

Shin MICHIZONO (KEK/IDT-WG2)

(Jan.05, 2021)

Technical preparations /performance & cost R&D [shared across regions]

- **SRF** performance R&D, quality testing of a large number of cavities (~100), fabrication and shipping of cryomodules from North America and Europe (for validating shipping)
- **Positron source** final design and verification
- **Nanobeams (ATF3 and related)**: Interaction region: beam focus, control; and Damping ring: fast kicker, feedback
- **Beam dump**: system design, beam window, cooling water circulation
- Other technical developments considered performance critical

Technical preparation (18 WPs)
(Technical_preparation_Ver1.docx)
Total 57.325 MILCU 400 FTE-yr
+ infrastructure at each region

Final technical design and documentation [central project office in Japan and possibly regional project offices]

- **Engineering design** and documentation, WBS
- **Cost confirmation/estimates**, tender and purchase preparation, transport planning, mass-production planning and QA plans, schedule follow up and construction schedule preparation
- Site planning including environmental studies, CE, safety and infrastructure (see below for details)
- Review office
- Resource follow up and planning (including human resources)

Engineering Design Report (EDR)
(EDR_Ver1.docx)
Total 48 FTE-yr (preliminary)

Preparation and planning of deliverables [distributed across regions, liaising with the central project office and/or its satellites]

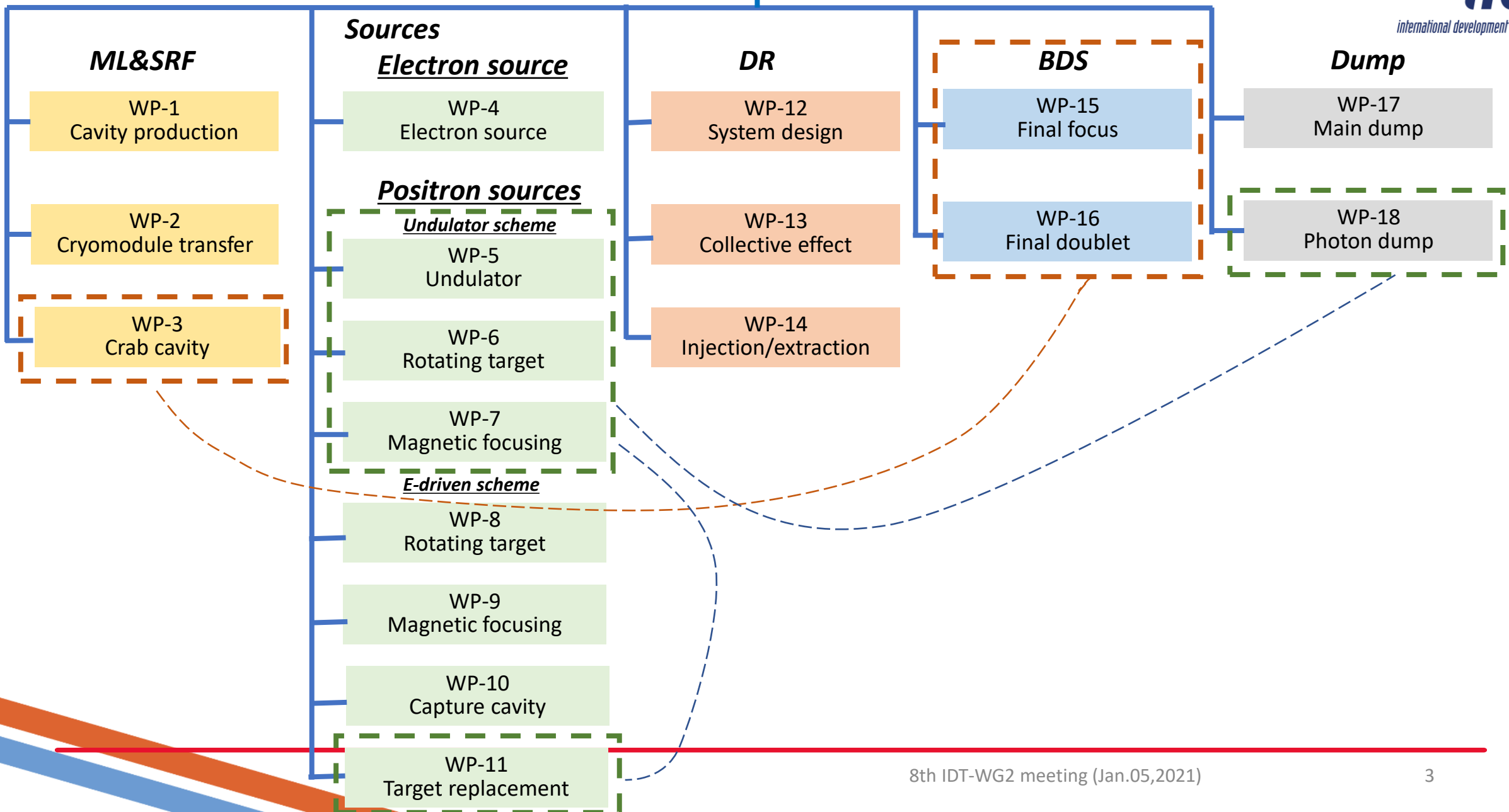
- Prototyping and qualification in local industries and laboratories, from SRF production lines to individual WBS items
- Local infrastructure development including preparation for the construction phase (including Hub.Lab)
- Financial follow up, planning and strategies for these activities

Planning and preparation of Hub lab.

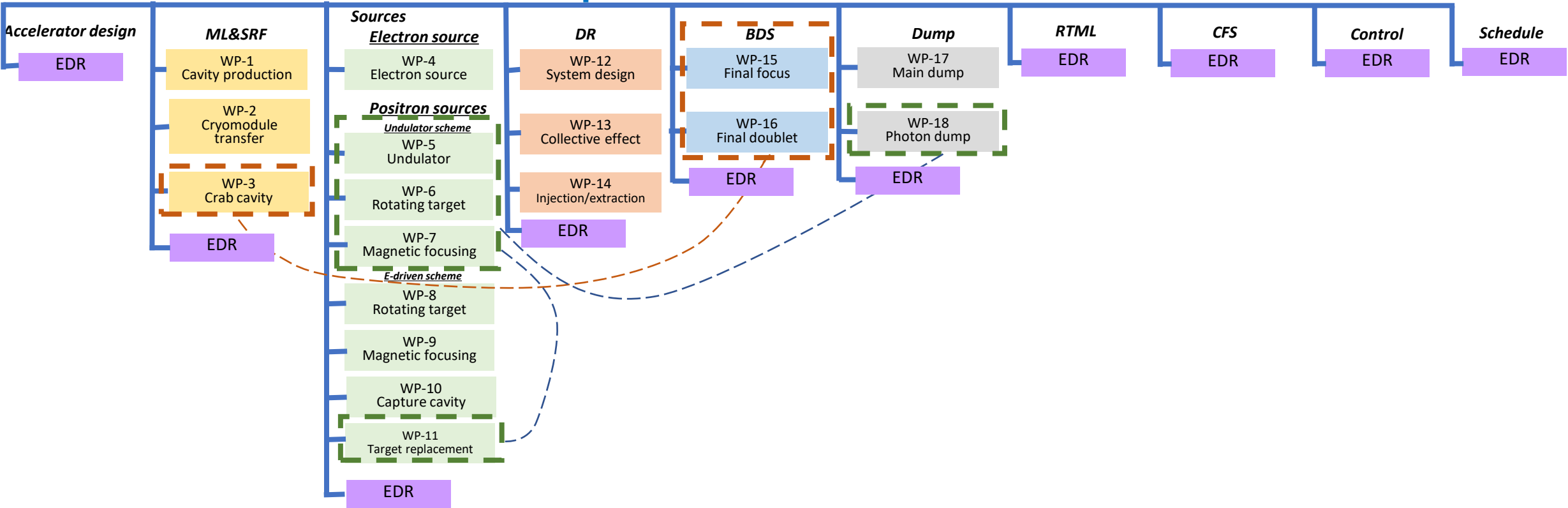
Civil engineering, local infrastructure and site [host country assisted by selected partners]

- Engineering design including cost confirmation/estimate
- Environmental impact assessment and land access
- Specification update of the underground areas including the experimental hall
- Specification update for the surface building for technical scientific and administrative needs

Civil engineering



ILC Pre-Lab



IDT-WG2 organization

Bi-weekly **Tuesday** meeting

IDT WG2
 Shin Michizono (Chair)
 Benno List (Deputy)

Charges of Sub-groups

- Discuss and coordinate the topics for
 - technical preparation (remaining topics) at Pre-lab
 - preparation for mass production at Pre-lab
 - possible schedule at Pre-lab
 - international sharing candidates of these activities
 - **final technical design and documentation**
- Report to the IDT-WG2

Bi-weekly Tuesday

SRF

Yasuchika Yamamoto	KEK
Nuria Catalan	CERN
Enrico Cenni	CEA
Dimitri Delikaris	CERN
Rongli Geng	JLAB
Hitoshi Hayano	KEK
Bob Laxdal	Triumpf
Matthias Liepe	Cornell
Peter McIntosh	STFC
Laura Monaco	INFN Milano
Olivier Napoly	CEA
Sam Posen	FNAL
Robert Rimmer	JLAB
Marc C. Ross	SLAC
Luis Garcia Tabares	CIEMAT
Hans Weise	DESY
Akira Yamamoto	KEK

Bi-weekly Tuesday

DR/BDS/Dump

Toshiyuki Okugi	KEK
Karsten Buesser	DESY
Philip Burrows	U. Oxford
Angeles Faus-Golfe	LAL
Jenny List	DESY
Thomas Markiewicz	SLAC
Brett Parker	BNL
Ivan Podadera	CIEMAT
David L. Rubin	Cornell
Nikolay Solyak	FNAL
Nobuhiro Terunuma	KEK
Glen White	SLAC
Kaoru Yokoya	KEK
Mikhail Zobov	INFN LNF

CRAB

Dump

Nobuhiro Terunuma	KEK
Toshiyuki Okugi	KEK
Chris Densham	(STFC)
Marco Calviani	(CERN)
Yu Morikawa	(KEK)
Fernadno Sordo	(ESS Bilbao)
Peter Sievers	(CERN)

Bi-weekly Monday

Sources

Kaoru Yokoya	KEK
Jim Clarke	STFC
Steffen Doebert	CERN
Joe Games	JLAB
Hitoshi Hayano	KEK
Masao Kuriki	U. Hiroshima
Benno List	DESY
Gudrid Moortgat-Pick	U. Hamburg

Peter Sievers (CERN)
 Sabine Riemann (DESY)

Civil engineering

Nobuhiro Terunuma	KEK
John Andrew Osborne	CERN
Tomoyuki Sanuki	U. Tohoku