

**Committee of Experts on the Transport of Dangerous Goods
and on the Globally Harmonized System of Classification
and Labelling of Chemicals**

Sub-Committee of Experts on the Transport of Dangerous Goods

1 July 2024

Sixty-fourth session

Geneva, 24 June-3 July 2024

Item 4 (b) of the provisional agenda

Electric storage systems:

**Hazard-based system for classification
of lithium batteries**

Hazard-based system for classification of lithium batteries

Presented by Belgium, France, RECHARGE on behalf of the IWG



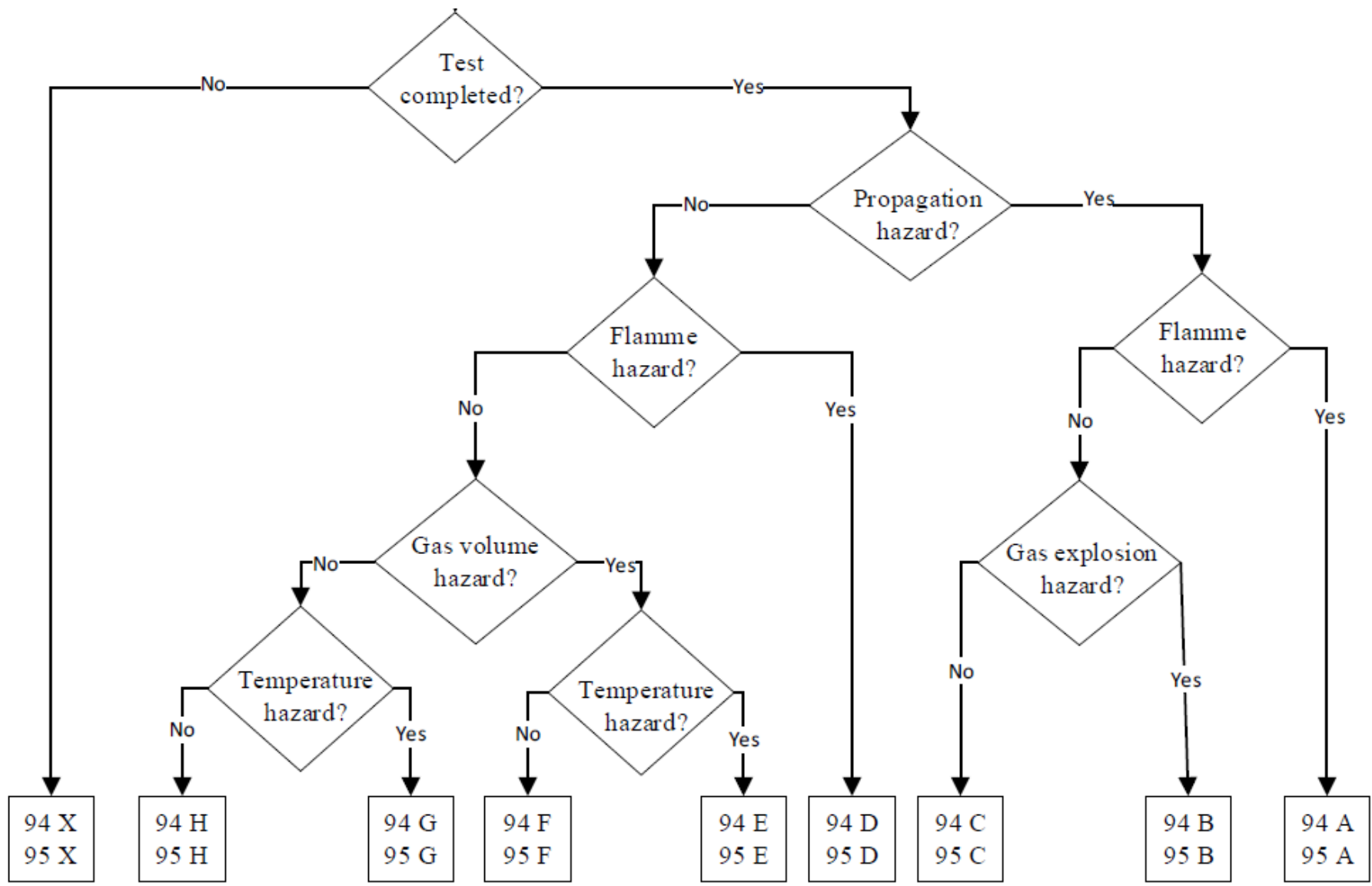
Six key points of the new proposed classification

Summary of key points of paper ST/SG/AC.10/C.3/2024/13 and INF. 26

Hazard-based system for classification of lithium batteries

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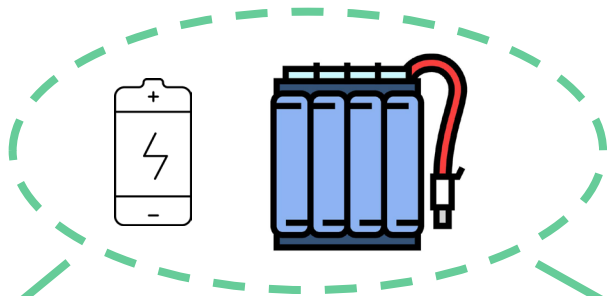
1. The new classification is optional

The new tests and classification will be applicable on a voluntary basis only during a transition period. Products can still be transported under the unchanged existing system.



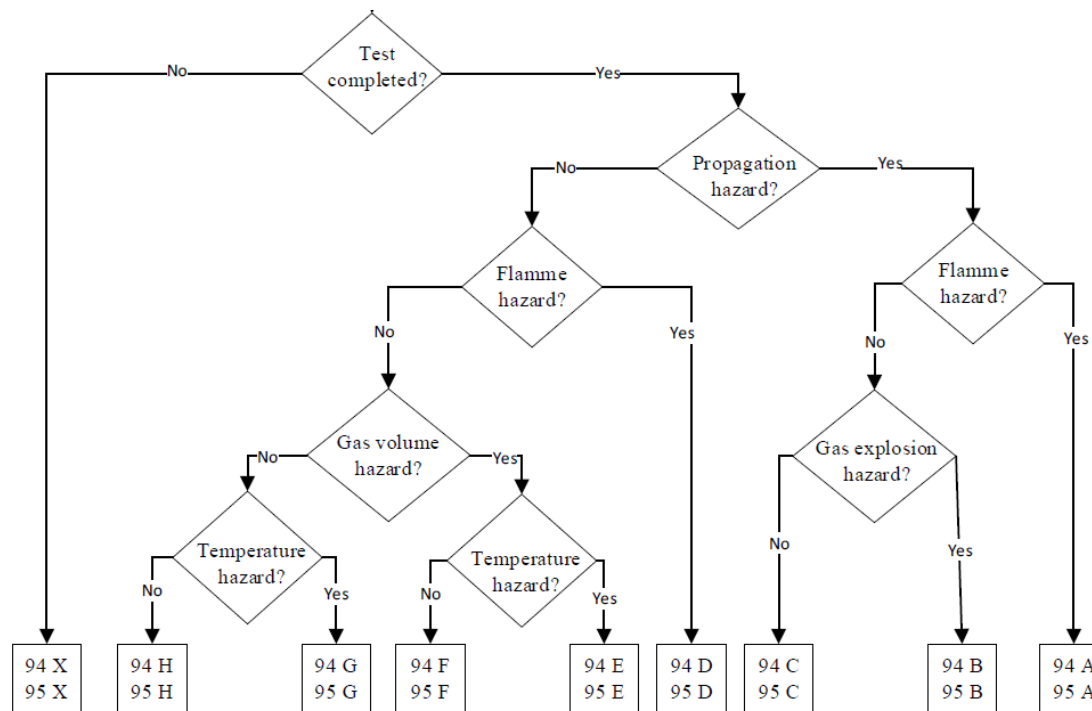


Option 1



Option 2
Voluntary
classification

Unchanged
existing system
("one size fits all")



Benefits ↓

- New transport condition adapted to the identified hazard
 - Possibility to take SoC into account





2. The new classification facilitates transport of “safe batteries”

Transport conditions (currently being draft) are expected to be less stringent than in the current system for low reactivity batteries .

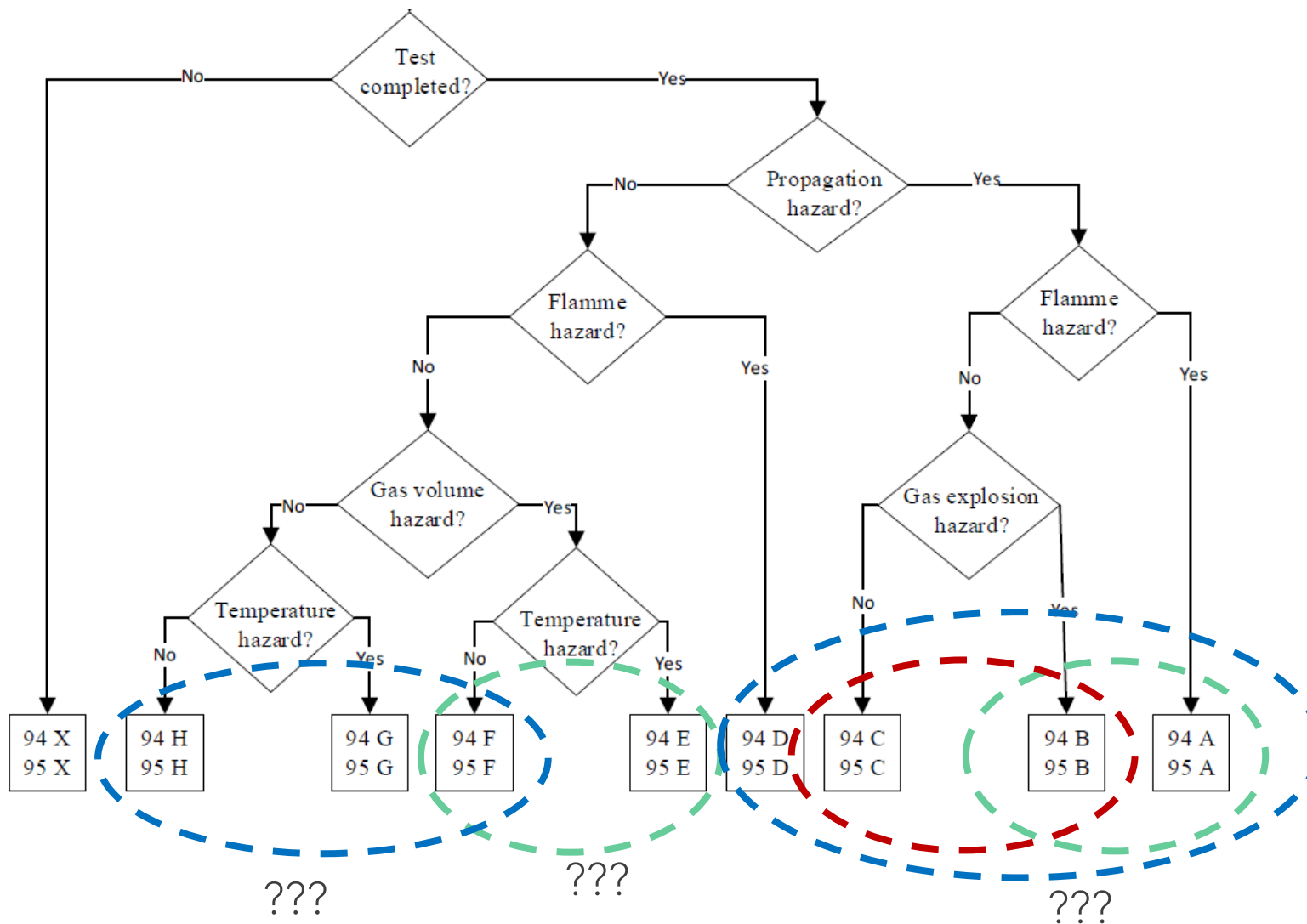




3. The new classification gives more granularity

The classification of hazards scheme represents the maximum expected granularity of the classification. The benefit is to identify when easier transport conditions can be applied.





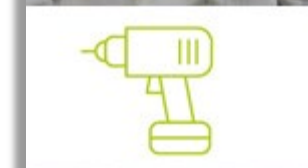
To be defined according to proposed transport conditions under discussion in the IWG





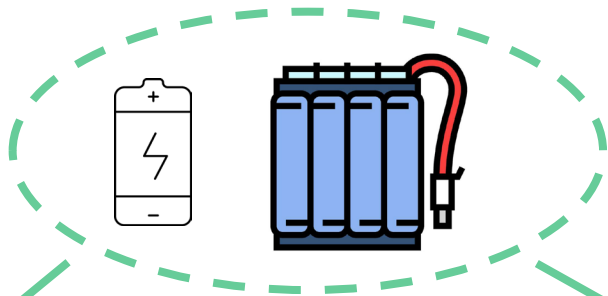
4. The new classification includes SoC

The State of Charge (SoC) of batteries is a major mitigation measure to facilitate safe transport. The proposal clarifies how to benefit of this when it can be verified.





Option 1



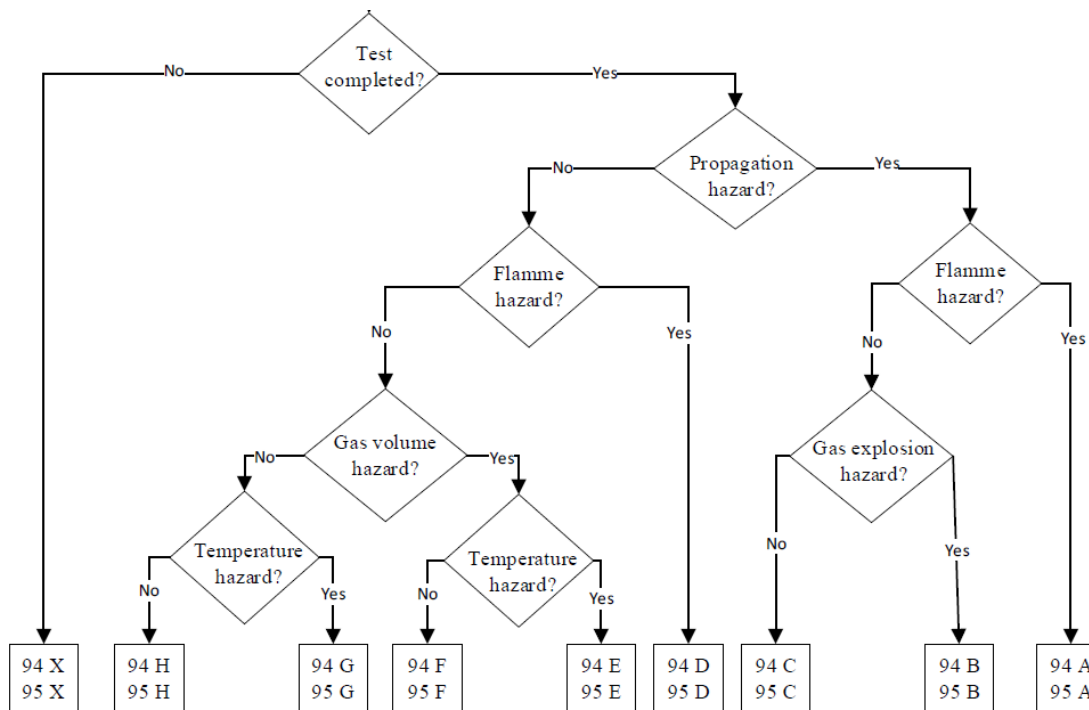
Option 2

Voluntary classification at X SoC

Unchanged existing system ("one size fits all")



Tested at SoC 100%



Benefit



- Possibility to take SoC into account





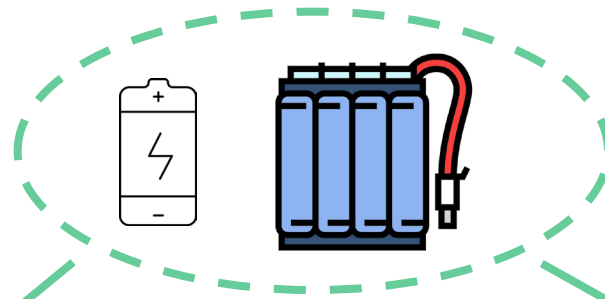
5. The new classification includes sodium ion batteries

Some sodium ion batteries have demonstrated hazards similar to those of lithium batteries, though less severe. The IWG includes the sodium-ion batteries in the new classification system



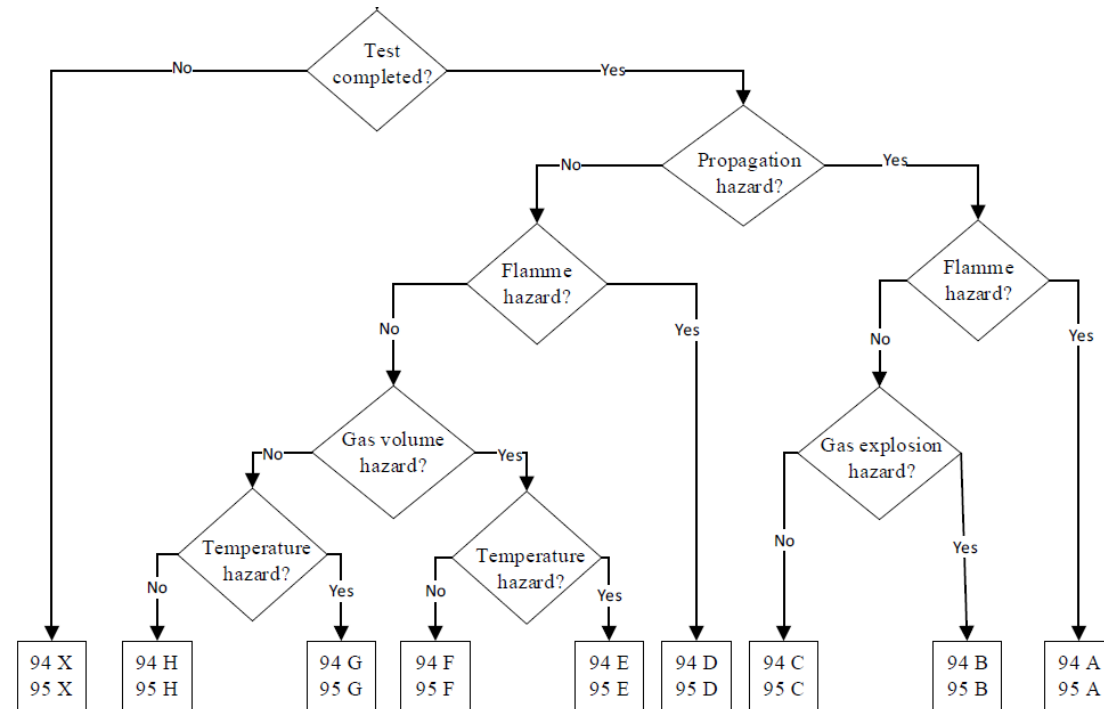


Option 1



Option 2
Voluntary
classification

Unchanged
existing system
("one size fits all")



Benefits ↓

- New transport condition adapted to the identified hazard
 - Possibility to take SOC into account





6. Further discussion at the IWG

- Continue discussions at the next IWG meeting on August 27-29 in Washington.
- The stakeholders having provided comments to the IWG proposal are welcome to join the discussions in the next IWG meeting.
- During the further development of the proposal, including packaging conditions to assign division, further assessment of additional testing and verification will also be discussed.
- At this point, it is not expected to adopt any new regulation this biennium, but the IWG expects to finalize as soon as possible.

