TECHNICAL REPORT

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Information technology — Big data reference architecture —

Part 2: Use cases and derived requirements

Technologies de l'information — Architecture de référence des big data —
Partie 2: Cas pratiques et exigences dérivées

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Foreword

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Introduction

This document is focuses on forming a community of interest from industry, academia, and government, with the goal of developing a consensus list of big data technical considerations across all stakeholders. This included gathering and understanding various examples of use cases from diversified areas (i.e., application domains). To achieve this goal, the following tasks were done:

— gathered input from all stakeholders regarding big data technical considerations;

— analyzed and prioritized a list of challenging use case specific technical considerations that may delay or prevent adoption of big data deployment;

— developed a comprehensive list of generalized big data technical considerations for ISO/IEC 20547-3, *Information technology – Big data reference architecture - Part 3: Reference architecture*; and

— documented the findings in this document.

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Information technology — Big data reference architecture —

Part 2: Use cases and derived requirements

1 Scope

This document provides examples of big data use cases with application domains and technical considerations derived from the contributed use cases.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 20546*Information technology — Big data — Definition and vocabulary*

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3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 20546 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

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— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1 Terms defined elsewhere

None.

3.2 Terms defined in this document

3.2.1
use case
typical application stated at a high level for the purposes of extracting technical considerations or comparing usages across fields

3.3 Abbreviated terms

2D	two-Dimensional
3D	three-Dimensional
6D	six-Dimensional
AOD	Analysis Object Data

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