

# ISO/IEC 23090-28:2026-02 (E)

## Information technology - Coded representation of immersive media - Part 28: Interchangeable scene-based media representations

---

### Contents

Page

|   |           |
|---|-----------|
| Foreword.....   | iv        |
| Introduction.....   | v         |
| <b>1 Scope.....</b>   | <b>1</b>  |
| <b>2 Normative references.....</b>  | <b>1</b>  |
| <b>3 Terms and definitions.....</b>   | <b>1</b>  |
| 3.1 General.....  | 1         |
| 3.2 Abbreviated terms.....  | 3         |
| <b>4 Architectures for scene-based media.....</b>                                   | <b>3</b>  |
| 4.1 General.....  | 3         |
| 4.2 Architecture for scene graph representations.....                               | 4         |
| 4.3 Scenes nested within scenes.....  | 5         |
| 4.4 Architecture for annotated scene graph using IMS.....                           | 5         |
| 4.5 Architecture for translation between scene graph representations using IMS..... | 5         |
| <b>5 Independent mapping space (IMS).....</b>                                       | <b>7</b>  |
| 5.1 General.....  | 7         |
| 5.2 Architecture of IMS.....  | 7         |
| 5.3 IMS systems.....  | 7         |
| 5.3.1 General.....  | 7         |
| 5.3.2 IMS logical organization component.....                                       | 9         |
| 5.3.3 IMS physical organization component.....                                      | 18        |
| 5.3.4 IMS processing directions component.....                                      | 23        |
| <b>Annex A (normative) Annotation using IMS and ITMF.....</b>                       | <b>32</b> |
| <b>Annex B (normative) Mapping of IMS to glTF 2.0.....</b>                          | <b>37</b> |
| <b>Annex C (normative) Annotation process for glTF.....</b>                         | <b>39</b> |
| <b>Bibliography.....</b>  | <b>45</b> |