

An Update of Operators Requirements on Network Management Protocols and Modelling

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

IETF#123, Madrid , July 2025

Mohamed Boucadair (Orange)
Luis M. Contreras (Telefonica)
Óscar Gonzalez de Dios (Telefonica)
Thomas Graf (Swisscom)
Reshad Rahman (Equinix)
Lionel Tailhardat (Orange)

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?

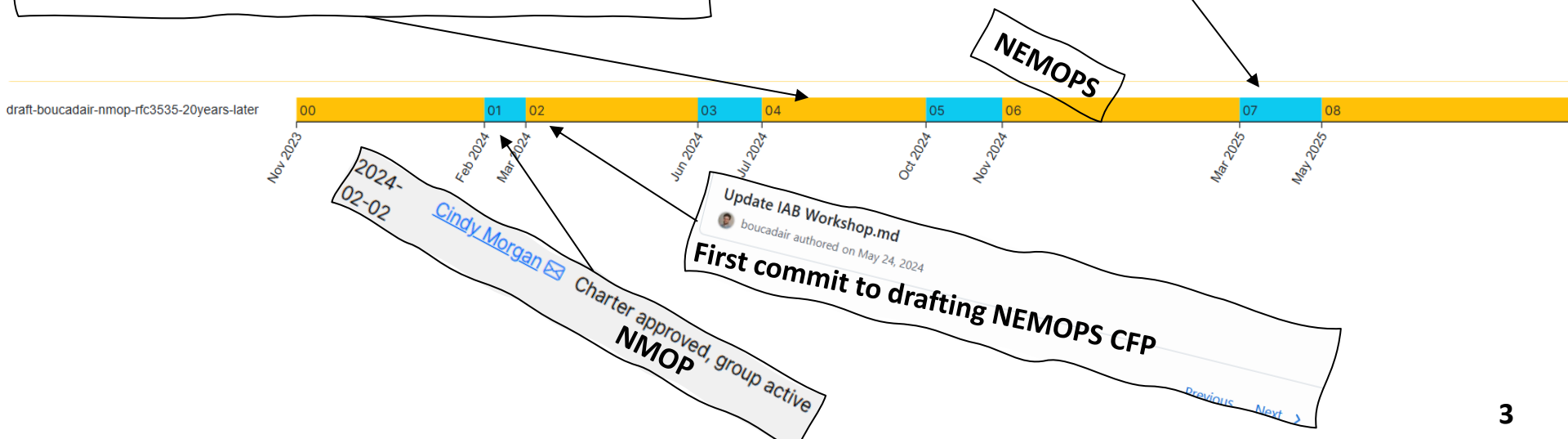
- presented in IETF#120, 07/2024
- The WG coordinates with the IAB to organize NEMOPS Workshop with the hope to collect inputs from *a wider operators' community* (not only those participating to the IETF)
 - A workshop report will be published by the IAB
 - That report *does not reflect IETF consensus*
- 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 - The document can be adopted with the assumption that it might not be published as an RFC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	nbnc	Overall
---------------------------	--------	------------	----------	---------	------------------	---------------	------	---------

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

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

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) ¶

Questions