



Evolution of the Terminology documentation and inclusion of AI

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WP6T4

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GN5-2

Agenda

- The need for Terminology and a Glossary
- How the Terminology and Glossary is enriched – The process!
- Activities published so far
- Activities under development
- AI/ML to the Rescue!
- Methodology

The need for Terminology and a Glossary

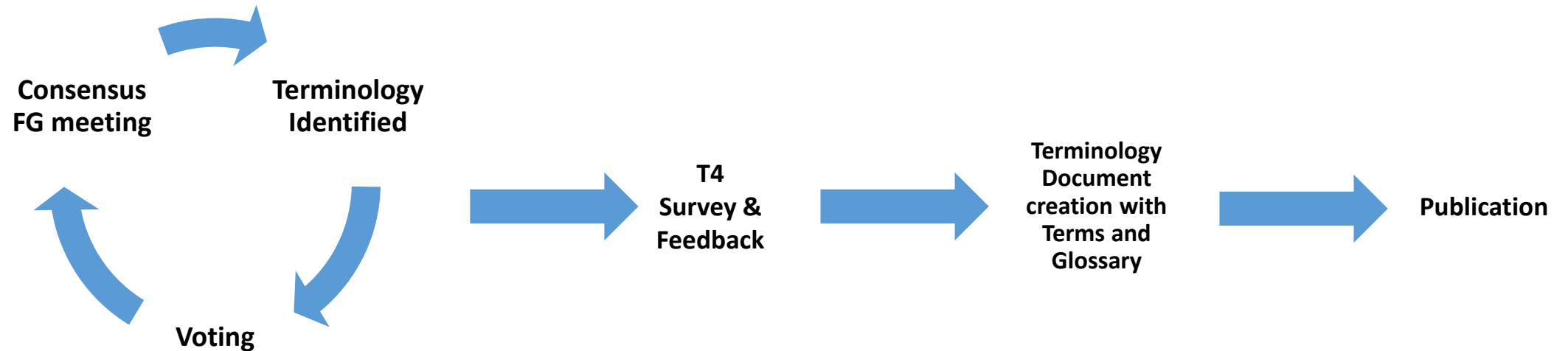
Overview

- **Challenge Identified:** Discussions with NRENs and workshops revealed that OAV* terms are used with varying meanings and understandings.
- **Solution Implemented:**
 - **Creation of a Unified Glossary:** A list of relevant OAV terms with short definitions and reference links (sources).
 - **Acronym Table:** Definitions for abbreviations to ensure clarity.
 - **Standard-Based Definitions:** Where available, standard definitions were used. Internal definitions were developed through team consensus when standards were unavailable.

*OAV = Orchestration, Automation and Virtualisation

How the Terminology and Glossary is enriched – The process!

Internal Definition Process



<https://wiki.geant.org/display/NETDEV/OAV+Terminology>

- **Goal:** Establish a common language for OAV discussions to enhance understanding and collaboration.

Activities published so far



We have published **FOUR** Terminology White papers:

- [Orchestration, Automation and Virtualisation Terminology](#) (Apr. 8, 2020, under GN4-3). With the following **OAV terms and acronyms**:
 - Number of Terms Defined: **77** unique terms in the context of Orchestration, Automation, and Virtualisation (OAV).
 - Number of Acronyms: The document includes **106** acronyms with their respective definitions.
- [Orchestration, Automation and Virtualisation Terminology Version 1.1](#) (Jan. 20, 2021, under GN4-3). With the following **updated OAV terms and acronyms** (adopted by the GNA-G Network Automation):
 - Number of Terms Defined: **83** unique terms in the context of Orchestration, Automation, and Virtualisation (OAV).
 - Number of Acronyms: The document includes **108** acronyms with their respective definitions.
- [Orchestration, Automation and Virtualisation Terminology Version 2.0](#) (Jan 10, 2023, under GN4-3). With the following **updated OAV terms and acronyms**:
 - Number of Terms Defined: **99** unique terms in the context of Orchestration, Automation, and Virtualisation (OAV).
 - Number of Acronyms: The document includes **127** acronyms with their respective definitions.
- [Orchestration, Automation and Virtualisation Terminology Version 3.0](#) (Oct 29, 2024, under GN5-1): With the following **updated OAV-AI/ML terms and acronyms** (adopted by the GNA-G Network Automation):
 - Number of Terms Defined: **122** unique terms in the context of Orchestration, Automation, and Virtualisation (OAV).
 - Number of Acronyms: The document includes **134** acronyms with their respective definitions.



Activities under development – More Terminology documents, not just OAV!



Currently, the Focus Group is working on finalizing the new Terminology document that is related to AI/ML!



New Target: Enrich the following GEANT topics with Terminology and Abbreviations documents:

- RARE (Router for Academia, Research and Education)
- Network programmability - P4 Terminology
- Monitoring tools - platforms
- OTFN Terminology
- QUANTUM Terminology

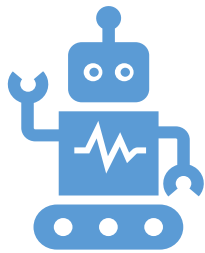


AI/ML tools to the rescue!

Usage of AI/ML tools to help with the Terminology and Abbreviations documents.

What we want to achieve with the usage of AI in our per-topic terminology documents:

- Build clean frequency lists from our document set (per TOPIC).
- Extract a canonical list of TERMS AND ABBREVIATIONS with their expansions and usage notes.
- Compile a terminology/term base (multi-word terms included) with POS/lemmas, short definitions and links



AI/ML Tools

AI-assisted frequency cleanup (LLMs).

Abbreviation extractor: **AgenticAbbreviationExtractor**.

Terminology extraction: **TermXT**.

POS tagging & lemmatization: **TermSuite components**.

LLMs like **ChatGPT, Lama and Gemini**.



Word-frequency Analysis Tools

Reddit thread

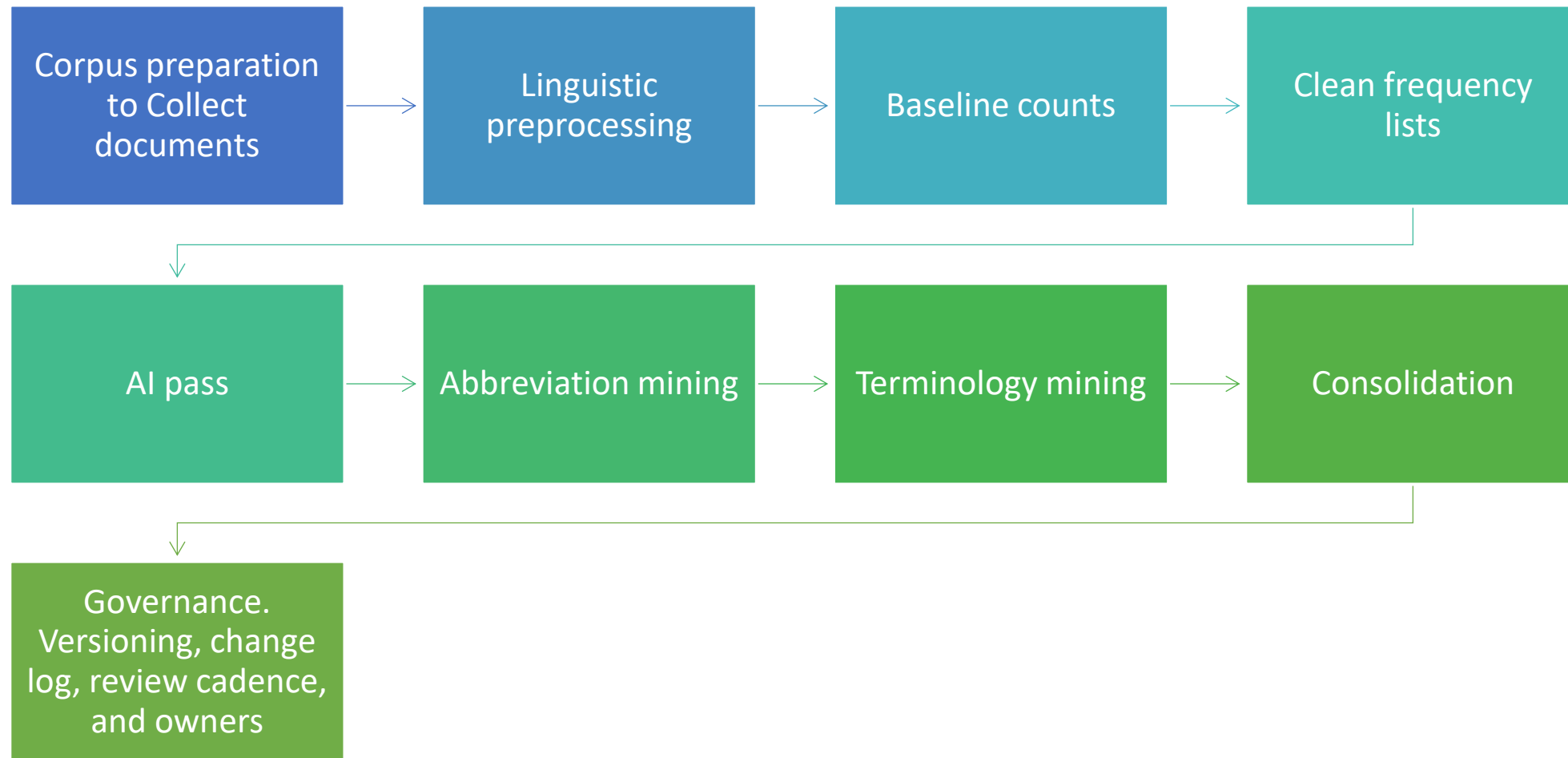
MAXQDA guide

Voyant Tools

Quick online counter

Stop-word primer

Methodology - Phases





Thank You

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