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ETSI GS NFV-IFA 053 V0.0.1 (2023-05)

**Group Specification**

Network Functions Virtualisation (NFV) Release 5; Management and Orchestration; Requirements and interface specification for Physical Infrastructure Management

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# Foreword

This Group Specification (GS) has been produced by ETSI Industry Specification Group (ISG) Network Functions Virtualisation (NFV).

# Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](https://portal.etsi.org/Services/editHelp!/Howtostart/ETSIDraftingRules.aspx) (Verbal forms for the expression of provisions).

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# 1 Scope

Editor’s Note: This clause will provide scope of the present document.

# 2 References

## 2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non‑specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at [https://docbox.etsi.org/Reference](https://docbox.etsi.org/Reference/).

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The following referenced documents are necessary for the application of the present document.

[1] <first normative reference>.

## 2.2 Informative references

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NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

[i.1] <first informative reference>.

# 3 Definition of terms, symbols and abbreviations

## 3.1 Terms

For the purposes of the present document, the terms given in ETSI GR NFV 003 [i.1] and the following apply:

NOTE: A term defined in the present document takes precedence over the definition of the same term, if any, in ETSI GR NFV 003 [i.2].

## 3.2 Symbols

For the purposes of the present document, the [following] symbols [given in ... and the following] apply:

## 3.3 Abbreviations

For the purposes of the present document, the [following] abbreviations [given in ... and the following] apply:

# 4 Overview

Editor’s Note: This clause will provide overview of Physical Infrastructure Management in the NFV-MANO context and analyse the relevant use cases in other documents.

## 4.1 Introduction

Editor’s Note: This sub-clause will introduce physical infrastructure management and discuss its need in NFV.

## 4.2 Use cases from relevant NFV documents

Editor’s Note: This sub-clause will refer the relevant use cases from other NFV documents related to Physical Infrastructure Management, e.g., IFA036, IFA046, EVE021 etc.

## 4.3 Input from other organizations

Editor’s Note: This sub-clause will discuss physical infrastructure management approaches/requirements from other organizations such as Anuket, GSMA etc.

# 5 Architectural Aspects of Physical Infrastructure Management

Editor’s Note: This clause will analyse architectural aspects of PIM and discuss options to determine the best specification approach for interfaces and information modelling.

# 6 Requirements for Physical Infrastructure Management

Editor’s Note: This clause will define requirements associated to PIM based on profiling of existing solutions done in Annex B.

# 7 Information Modelling for Physical Infrastructure Management

Editor’s Note: The information modelling in this clause will take into considerations the outcomes from profiling of existing solutions. For example, it may reference already defined information models, such as DMTF Redfish.

# Annex A (informative): Architectural Analysis of Physical Infrastructure Management

Editor’s Note: This annex will analyse the architectural options for physical infrastructure management within the NFV-MANO framework.

## A.1 First clause of the annex

### A.1.1 First subdivided clause of the annex

# Annex B (informative): Profiling of existing solutions

Editor’s Note: This annex will profile the endorsed existing solutions such as IPMI, Ansible, DMTF Redfish, OpenStack Ironic, LFN ODIM and metal3 etc.

## B.1 First clause of the annex

### B.1.1 First subdivided clause of the annex

# Annex (informative): Change History

| Date | Version | Information about changes |
| --- | --- | --- |
| May 2023 | V0.0.1 | Initial skeleton of the GS as provided in NFVIFA(23)000313r1 (approved in NFVIFA##332-F2F). |
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# History

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