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# IWG WLTP Low Temp Test Procedure Development for EV

Discussion topics within WLTP Sub Group EV and tasks to be completed

# IWG WLTP Low Temp Test Procedure Development for EV

Current status of the discussion regarding test procedure

Vehicle Category	Type 1 Test Procedure	Options in discussion for Type 6 Test Procedure	Status of discussion
NOVC-HEV(*)	CS-Test (1 x WLTP cycle)	CS-Test (1 x WLTP cycle)	Adapt Type 1 conditions to Type 6 conditions
OVC-HEV(*)	CD-Test (n x WLTP cycle)	CD-Test (n x WLTP cycle)	Proposal from JRC EC: For ICE/NOVC-HEV 1x WLTP test, emissions 3&4 phases. For OVC-HEV CD test: 1x 3 phases and 1x 4 phases WLTP and for CS test 1x 4 phases WLTP.
	CS-Test (1 x WLTP cycle)	CS-Test (1 x WLTP cycle)	
PEV(*)	CCP	CCP	Adapt Type 1 conditions to Type 6 conditions
	STP	STP	Adapt Type 1 conditions to Type 6 conditions
		Shortened STP (3 x WLTP cycle)	New approach: Proposals explaining this possible new approach available from GM and Renault

(\*) refer to [WLTP Low Temp TF Status list v2019-10-25.xlsx](#) (row status “Under Discussion”)

- Row 99: test procedure for NOVC-HEVs (flow diagram)
- Row 100: test procedure for OVC-HEVs (flow diagram)
- Row 102: test procedure for PEVs (flow diagram)

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# IWG WLTP Low Temp Test Procedure Development for EV

Main topics to be covered and concluded

## **Main topic 1:**

Test Procedure set up excluding the topic of preconditioning and vehicle preparation

## **Main topic 2:**

Preconditioning for the test (preconditioning drive, soak and charge period) in order to have a robust procedure and reproducible test results (in line with concepts discussed in Low Temp TF)

## **Main topic 3:**

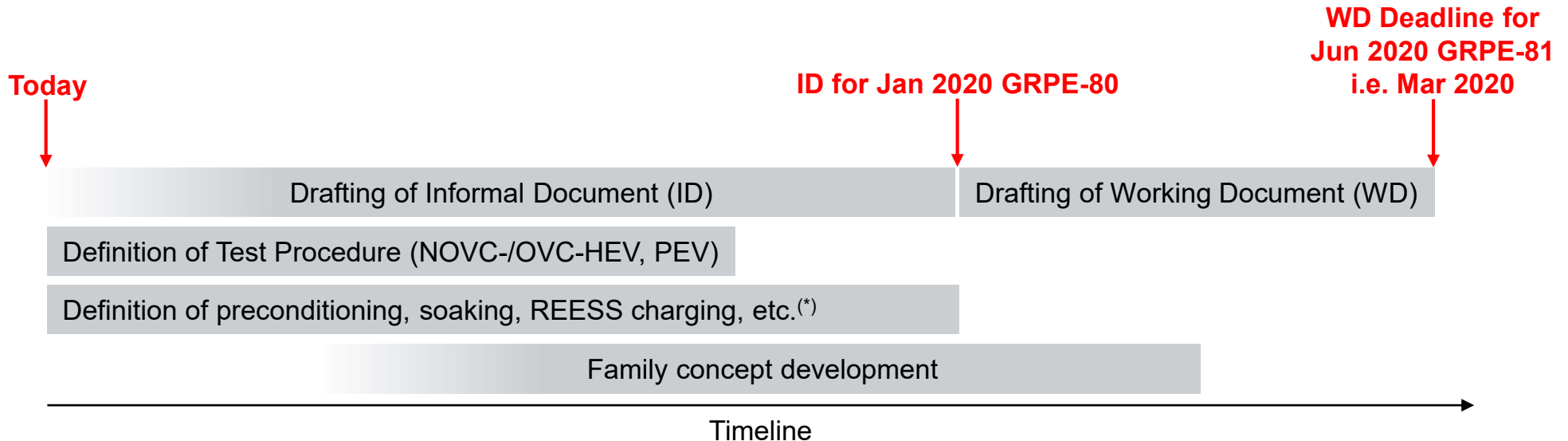
Family concept (in line with concepts discussed in Low Temp TF)

## **Main topic 4:**

Drafting of the informal document (exchange with Draft Coordinator and Low Temp TF required)

# IWG WLTP Low Temp Test Procedure Development for EV

## Main tasks overview



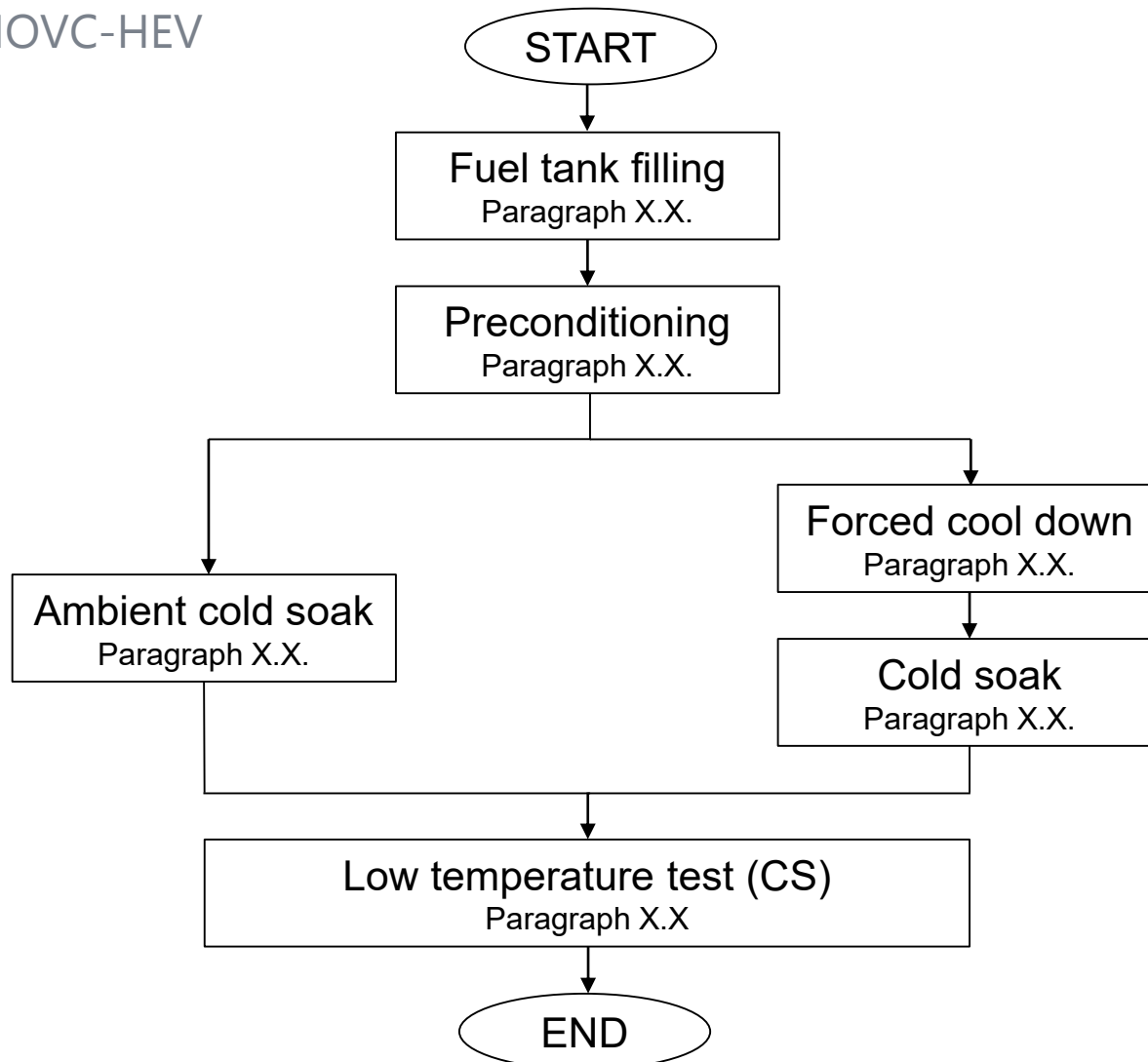
(\*) refer to [WLTP Low Temp TF Status list v2019-10-25.xlsx](#) (row status "Under Discussion")

- Row 107: REESS conditioning (heating)
- Row 109: pre HVAC → discussion in Aux SG
- Row 110: soak duration
- Row 112: define the duration between REESS charge completion and test start
- Row 114: REESS temperature
- Row 116: REESS compensation
- Row 117: Data processing

# IWG WLTP Low Temp Test Procedure Development for EV

Test procedure NOVC-HEV

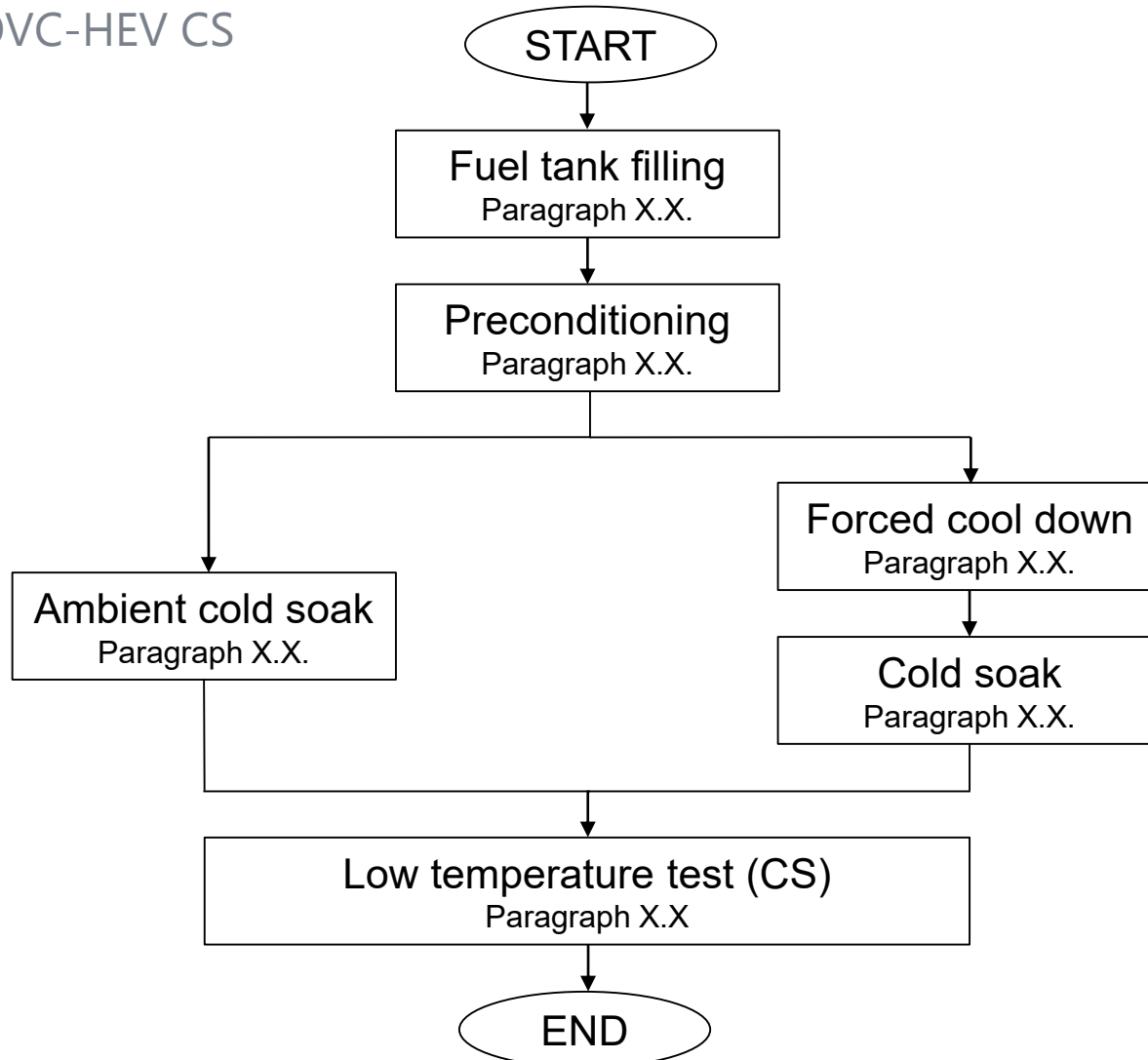
**Draft structure  
for discussion**



# IWG WLTP Low Temp Test Procedure Development for EV

Test procedure OVC-HEV CS

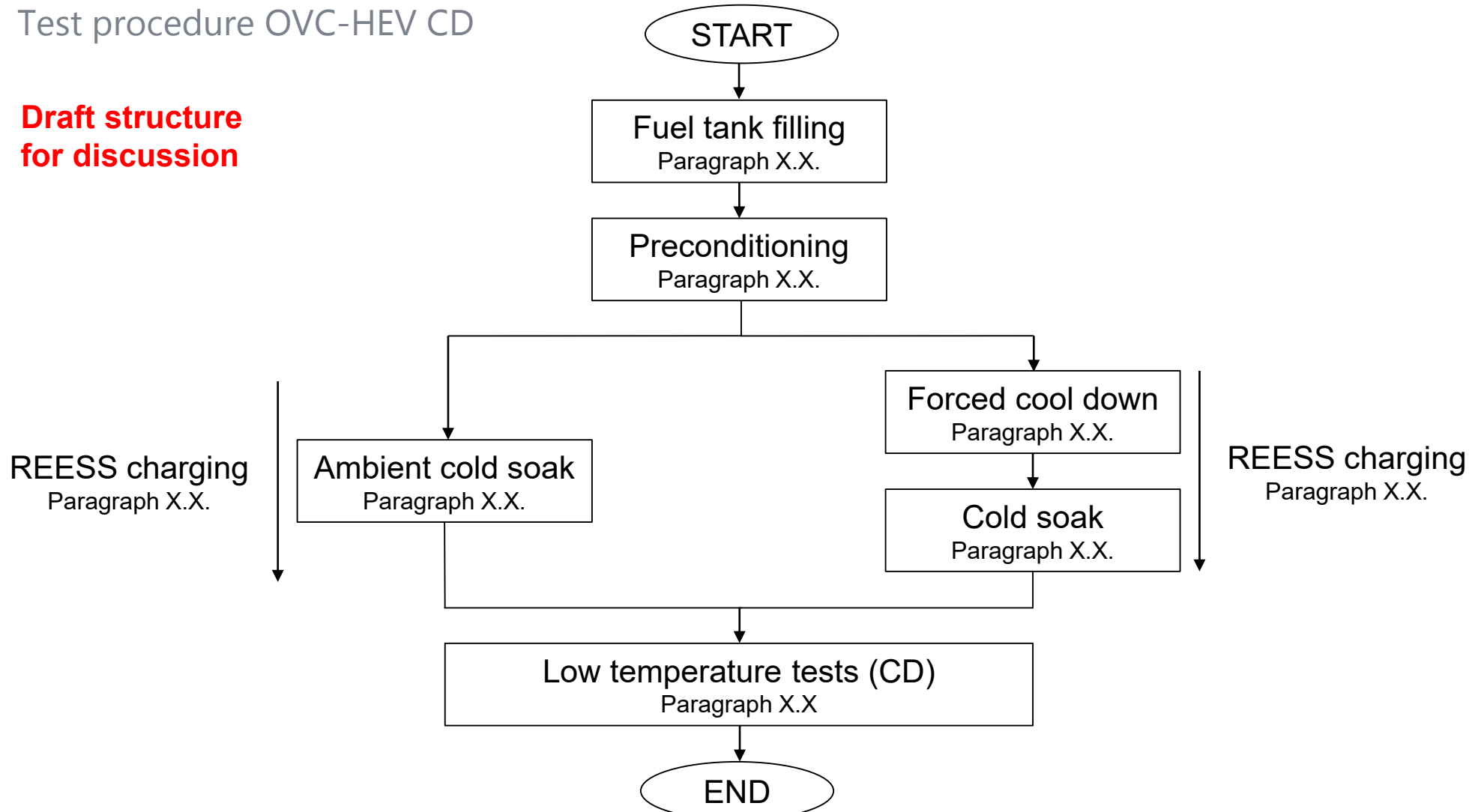
**Draft structure  
for discussion**



# IWG WLTP Low Temp Test Procedure Development for EV

Test procedure OVC-HEV CD

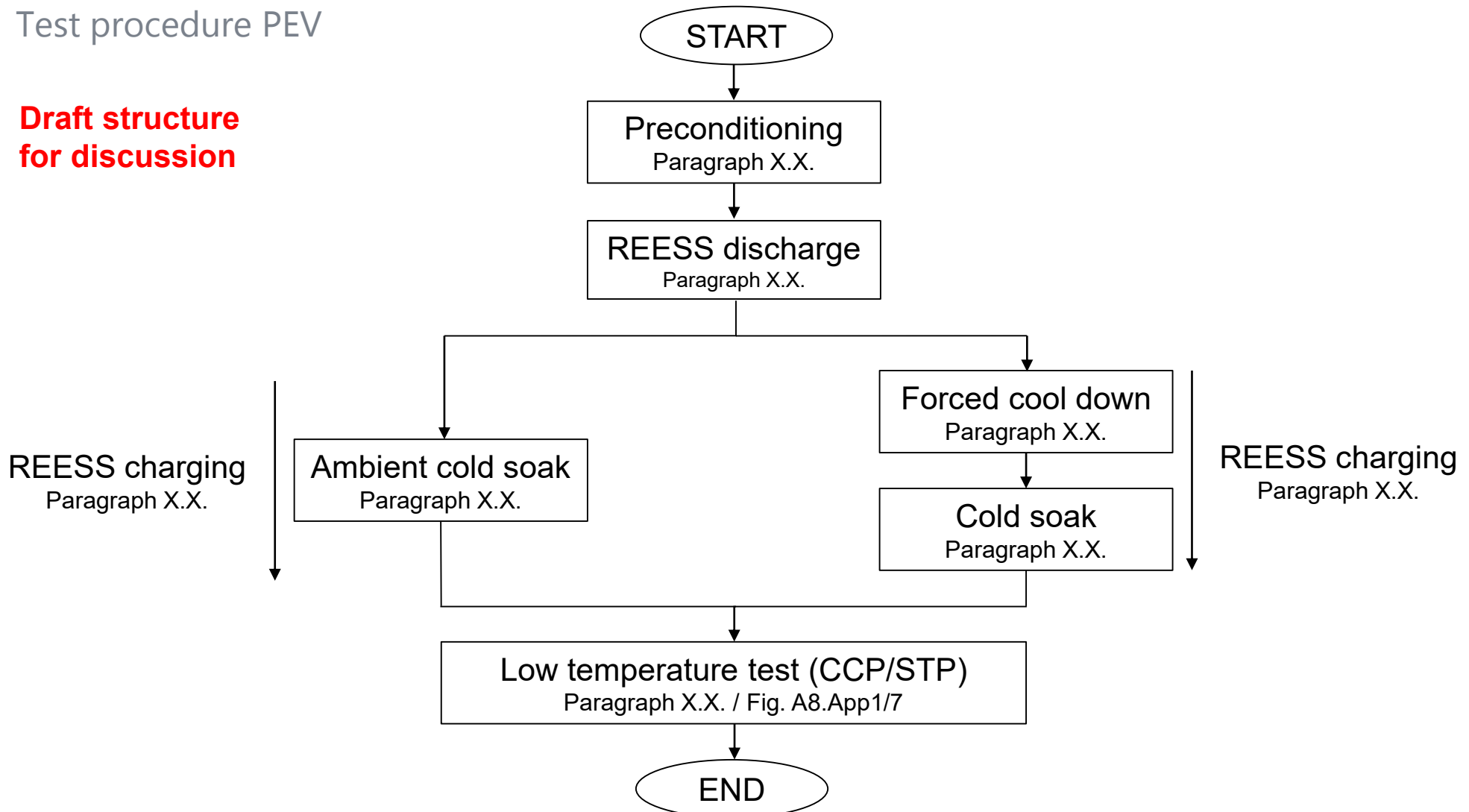
**Draft structure  
for discussion**



# IWG WLTP Low Temp Test Procedure Development for EV

Test procedure PEV

**Draft structure  
for discussion**





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# IWG WLTP Low Temp Test Procedure Development for EV

## **WLTP Sub Group EV Leading Team**

Chair:

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