

MPEG-G increases the interoperability by combining genomic information from multiple legacy formats, compressed efficiently, in one unified syntax.

### Why is MPEG-G highly interoperable?

The high level of interoperability of the MPEG-G format results from three attributes: the **abstraction between the actual genomic information and how it is represented (the formats)**, the **unified syntax**, and its **open specification** by the MPEG ISO working group. A standard for genomic data was created in the process, making the so essential and necessary data exchange in genomics research more straightforward and faster.

### What is MPEG-G?

MPEG-G (ISO/IEC 23092) is a ISO international standard for the representation of genome sequencing data and associated metadata.

The standard MPEG-G aims to provide a framework for developing interoperable applications towards genuinely efficient and economical handling of genomic information.

### Use-Case: Interoperability Benefit

A research group in Switzerland and one in Malaysia want to exchange *100 Whole-Exome Sequencing (WES)* datasets with *100x coverage*. The Swiss uses MPEG-G and share in total **100 files with 473 GB of data size**, while the Spanish research group need to share **200 files of FASTQ gzipped pairs** which amounts to **1'148 GB of data size**.

**GenomSys Variant Analyzer** is the worldwide first CE marked MPEG-G native genomic analysis software enabling laboratories and researchers to leverage the high interoperability feature of the ISO format.

