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1 Scope of this document

The goal of this document is to define a common set of basic requirements that apply to all functional clusters of the Adaptive Platform.

1.1 Document Conventions

The representation of requirements in AUTOSAR documents follows the table specified in [TPS_STDT_00078], see Standardization Template, chapter Support for Traceability ([1]).

The verbal forms for the expression of obligation specified in [TPS_STDT_00053] shall be used to indicate requirements, see Standardization Template, chapter Support for Traceability ([1]).

2 Acronyms and Abbreviations

There are no acronyms and abbreviations relevant within this document that are not included in the [2, AUTOSAR glossary].

3 Requirements Tracing

The following tables reference the requirements specified in <CITATIONS_OF_CONTRIBUTED_DOCUMENTS> and links to the fulfillment of these. Please note that if column “Satisfied by” is empty for a specific requirement this means that this requirement is not fulfilled by this document.

Requirement	Description	Satisfied by
[RS_AP_00113]	API specification shall comply with selected coding guidelines.	[SWS_AP_00003]
[RS_AP_00116]	Header file name	[SWS_AP_00001]

4 Requirements specification

4.1 Non-functional Requirements

[SWS_AP_00001] Include folder structure [

Type:	Valid
Description:	All ARA public header files shall be accessible within folder ara-api/inc/ara/<func-cluster-short-name>.
Rationale:	Harmonized look and feel.
Dependencies:	–
Use Case:	–
Supporting Material:	<p>Example: Execution management provide ApplicationStateClient class: ara-api/inc/ara/exec/application_state_client.h</p> <pre>namespace ara { namespace exec { class ApplicationStateClient { ... } } }</pre> <p>Exception: Proxy and skeleton namespaces are derived from configuration.</p>

](RS_AP_00116)

[SWS_AP_00002] Prevent multiple inclusion of header file [

Type:	valid
Description:	All public header files shall have #define guards to prevent multiple inclusion.
Rationale:	Common coding guideline
Dependencies:	–
Use Case:	–
Supporting Material:	<p>Google C++ Style Guide [https://google.github.io/styleguide/cppguide.html#The_#define_Guard]</p>

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[SWS_AP_00003] Coding guidelines [

Type:	draft
Description:	Adaptive Platform implementation shall conform the "Guidelines for the use of the C++14 language in critical and safety-related systems".
Rationale:	Common coding guideline
Dependencies:	–
Use Case:	–
Supporting Material:	"Guidelines for the use of the C++14 language in critical and safety-related systems"

](RS_AP_00113)

5 References

- [1] Standardization Template
AUTOSAR_TPS_StandardizationTemplate
- [2] Glossary
AUTOSAR_TR_Glossary