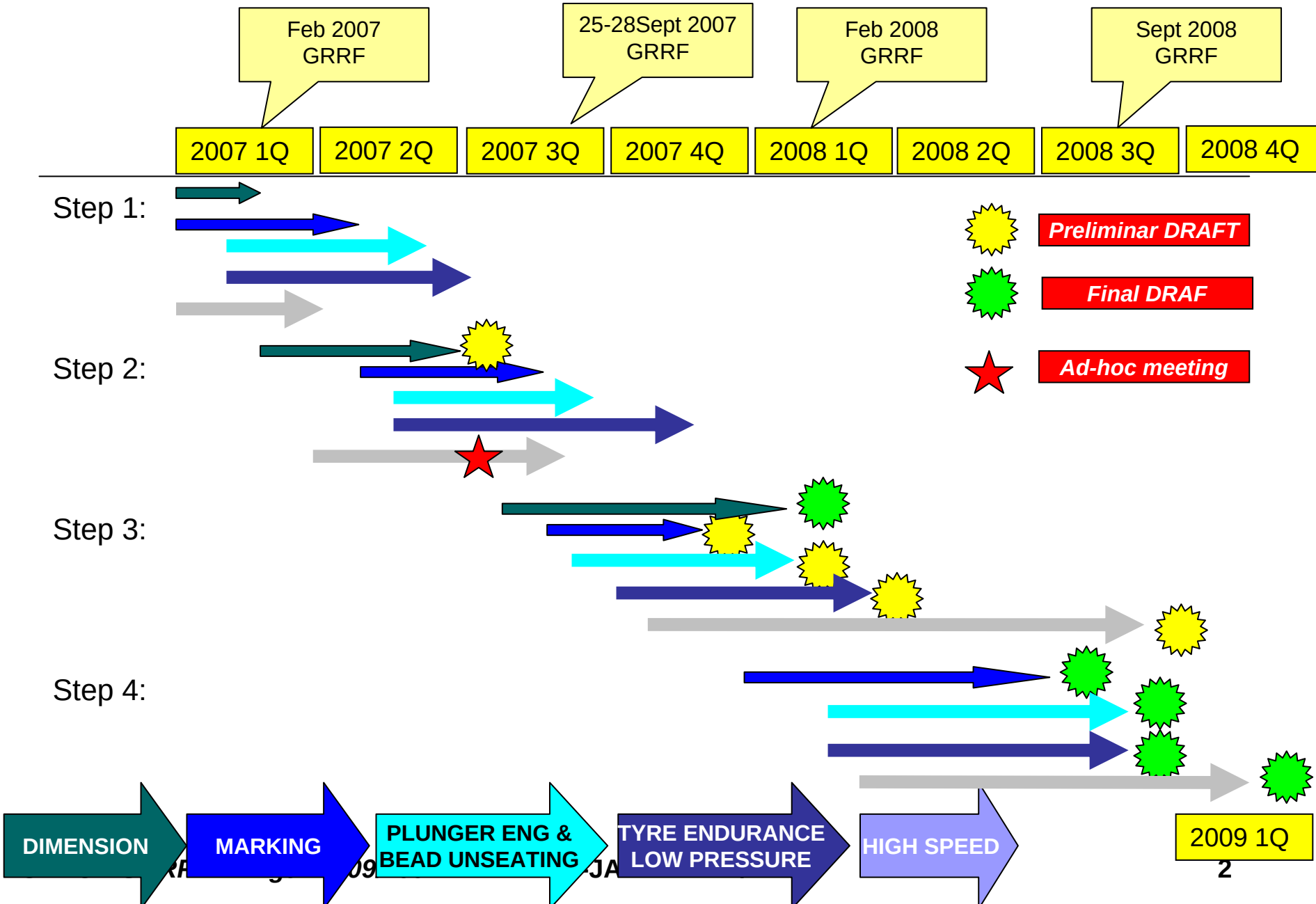
UNECE WP29

TYRE GTR

ROADMAP & ACTION PLAN

Road map for TYRE GTR



Markings for tyre GTR

1st Step : Approach:

Review current marking requirements in various regulations

- Regulations of 98 C/P
- Regulations on other countries, such as Middle East area and South America
- GTS 2000 requirements

Categorizing and grouping marking requirements and items

- FMVSS group
- ECE group
- Special marking requirements

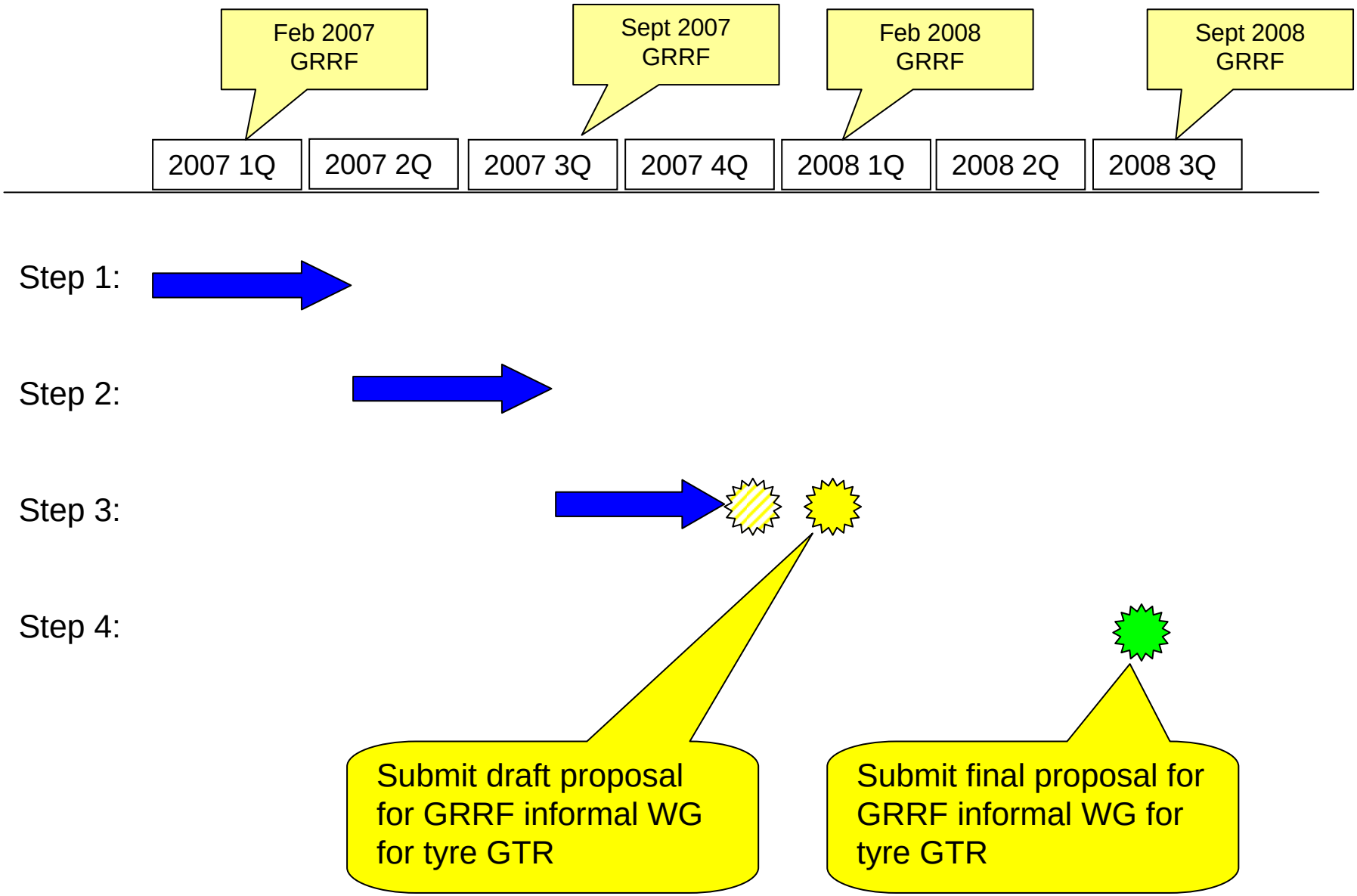
2nd Step : Study draft proposal

- Review each marking item for requirement
- Construct marking requirements, with reasons for adoption

3rd Step : Finalize draft proposal

4th Step : Submit final proposal

Road map for tyre GTR markings



Road Map for Physical Dimensions

1st Step : Analysis of existing regulations:

- Sept 2006: Presented preliminary analysis
- Feb 2007: Update of analysis

2nd Step : Present draft proposal for test method and tolerances

- June 2007: Draft proposal document available to CPs
- Sept 2007: Discussion of proposal in GRRF

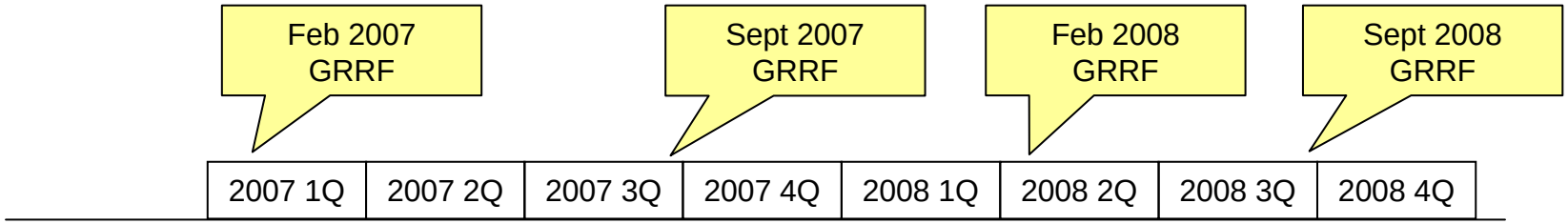
3rd Step : Finalize draft proposal

- Feb 2008: Present final draft, make modifications if needed

4th Step : Submit final proposal

- Sept 2008: Obtain final agreement

Road Map for Physical Dimensions



Step 1:

Step 2:

Step 3:

Step 4:

Present final draft, make modifications if needed

Obtain final agreement

Road Map for High Speed Test

1st Step : Approach:

- Sept 2006: Proposed idea to use "most severe" test
- Feb 2007: Propose method to determine test severity equivalence point

2nd Step : Gather data, evaluate feasibility, and presentation of preliminary results

- June 2007: Feasibility established
- Sept 2007: Present preliminary results to GRRF

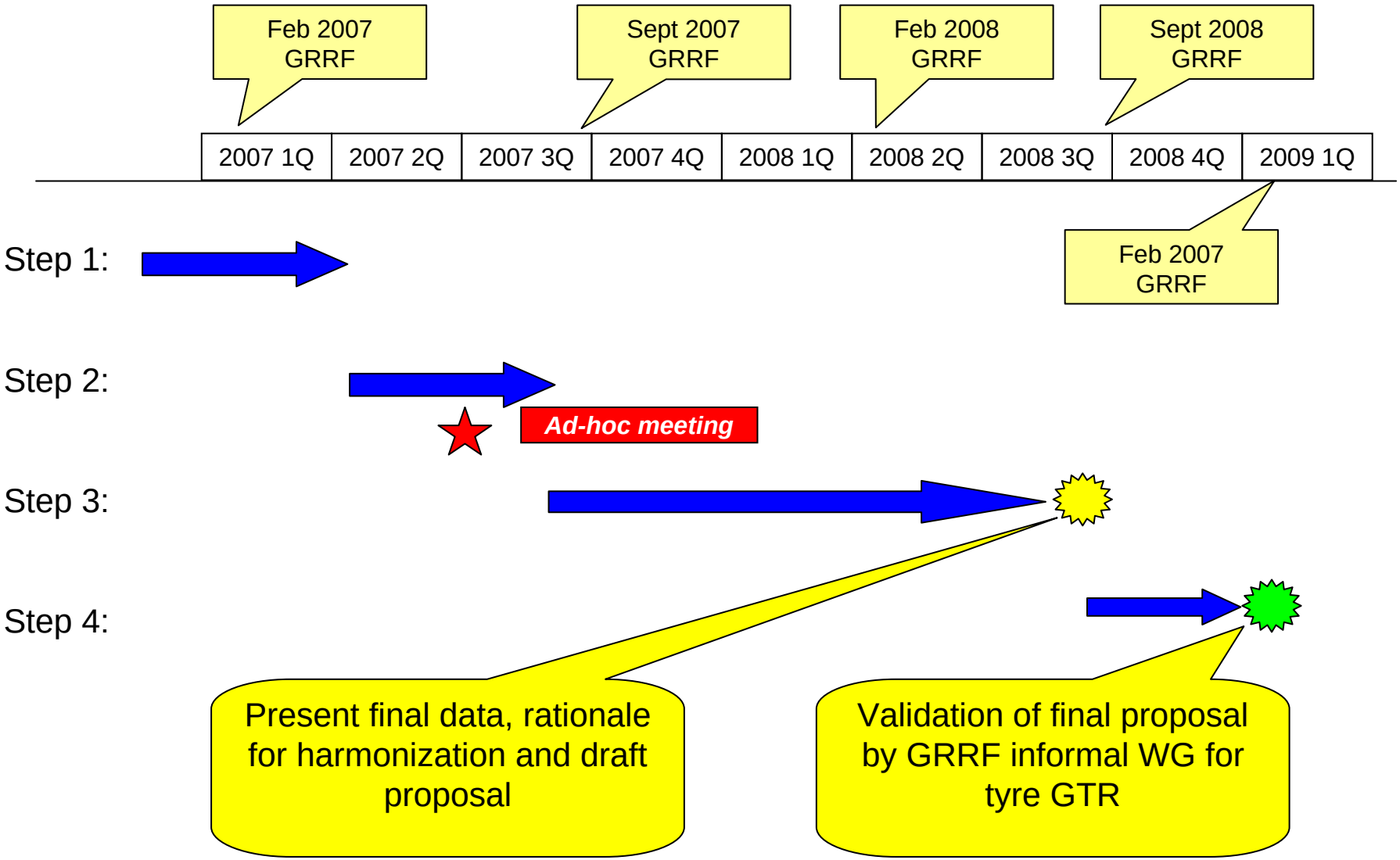
3rd Step : Finalize draft proposal

- Sept 2008: Present final data, rationale for harmonization and draft proposal

4th Step : Submit final proposal

- Feb 2009: Obtain final agreement

Road Map for High Speed Test



Plunger Energy (Tyre Strength)

1st Step: Approach:

- Review current test requirements
  - Regulations of 1998 Agreement Contracting Parties
  - Regulations from other countries
  - GTS 2000 requirements
- Study value of test for bias and radial
  - Solicit experience from CP regarding casing penetrations for radial ply tyres
  - Consider options for industry proposal based on needs and application of test to modern radial tyres

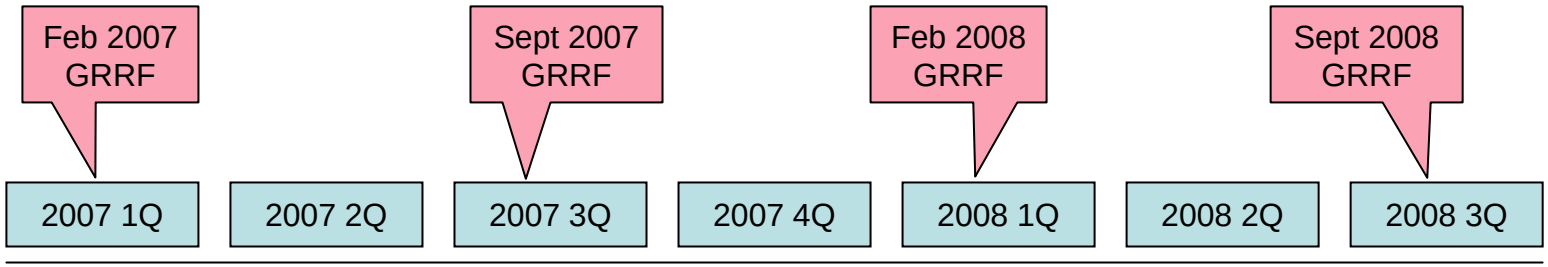
2nd Step: Study Draft Proposal

- Review all available input and construct draft application based on best available information

3rd Step: Finalize Draft Proposal

4th Step: Submit Final Proposal

Road Map for Plunger Energy (Tyre Strength)



Step 1:

Step 2:

Step 3:

Step 4:

Submit Draft Proposal

Submit Final Proposal

Bead Unseating Resistance Test

1st Step: Approach:

- Review current test requirements
  - Regulations of 1998 Agreement Contracting Parties
  - Regulations from other countries
  - GTS 2000 requirements
- Study value of test for bias and radial
  - Solicit experience from CPs and other stake holders regarding bead unseating for radial ply tyres
  - Consider options for industry proposal based on needs and application of test to modern radial tyres, including low aspect ratio tires

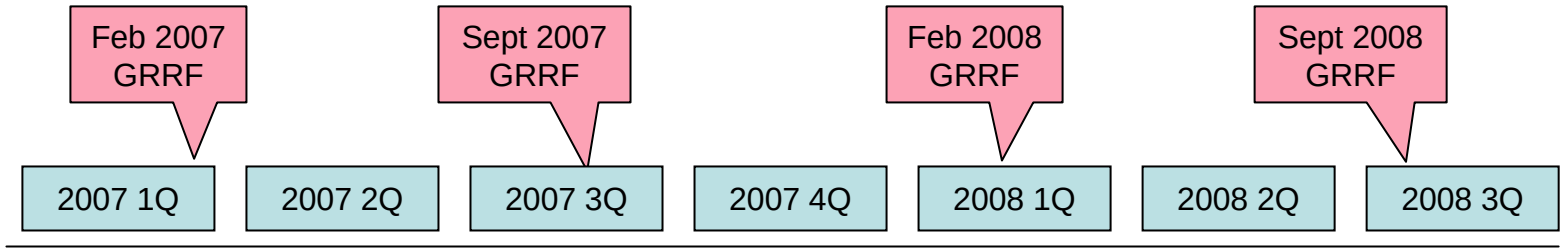
2nd Step: Study Draft Proposal

- Review all available data, including transfer of forces, simulation of actual field conditions and construct draft proposal

3rd Step: Finalize Draft Proposal

4th Step: Submit Final Proposal

Road Map for Bead Unseating Resistance Test

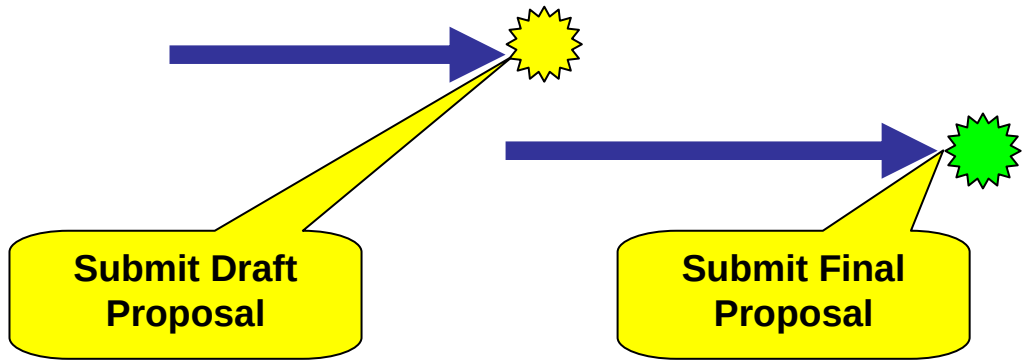


Step 1:

Step 2:

Step 3:

Step 4:



Tyre Endurance/Low Pressure Test

1st Step: Approach:

- Review current test requirements
  - Regulations of 1998 Agreement Contracting Parties
  - Regulations from other countries
- Study value of creating equivalent test severity for vehicle tyres
  - Review all available data, including work by ASTM to develop a technical standard for tires that provides equivalent test severity on a curved surface vs. a flat (real-world) surface.

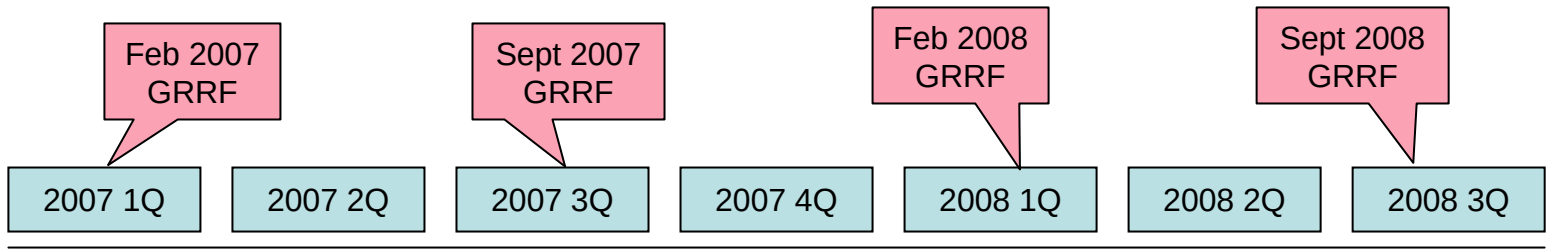
2nd Step: Study Draft Proposal

- Validate equivalency factors that can be used in roadwheel testing

3rd Step: Finalize Draft Proposal

4th Step: Submit Final Proposal

Road Map for Tyre Endurance/Low Pressure Test



Step 1:

Step 2:

Step 3:

Step 4:

Submit Draft Proposal

Submit Final Proposal