
CBec Discussion Summary / Progress Update

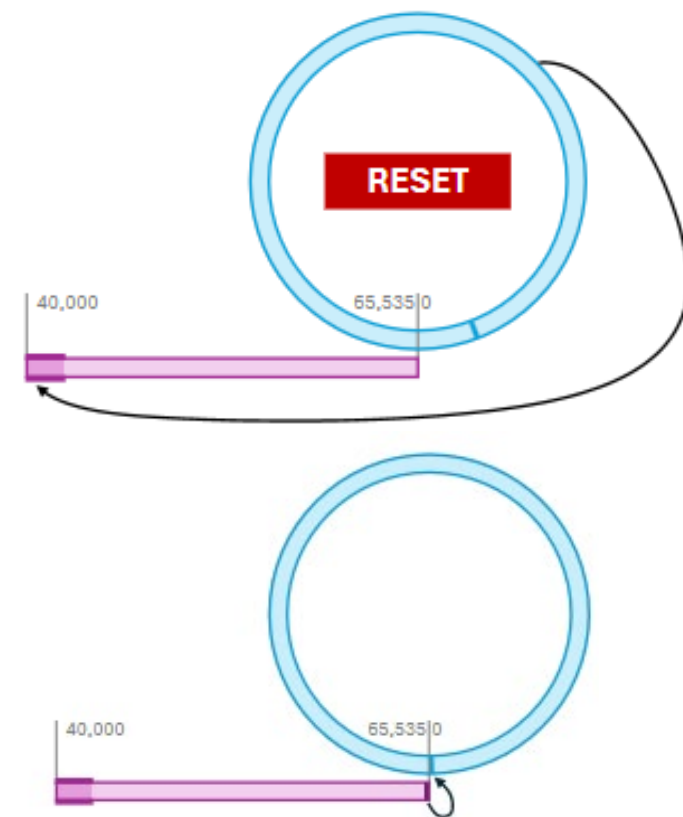
from 14. September 2026, Interim Lisbon

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Status Update

CBec Current Status of Interim Discussions

- **We have reached agreement on the intended behavior.**
- The current focus is on how to describe this behavior clearly and implementably in the standard. Alternatives are still under discussion.
- We are exploring different representations (pseudocode, state machines)
- **The next discussion round is scheduled for this afternoon (13:30).**



Figures from David McCall:
<https://www.ieee802.org/1/files/public/docs2026/ec-mccall-et-al-FRER-combined-proposal-details-draft-0626-v02.pdf>

Configuration and Optionality

Main Point: The new CBec version provides the same behavior as the current version, but avoids the lost-packet counting. Other behavior is optional.

The current concept allows several features to remain optional:

Option 1 — Sequence Generation

Support for the UseInitSpace administrative variable in SeqGen is configurable. A sequence generator may therefore continue to operate as today.

Option 2 — Sequence Recovery

Support for processing the Reset and Init flags / initial sequence-number space in SeqRcvy is configurable.

Option 3 — Parallel Processing

Processing the normal and initial sequence-number spaces in parallel is configurable.

The main open question is how this configurability can be expressed cleanly in the standard.



Some Agreed Behavior / Details

We use **two explicit flags**. Reason from the discussion:

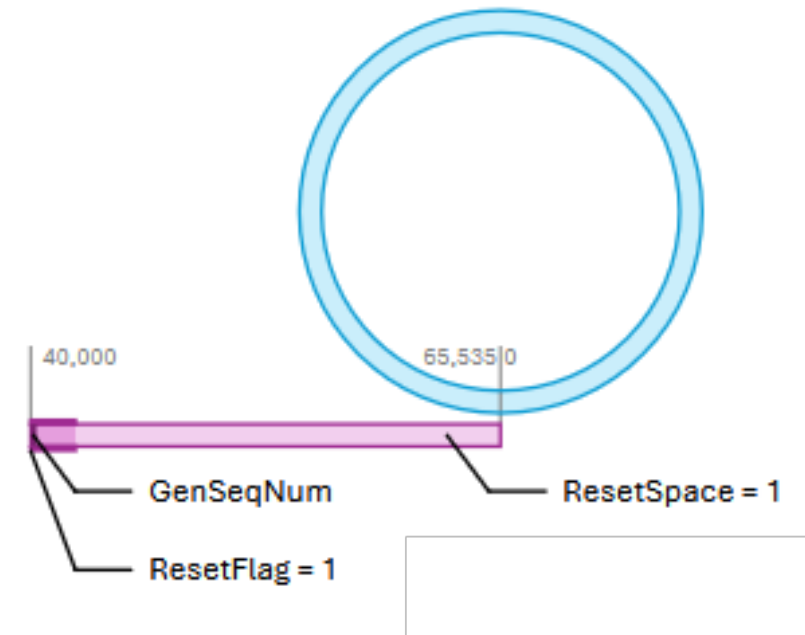
- In principle, the receiver could infer the transition from the initial sequence number plus an offset.
- However, requires a **sequence-number comparison** at the receiver.
- Flags make the processing simpler and the behavior easier to understand.

Disabling the **initial sequence-number space** is possible:

- For SeqGen, a changed UseInitSpace configuration becomes effective only after the next **Reset**. Same for SeqRcvy.
- Disabling of the initial sequence-number space while it is currently being used is therefore **not supported**.

Current discussions favor setting the number of packets carrying the **ResetFlag** to HistoryLength.

ValidWindowLength will be configurable. Its **default value** should be equal to HistoryLength



Main Open Design Question

The largest remaining discussion concerns the **receiver state machine / pseudocode**.

One proposed solution processes the **initial and normal sequence-number spaces in parallel**. This may be the easiest way to adapt the existing standard.

However, we need to determine:

- how parallel processing can be made optional, and
- whether the same behavior can be described with a **single state machine** instead.