

An Update of Operators Requirements on Network Management Protocols and Modelling

[draft-boucadair-nmop-rfc3535-20years-later](#)

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NMOP Work Item

The current topics of focus for the working group are:

- NETCONF/YANG Push integration with Apache Kafka & time series databases
- Anomaly detection and incident management
- Issues related to deployment/usage of YANG topology modules (e.g., to model a Digital Map)
- Consider/plan an approach for updating [RFC 3535](#)-bis
(**collecting updated operator requirements for IETF network management solutions**)

Excerpt from the NMOP Charter

Some History

What's Next?

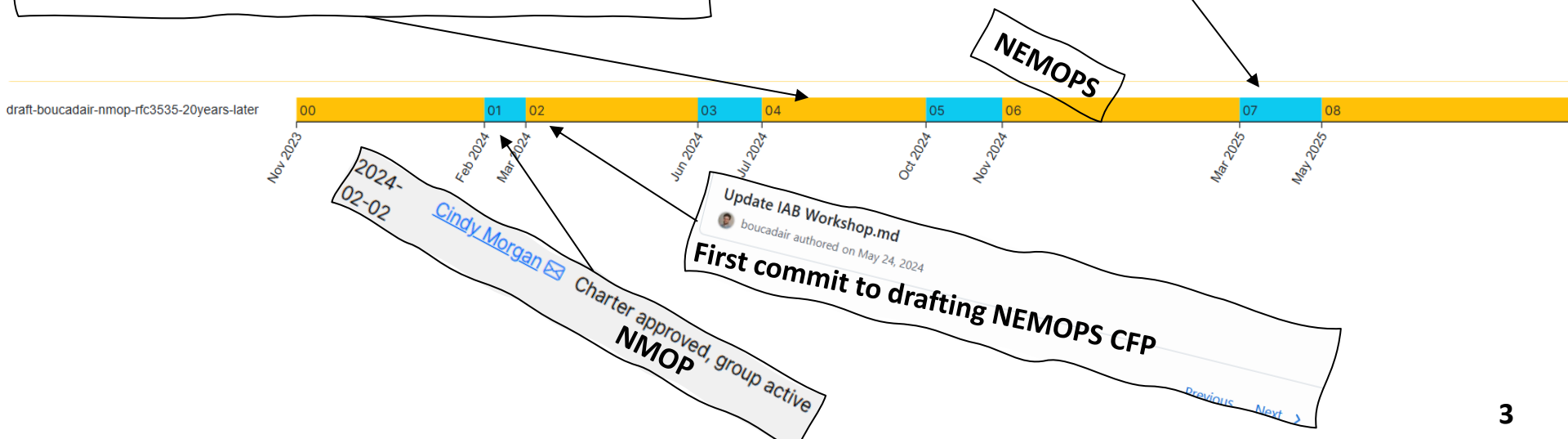
- presented in IETF#120, 07/2024
- The WG coordinates with the IAB to organize NEMOPS Workshop with the hope to collect inputs from *a wider operators' community* (not only those participating to the IETF)
 - A workshop report will be published by the IAB
 - That report *does not reflect IETF consensus*
- Options for discussion
 - #1: Submit *nmop-rfc3535-20years-later* as an individual contribution to NEMOPS
 - #2: Maintain an NMOP document that reflects the WG consensus and build IETF consensus on specific key/engineering items
- #1 seems reasonable for the long-term transformations
- However,
 - #2 seems more appropriate for IETF-specific adjustments (e.g., new YANG publication process, guidance about device models in the IETF)
 - The document can be adopted with the assumption that it might not be published as an RFC

OPSAREA IETF#122



NEMOPS Workshop Call for Action

- Feedback on the outcome of the workshop at nemops-interest@iab.org
- The Program Committee is working on the workshop reports:
 - <https://datatracker.ietf.org/doc/draft-iab-nemops-workshop-report/>
 - Send feedback or GitHub PR:
<https://github.com/intarchboard/draft-iab-nemops-workshop-report>
- Reminder: workshop is not the end, it is just a trigger for further discussion!
- New requirements being finalized in NMOPS WG
- Time for some process experimentations...



This **SHOULD NOT** Be ...

- a remake of NEMOPS Workshop
- a mirror of items that are already covered by advanced specifications
- a collection of random items without clear justification

What's in Then?

- A consolidated list of requirements from Operators together with an agreed **prioritization** of that list (strong, nice-to-have)
 - All inputs can be found at [rfc3535-20years-later/Prez/NEMOPS/nemops-session2-summary.md](https://github.com/boucadair/rfc3535-20years-later/Prez/NEMOPS/nemops-session2-summary.md) at main · boucadair/rfc3535-20years-later

Requirements Level								
Feel free to complete a column with your own assessment + update OP# with the operator name.								
NEW Ops Requirement Label	Orange	Telefonica	Swisscom	Equinix	Deutsche Telekom	China Telecom	nbnco	Overall

- A collaborative effort that involve all interested parties to build **a very few set of actionable items** that will be the focus of immediate work in the IETF

Candidate Direction of Work

- *Rationalize device models* space and avoid redundant efforts
 - Clear guidance for the development of device models in the IETF
- More *agile process* for developing YANG modules
- *More Profiling*
 - E.g., A profile with a set of recommendations about core/key NETCONF/RESTCONF features with the appropriate justification will help the emergence of more implementations that meet the operators' needs
 - YANG profiles
- *Reassess the value of some IETF proposals* vs. competing/emerging solutions would be useful (e.g., gRPC vs. YANG-Push)

Next Steps

- Update the new operators list
- Update

5.4. Collaborative Prioritization

TBC to reflect the priorities set by the WG. ¶

((Including Rob's Inputs)) ¶

- Move much faster (NEW-OPS-REQ-QUICK-BUT-WELL, NEW-OPS-REQ-TIMELY-DM) ¶
- Implement minimal functionality, not bells and whistles (NEW-OPS-REQ-GUIDE-AND-PROFILE, NEW-OPS-REQ-ITER) ¶
- Have running code (NEW-OPS-REQ-READILY-IMPLEM, NEW-OPS-REQ-TOOLS) ¶
- Have vendors and operators on board at the time of developing the solution independent compliance suite to validate things. ¶
- Need to coorelating data learned from different means (IPFIX, BMP, Models) ¶