

# Prioritization of WPs

Sources Steering Panel

Feb.7, 2022

# Prioritization of WPs

- Pre-Lab proposal would not be accepted as it is
  - ✓ The Experts Panel thinks Pre-Lab makes sense only when the body of the project is approved
  - ✓ But it might be possible to support up to some fraction of budget to encourage future development
- We do not know how much. Don't know how Japanese budget can contribute to the activities in foreign countries

# Prioritization of WPs

- Nonetheless, we need to prepare for “pre-Pre-Lab”
  - ✓ Working hypothesis: 2 years of pre-Pre-Lab followed by 4 (or maybe 3) years of Pre-Lab
  - ✓ **Make prioritized list of WPs**
  - ✓ Steering Panel formed
  - ✓ Deadline: early March ?
    - Budget request to MEXT: June
  - ✓ Each WP can be partial (or priority of items within each WP)

# IDT-WG2 with steering members

Shin Michizono (Chair)  
Benno List (Deputy)

Steering panel

ML&SRF steering panel

<b><i>Yasuchika Yamamoto</i></b>	<b>KEK</b>
Sergey Belomestnykh	FNAL
Enrico Cenni	CEA
Peter McIntosh	STFC
Laura Monaco	INFN Milano
Akira Yamamoto	KEK

Sources steering panel

<b><i>Kaoru Yokoya</i></b>	<b>KEK</b>
Joe Grames	JLAB
Masao Kuriki	U. Hiroshima
Gudrid Moortgat-Pick	U. Hamburg

DR/BDS/Dump steering panel

<b><i>Toshiyuki Okugi</i></b>	<b>KEK</b>
Philip Burrows	U. Oxford
Angeles Faus-Golfe	LAL
David Rubin	Cornell
Glen White	SLAC
Nobuhiro Terunuma	KEK

- Establish IDT-WG2 steering panel  
(group leader (SRF, Sources, DR/BDS/Dump)+ steering panel members will manage each group.)*

# Sources WPs

- For the positron source we do not discuss the priority of undulator vs. e-driven
- The priority of the WP4 (electron gun) should be lower in pre-Pre-Lab (my opinion)

Electron						
WP-4	Electron Gun	Drive laser system	prelab			
		HV Photogun	A		jlab	
		GaAs/GaAsP Photocathodes	prelab			
Undulator Scheme						
WP-5	Undulator	Simulation (field errors, masks, alignment)	prelab			
WP-6	Rotating target	Design finalization, partial laboratory test, mock-up design	B			
		Magnetic bearings: performance, specification, test	B			
		Full wheel validation, mock-up				
WP-7	Magnetic focusing system	OMD design finalization with yield calculation	A		DESY	
		OMD with fully assembled wheel	A small prototype			

(cost & FTE omitted here.)

See Prioritization-of-WPs-Sources-2022-0207-table.pptx

		Target module prototyping	A			
WP-9	Magnetic focusing system	Flux concentrator conductor				
		Transmission line	A EM calculation			
		Flux concentrator system prototyping	B prototype			
WP-10	Capture cavity, linac	APS cavity for the capture linac	A cold model			
		Capture linac beam loading compensation and tuning method.	A			
		Capture linac operation and commissioning				
		Power unit prototyping	B			
		Solenoid prototyping				
		Capture linac unit prototyping				
Common issue for undulator and e-driven sources						
WP-11	Target Maintenance	Target Maintenance (Common issue for undulator and e-driven sources)	prelab			