07:		16:	Filaments (9)
08:	Runaway & MGI (22)	17:	W Melting & gap loading (0)
09:	Error fields (7)	X01:	EC assisted start-up (4)
		MC-MHD	(1)

DEVICES	AUG	TCV	MAST-U
	Compass	WEST	W7-X

MST1: Participation per Topic

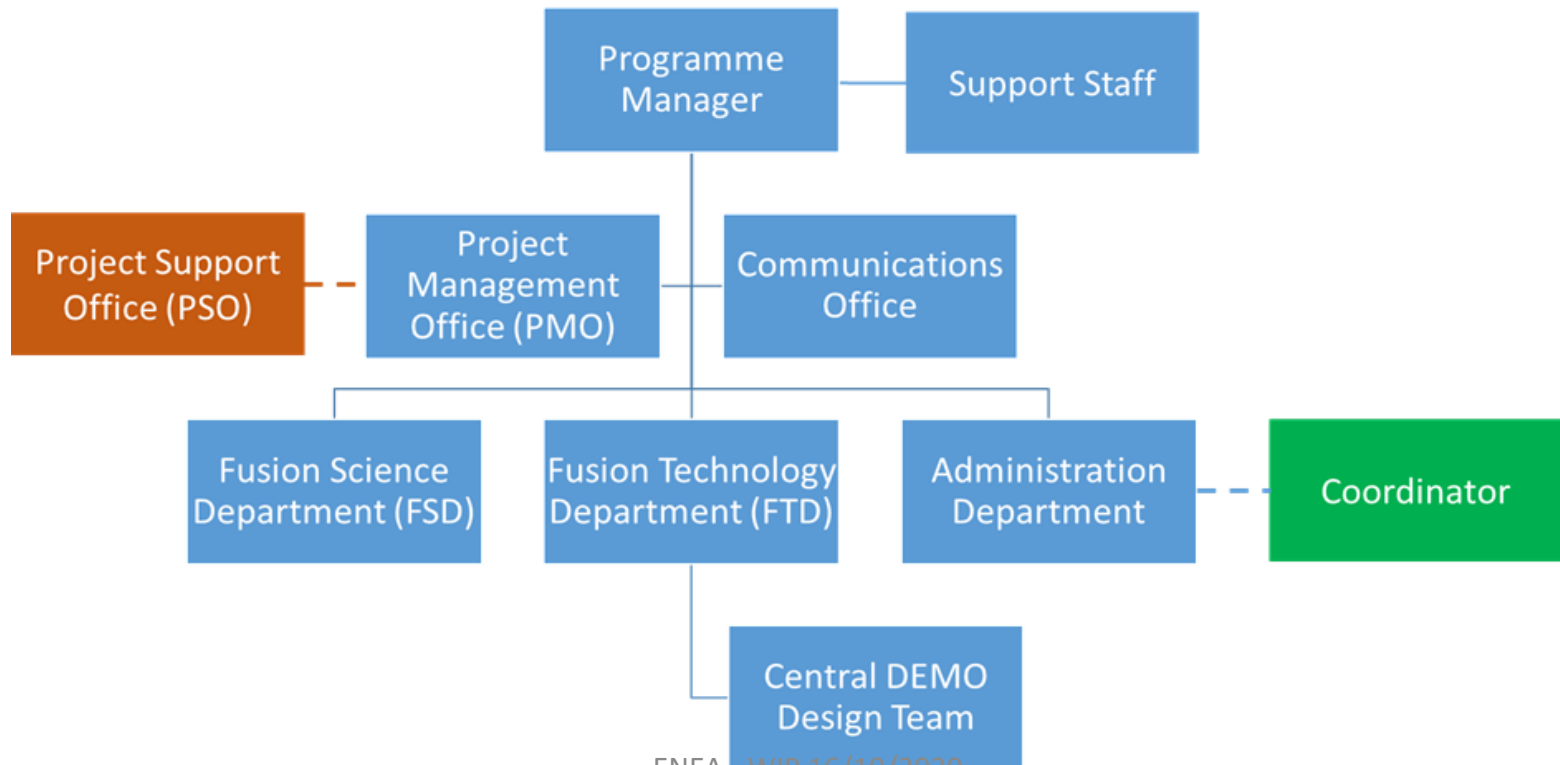


Next year (FP9)

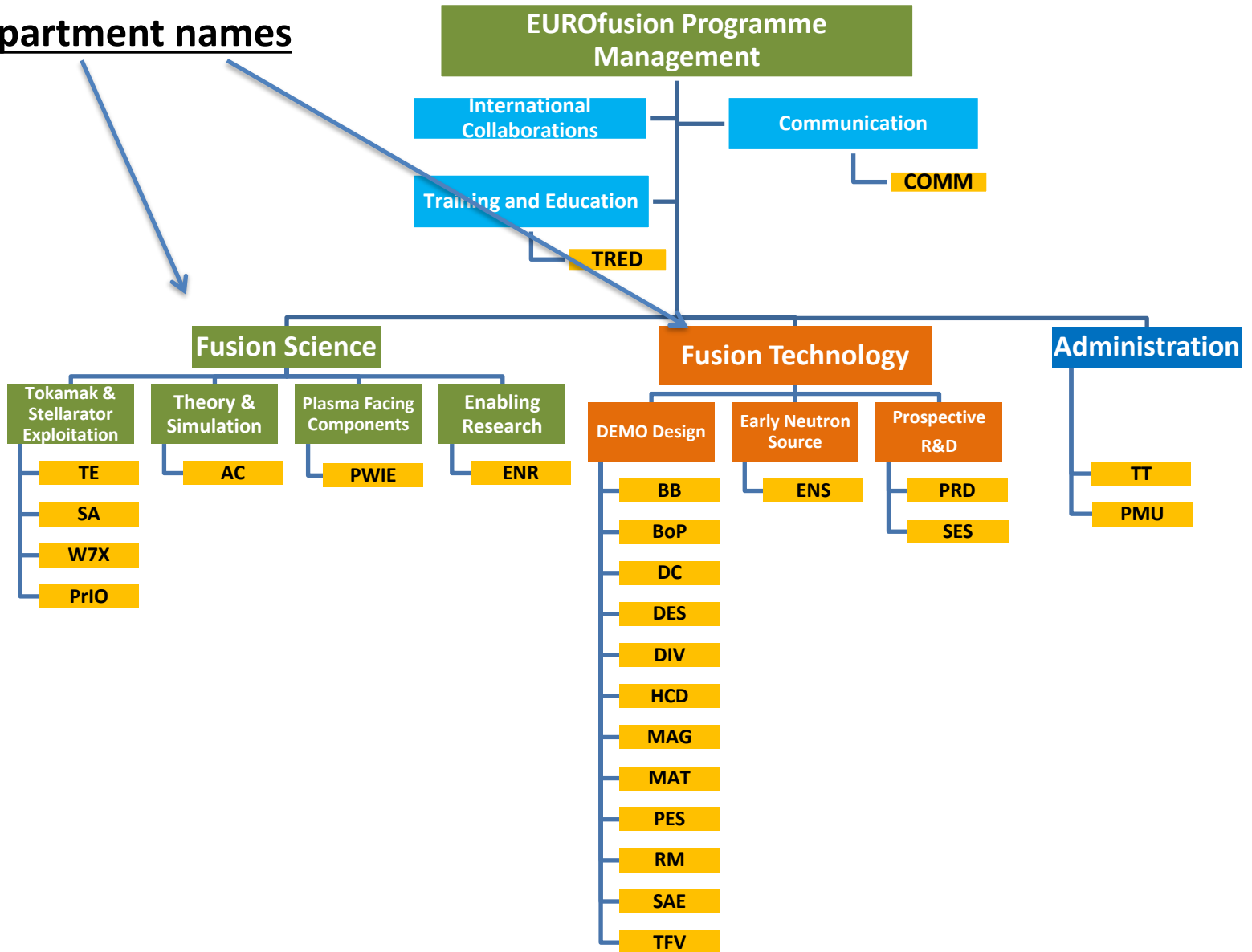
- JET will become part of the TE program with the other MSTs
- WEST should be included
- MAST-U should be fully operational
- COMPASS will be turned off
- There will be considerably less money available from EUROfusion for machine time
- Due to COVID-19, remote participation is likely to remain the preferred option for a while: a problem for new entries
- The whole program is likely to be restructured: this is the time for new ideas!
- More Scientific Coordinators are desirable

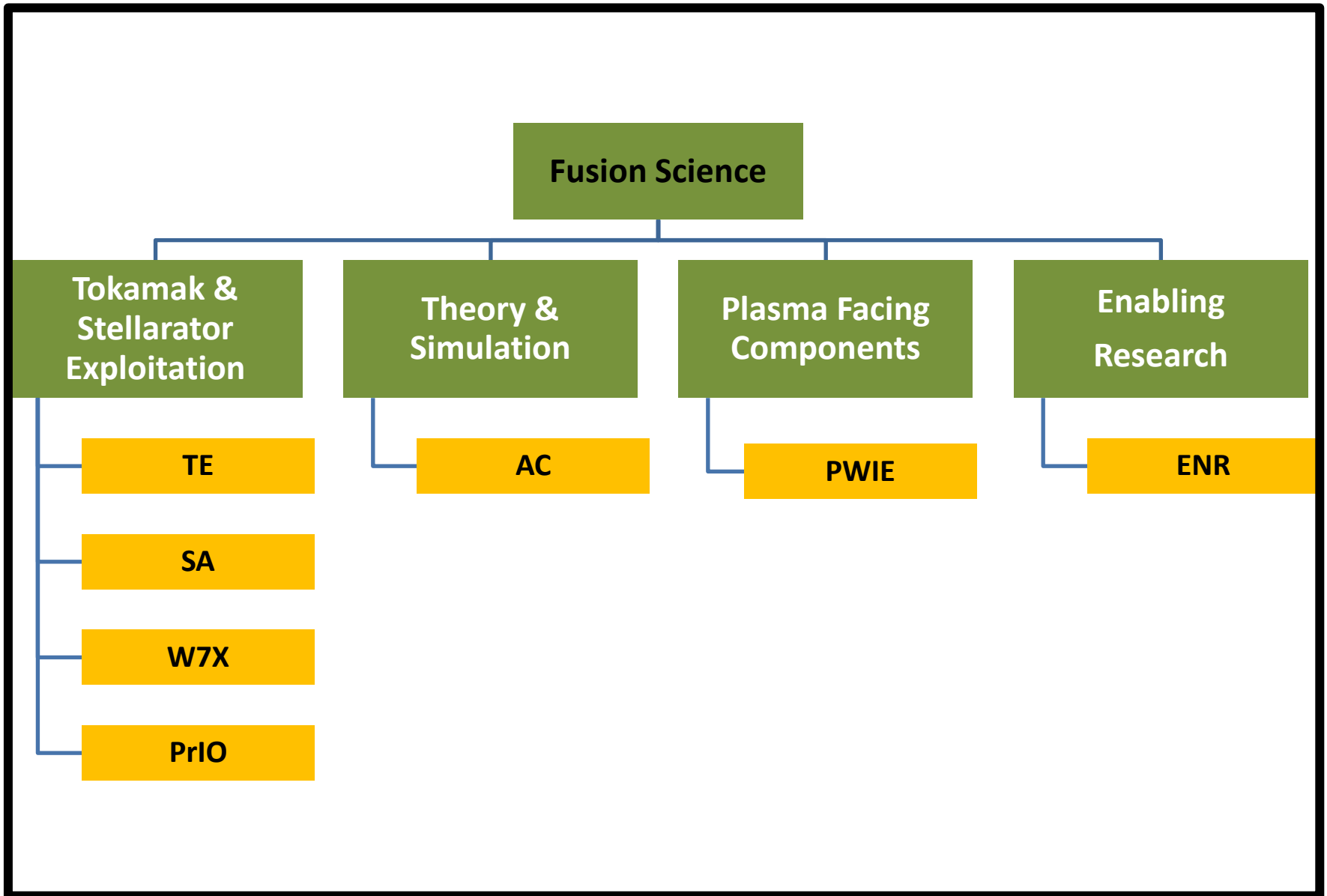
Reorganization of the EUROfusion Work Packages in FP9

The FP9 Grant Agreement proposal will include a new organizational structure of EUROfusion at Governance, Consortium and Work Package level.



New department names





Fusion Science Department

- **Tokamak Exploitation (WP TE)**→NEW, includes WP MST1,MST2, JET1, JET4
- **JT-60SA EXPLOITATION (WP SA)**→ WITH F4E collaboration in the frame of the Broader Approach
- **W7-X Exploitation(WP W7X)**→NEW, includes WP S1 and WP S2
- **Advanced Computing (WP AC)**→ NEW Advanced Computing (CD, ISA, part of S2, HPC)
- **Plasma Wall Interaction and Exhaust (WP PWIE)**→ NEW, includes PFC, JET2, ADC Physics
- **Preparation of ITER Operation (WP PrIO)**→NEW, ITER data analysis tools within IMAS, ITER Neutral Beam system, nuclear technology (JET3)
- **Enabling Research**→ Newly placed with new selection process, selection by different panels. PIs of selected projects reports annually to the panels (which include PLs and TFLs)

Info Meeting on FP9 Programme to the Beneficiaries

Date:	Monday 19 th October 2020 and Tuesday 20 th October 2020
Time:	13:00 – 18:00
Venue:	Video conference
Files (Indico):	https://indico.euro-fusion.org/event/490/
Zoom Link	https://us02web.zoom.us/j/86730229487?pwd=bnZMcMRESVM3M1VHVKkYmJSEUUT09
Version	1.0

No	Items	Start	End	Time	Who
1	Introduction: Programmatic & governance aspects	13:00	13:50	00:35 + 00:15 questions	Tony Donn�
2	Fusion Science Department Programme	13:50	14:20	00:20 + 00:10 questions	Volker Naulin
3	WP PWIE (Plasma Wall Interaction & Exhaust)	14:20	14:50	00:20 + 00:10 questions	Sebastijan Brezinsek
	Break	14:50	15:05	00:15	
4	WP PriO (Preparation of ITER Operation)	15:05	15:35	00:20 + 00:10 questions	Xavier Litaudon
5	WP JT-60SA	15:35	16:00	00:15 + 00:10 questions	Sozzi Carlo
	Break	16:00	16:15	00:15	
6	WP TE (Tokamak Exploitation)	16:15	16:55	00:20 + 00:20 questions	Emmanuel Joffrin
7	DEMO Physics	16:55	17:25	00:20 + 00:10 questions	Volker Naulin for Hartmut Zohm
8	Questions to the FSD PLs and TFLs	17:25	18:00	00:35 questions	All
	Adjourn	18:00			

No	Items	Start	End	Time	Who
1	Fusion Technology Department Programme	13:00	14:20	00:50 + 00:30 questions	Gianfranco Federici
2	DEMO Project Organisation Highlights	14:20	15:00	00:30 + 00:10 questions	Christoph Baylard
	Break	15:00	15:10	00:10	
3	DEMO Work Breakdown Structure	15:10	15:45	00:20 + 00:15 questions	Alice Beaumont
4	WPDES (Design Activity) Call	15:45	16:10	00:10 + 00:15 questions	Alice Beaumont
	Break	16:10	16:20	00:10	
5	Involvement of industry	16:20	16:50	00:15 + 00:15 questions	
6	Calls for Participation (timetable and format)	16:50	17:25	00:10 + 00:25 questions	Botond Meszaros
7	Questions to the FTD PLs	17:25	18:00	00:35 questions	All
	Adjourn	18:00			

Contingency on TCV in 2020

Some of you have already asked us if additional shots or even sessions could be scheduled for your Topic in the remaining weeks of the 2020 TCV campaign now that a large fraction of the originally allocated machine time has been cut - following the EC decision to stop the MST1 programme by the end of 2020. As a result, EUROfusion has recently shifted the corresponding budget to the benefit of other work packages, implying that our resources to expand the present MST1 program are quite limited.

However, we still have about 40 shots left in our contingency budget, and part of these (up to 30 shots or so) we can allocate to the different Topics for completing their programs. To this end, we are asking you to provide us with an official contingency request, justifying the need for extra pulses beyond those already scheduled (see attached timeline). We'd prefer to have these requests as soon as possible, **preferably by Tuesday 13th of October**.

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Call for Proposals for the Use of the EUROfusion High Performance

12th October 2020

Dear Colleagues

Subject : Call for Proposals for the Use of the EUROfusion High Performance Computer (Marconi-Fusion)

With the present letter, I invite you to submit proposals for the use of the EUROfusion High Performance Computer (Marconi-Fusion). Successful projects will be implemented on the Marconi-Fusion (5th Cycle) starting from 15 March 2021 and ending on 28 February 2022

Proposals shall be submitted via the IMS System, no later than midnight of **20th November 2020**. This link to use is : <http://IMS.EURO-fusion.org> should you have any questions, please contact Duarte Borba at Duarte.Borba@euro-fusion.org.

CALL FOR PARTICIPATION IN THE EUROFUSION SUPPORTED EXPERIMENTS OF THE WEST C5 -2020 CAMPAIGN

SCADENZA INTERNA venerdì 23 OTTOBRE

With this letter, I would like to invite you to participate in the **EUROfusion supported experiments in the WEST C5 campaign in 2020**. The WEST C5 experimental campaign is presently planned from 26 November 2020 to 29 January 2021. The EUROfusion supported experiments are scheduled for December 2020.

The main objectives of the C5 campaign are the scenario development towards H mode and the characterization of tungsten sources, in the light of newly installed low Z tiles on the start-up limiters. The EUROfusion supported experiments are focussed on the impact of the low Z tiles on W sources both in ohmic and heated plasmas, as well as PFU melting experiments in steady state conditions.