

System Power Determination

Status of Drafting

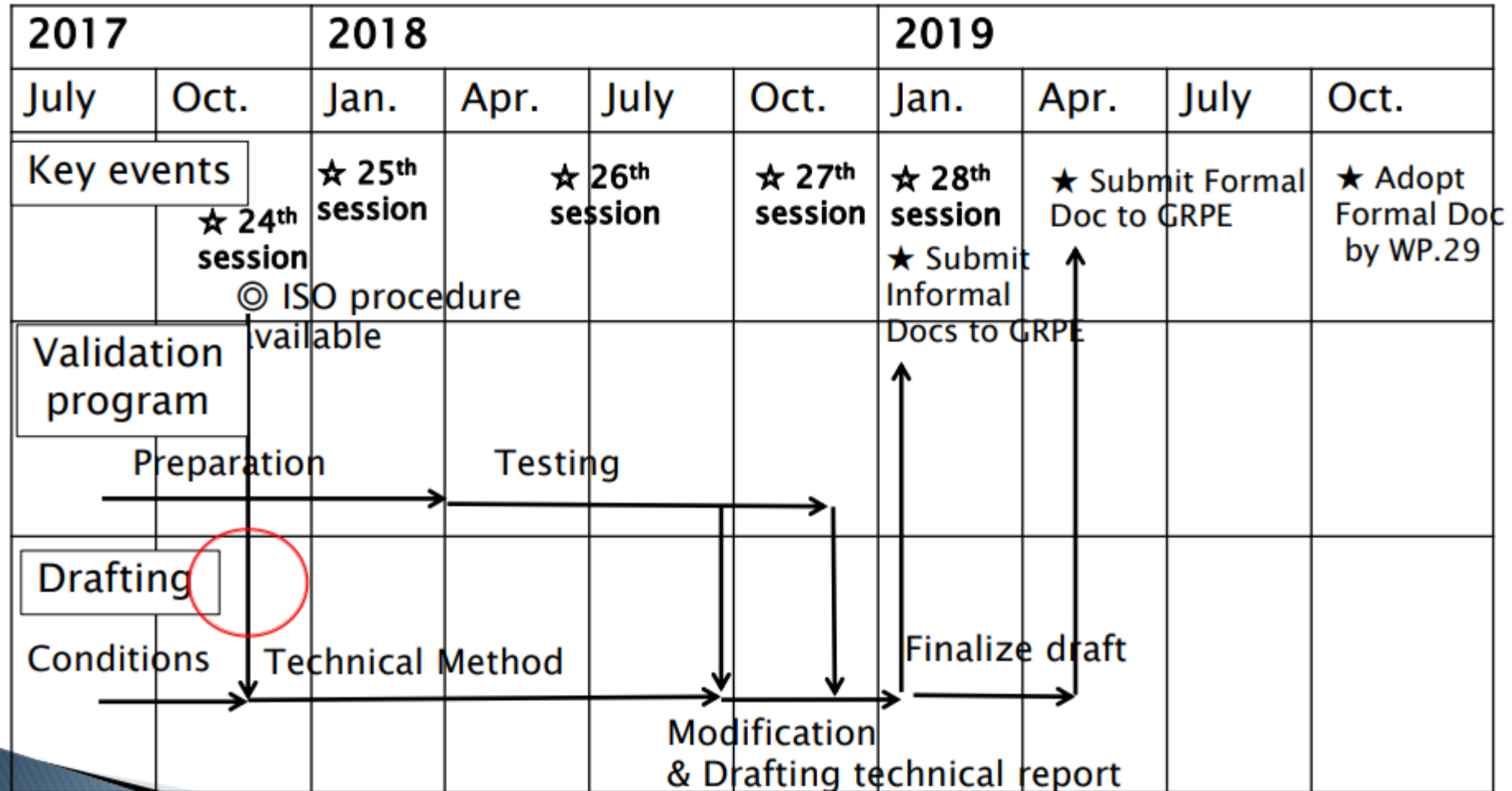
And

Technical Considerations

Drafting group

- Current membership:
 - Chair – Mike Safoutin, US EPA
 - Samarendra Tripathy – Renault
 - Elena Paffumi – JRC
 - Michele DeGennaro – JRC
 - Jiamiao Li – PSA Group
 - Matthis Naegeli – VW
 - Norbert Klein – Hyundai
 - Heinz Steven
 - Kendelle Anstey - Canada
- Meeting 1 telco held 21 Nov 2017
- Meeting 2 telco held 13 Dec 2017
- Progress to date:
 - Conversion of ISO procedure to Word document
 - Establishment of Sharepoint site for group editing
 - Word document properly formatted according to UN style guidelines
 - Adopted protocol for tracking open issues, expert input, revisions
 - Several open issues identified

Planned Schedule for Power Determination GTR Development



Technical considerations

- Validation of TP1 and TP2 for HEV and PHEV configurations
 - Similarity of results
 - Avoid possibility of “cherry picking”
- Selection of CS or CD mode for PHEV configurations
 - Possibility of different power rating (Volt greater in CS, i3 greater in CD)
- Load collectives and maximum power
 - ISO provides a series of fixed vehicle speeds to identify max system power
 - However, detailed method for dividing and specifying speed intervals has not been described
 - Is manufacturer’s recommendation appropriate for a GTR?

Technical considerations

- Reference and candidate methods
 - Reference method to be developed first
 - Candidate method should also be considered concurrently
 - ISO does not describe a candidate method
 - Once developed, it needs to be carefully validated against reference method
- Validation testing
 - See test site matrix
 - Need to identify and solidify test sites, vehicles to be tested
- Warm-up state for PHEVs
 - Maximum battery power is likely at maximum SOC, but achieving warm-up is likely to deplete battery to some degree
 - Artificial regeneration on dynamometer?